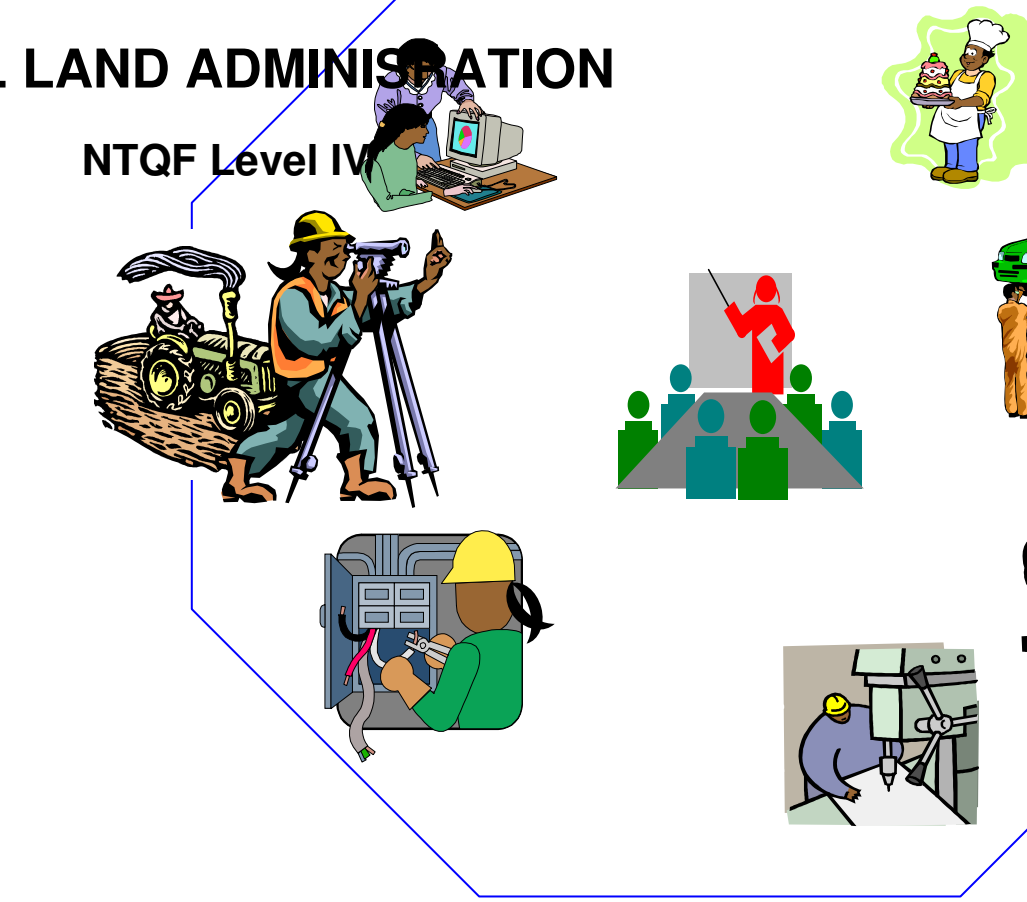
Federal Democratic Republic of Ethiopia

OCCUPATIONAL STANDARD

RURAL LAND ADMINISTRATION

NTQF Level IV



Ministry of Education
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and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labor market.

The Ethiopian Occupational Standards (EOS) are - a core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF).They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopian Occupational Standard comprised of Units of Competence.

A Unit Title describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title, NTQF level
- Unit code
- Unit title
- Unit descriptor
- Elements and Performance criteria
- Variables and Range
- Evidence guide

Together all the parts of a Unit Title guide the assessor in determining whether the candidate is competent.

The ensuing sections of this EOS document comprise a description of the respective occupation with all the key components of a Unit Title

- Chart with an overview of all Units of Competence for the respective level including the Unit Codes and the Unit Titles
- Contents of each Unit Title (competence standard)
- Occupational map providing the Technical and Vocational Education and Training (TVET) providers with information and important requirements to consider when designing training programs for this standards and for the

NTQF Level IV

AGR RLA4 01 1117 Prepare and Implement Land Use Plan	AGR RLA4 02 1117 Supervise the Implementation of Land Administration and Development Policies and Legislations	AGR RLA4 03 1117 Monitor and Evaluate the Implementation of Land Use Plan
AGR RLA4 04 1117 Develop Environmental Management Plan and Implement Mitigation Measures	AGR RLA4 05 1117 Conduct an Advanced GPS/GNSS Data Collection and Set out Survey Strategy	AGR RLA4 06 1117 Conduct Advanced Total Station Data Collection and Plotting
AGR RLA4 07 1117 Develop Spatial Database	AGR RLA4 08 1117 Maintain Spatial Data	AGR RLA4 09 1117 Integrate Surveying Dataset
AGR RLA4 10 1117 Utilize GIS for Spatial and Non-Spatial Data Capturing, Analysis and out Put	AGR RLA4 11 1117 Design and Produce Maps	AGR RLA4 12 1117 Undertake Field Verification and Completion of Cadastral Records
AGR RLA4 13 1117 Assess Applications for Legislative Compliance	AGR RLA4 14 1117 Participate in Property Valuation	AGR RLA4 15 1117 Handling Expropriation and Compensation Claim
AGR RLA4 16 1117 Inspect Legality of Property Transaction and Registration	AGR RLA4 17 1117 Build and Maintain Community Relationships	AGR RLA4 18 1117 Plan and Organize Adjudication, Registration and Certification Activities for Legal Cadastre
AGR RLA4 19 1117 Migrate to New Technology	AGR RLA4 20 1117 Establish Quality Standards	AGR RLA4 21 1117 Develop Individuals and Team

Communication Skills	Medium Enterprises (MSMEs)	Techniques and Tools

NTQF Level IV

Unit Code	AGR RLA4 01 1117
Unit Descriptor	This unit of competence covers knowledge, skill and attitude required for preparing land use plan. It requires the ability to identify application of land use planning, collect land related information, problem identification, designing alternative solutions and decision making ways in accordance with national land use policies and strategies, develop land use map, proper handling of materials, tools and equipment undertake land use planning activities, store and stockpile materials, and clean up on completion of work. work requires knowledge of safe work practices

Elements	Performance Criteria
1. Identify the framework for land use plan	1.1. Fields of application of Land Use Planning (LUP) and its roles are identified and overviewed. 1.2. The functions of LUP in land administration are identified 1.3. ***Planning elements and useful tools*** are identified. 1.4. Principles, goals and focus of LUP are identified 1.5. Types of LUP are identified. 1.6. Different levels of LUP are identified. 1.7. Integration of LUP in the overall planning system is identified. 1.8. Overview of the planning process is identified.
2. Collect land information	2.1. ***Tools and equipment*** and ***materials*** are identified and selected 2.2. Land and related information is surveyed/assessed based on the required purpose. 2.3. Present and future needs are systematically assessed and evaluated based on land ability 2.4. Bio-physical and socio economic data are collected, organized and analyzed based on survey techniques. 2.5. ***Occupational health and safety*** are adhered to throughout collecting land information
3. Identify the problems	3.1. Problem identification procedures with in the community are prepared based on required information. 3.2. Key land use problems are identified based on analyzed data.

4. Determine existing alternative solutions	4.1. Solution methods for challenges are identified according to socio economic, environmental and cultural information 4.2. Opportunities, management options and land resources are assessed based on the requirements.
5. Decide the best options	5.1. Sustainable options are chosen according to identified needs 5.2. Selected options are applied in accordance with management principles
6. Prepare the plan	6.1. Strategic plan is developed in consultation with stakeholders and the community based on the desired changes to bring. 6.2. Development plan to guide future development is outlined based on strategies. 6.3. Land use plan is prepared according to the technical plan preparation procedure.
7. Implement the Plan	7.1. Resource are organized and mobilized as the requirements 7.2. Land use plan is implemented based on the available resource. 7.3. Monitoring and evaluation are done based on the plan. 7.4. Land use plan is reviewed based on implementation experience. 7.5. Stakeholders and community are consulted in the implementation of land use plan

Variable	**Range**
Planning elements and useful tools	May include, but not limited to: • Preparation • Data Collection and Analysis • Plan Formulation • Negotiation and Decision-making • Implementation • Monitoring and Updating
Tools and equipment	May include, but not limited to: • Line level, • String, • Graduated staff, • Clinometers,

	• GPS/GNSS, • Table, • Computer , • Automatic level and • stereoscope.
Materials	May include, but not limited to: • Aerial photographs, • Top maps, • Clip board, • Notebook and • Drawing materials
Occupational health and safety	May include, but not limited to: • OHS hazard identification, • Risk assessment and control • Implement procedures for dealing with hazardous events • Hazards may include disturbance or interruption of services • Solar radiation, dust, soil- and water-borne micro-organisms, sharp hand tools and equipment, manual handling, falling objects, and uneven Surfaces.

Evidence Guide	
Critical Aspects of Competence	A candidate must be able to demonstrate the ability to: • Survey/Assess, organize and analyze land related information • Prepare problem identification procedures • Prioritize identified problems • Assess and applied selected opportunities, management options and land resources • Choose sustainable options • Develop, implement, monitor and evaluate plan • Review land use plan
Underpinning knowledge and attitudes	Demonstrates knowledge of: • Fields of application of Land Use Planning (LUP) and its roles • Planning elements and useful tools • Principles, goals and focus of LUP are identified • Types of LUP • Planning at different levels • Planning process • Policy and strategy of land use • Differentiate potential land capability

	• Identifying and maintaining documentation for the quality systems • Using simple pegs to complex instruments like ,GPS, automatic level, geo-scope, stereoscope, etc • Implementing training programs, organizing group discussion, undertaking land use planning activities in the office and in the field. • Evaluating activities related with land use planning and making improvements where necessary.
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

	Development Policies and Legislations
Unit Code	**AGR RLA4 02 1117**
Unit Descriptor	This unit of competence covers supervising the application of Land policies, rules and regulations, harmonizing local & national Policies, International conventions, treaties and adaptation of these to the local conditions. This unit of competence applies to the administration, development, protection and utilization of land resources. Also includes the adaption of national policies and legislations to local bye-laws formulation and implementation. It requires the knowledge of adoption and implementation national policies and legislations as well as international conventions and protocols and resolution of conflicts between different interest groups at local, regional, national and international level.

Elements	**Performance Criteria**
1. Monitor and supervise application of land related policies and legislations	1.1. Land related policies and legislations and industrial ***rules and regulations*** are applied correctly. 1.2. Community awareness is created regarding the updated rules and regulations 1.3. Rules and regulations are formulated by industries in line with government policies
2. Supervise identification and objective realization of property/land rights	2.1.Holding and use rights, either state, communal or private are properly identified and documented 2.2.Objectives related to property/land right are realized and specified
3. Supervise identification of the role of formal and informal institutions	3.1 The roles of formal and informal institutions related to land administration are identified and analyzed 3.2.Successful involvement of communities and rural population groups in activities related to land administration is secured 3.3. Women's and ***vulnerable groups*** in land administration process is Involved and empowered
4.Facilitate and support local bye-laws formulation and implementation	4.1. ***Local bye-laws*** are formulated and implemented by communities in accordance with ***socio-cultural setting*** of society 4.2. Bye-laws are revised and documented in accordance with the current situation of the community 4.3. Bye-laws are compromised with existing rules and

and protocols	5.2. Strategies are developed to implement ***international conventions*** and protocols
6.Establish conflict resolution institutions	6.1. Source of conflicts are identified through discussion with communities 6.2. Conflict resolution committee members are elected from the community based on acceptance by community 6.3.Conflicts are resolved based on various conflict resolution mechanisms

Variable	**Range**
Rules and regulations	May include, but not limited to: • Sets forth the operational powers or • Provisions and the use restrictions adopted by the association. Or • Specific articles describing and/or • Prohibiting behavior, • Actions or conduct
Vulnerable groups	May include, but not limited to: • Elderly • Children • Women • Survivors of violence • People with physical or mental disabilities • Ethnic minorities.
Local bye-laws	May include, but not limited to a locally binding rule established by interested community members
Socio-cultural setting	May include, but not limited to: • The way people act and develop based around their surroundings and the roles of different ethnic groups, gender and the culture; with all these elements combined it forms a personality.
International conventions	May include, but not limited to: • Public international law concerns the structure and conduct of states and intergovernmental organizations

Evidence Guide	
Critical Aspects of Competence	A candidate must be able to demonstrate the ability to: • Aware community about policy and legislation • Formulate and implemented local byelaws • Adopt international conventions and protocols • Resolve conflict
Underpinning	Demonstrates knowledge of:

Underpinning skills	Demonstrate abilities to: • Monitor and supervise the application of related policies and legislations • Supervise the Identification and objective realization of natural resources property rights • Supervise the identification of the role of formal and informal institutions • Facilitate and support local bye-laws formulation and implementation • Follow international conventions, treaties and protocols Establish conflict resolution institutions
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit of competency covers the knowledge, skills and attitude required to set the time for monitoring and evaluation of implementation of land use plan. It includes managing of each planned activities, conduct participatory monitoring and evaluation and revise the land use plan.

Elements	Performance Criteria
1.Set the period of monitoring and evaluation (M&E) for each planned activities	1.1. Regular ongoing/progress monitoring (daily, weekly, monthly and quarterly) period is set for planned activities based on work place regulation. 1.2. Performance evaluation plan is prepared based on duration of the program.
2.Conduct monitoring and evaluation	2.1. Checklists are prepared to collect information based on planned activities 2.2. ***Materials*** are prepared to carry out planned activities 2.3. Decision is made on sharing responsibilities to carryout monitoring and evaluation to ensure community participation 2.4. ***Community & other stakeholders participation*** is ensured in monitoring and evaluation for planned activities. 2.5. Monitoring and evaluation is conducted based on the set period 2.6. Collected information is organized to take corrective measures based on progress report 2.7. Evaluation report is reviewed by involvement of relevant stakeholders to decide for future actions in accordance with standard.
3.Provide feed back	3.1. ***Land use problems*** that are identified through monitoring and evaluation and which demands assistance from outside are sorted out and briefed based on the criteria set by reviewers 3.2. Institutions that could be communicated for backstopping are identified based on types of technologies implemented. 3.3. Cases that need backstopping are provided to relevant higher bodies following work place procedure.
4.Revise the plan	4.1. Goals are checked if they are still valid and redefined 4.2. Modifications are initiated to revise the plan either through

	4.4. Redesigning program is performed based on periodic evaluation.

Variable	Range
Materials	May include, but not limited to: • Land use policy documents • Resource data • Land suitability map • Land capability map • Land use plan procedures and formats • Stationary materials • GIS software • GPS/GNSS
Community& other stakeholders participation	May include, but not limited to: • Men • Women, • Youth, • Elderly, • Marginalized • Groups • Local NGOs, • Customary institutions, • Government agencies, …
Land use problems	May include, but not limited to: • Existing land use systems and their problems: ➢ Social, ➢ Environmental and economic constraints

Evidence Guide	
Critical Aspects of Competence	A person must be able to demonstrate ability to: • Explain participatory monitoring • Identify various aspects of evaluation • Initiate modifications to revise the plan
Underpinning knowledge and attitudes	Demonstrates knowledge of: • Management principles • PRA techniques
Underpinning skills	Demonstrates skills to: • Management functions skills
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test

Unit Code	**AGR RLA4 04 1117**
Unit Descriptor	This competency standard covers the process of developing an environmental management plan and implement mitigation measures for a designated land resource area. It requires the ability to define the need for an environmental management plan, undertake preliminary planning activities, prepare a site description, analyze site information, identify management legislation, policies and strategies and prepare the management plan and implementation of mitigation measures. Developing an environmental management plan for an environmental/ a land resource area requires knowledge of management planning principles and issues, basic environmental impact assessment, survey and analysis techniques and bio-physical components and processes.

Elements	**Performance Criteria**
1. Plan and undertake environmental training and awareness programs	1.1. Environmental training and awareness needs are identified accurately, specifying gaps between environmental training and awareness required and those held by group members 1.2. Arrangements are made for fulfilling identified training and wariness needs and gaps for the work group with relevant parties 1.3. ***Environmental management policies, rules*** and ***regulations*** are identified and reviewed for community awareness. 1.4. The roles of formal and informal institutions related to environment are identified and analyzed. 1.5. Consultation with stakeholders and ***clients*** is undertaken according to enterprise guidelines. 1.6. Community awareness is created regarding ***environmental impacts*** and community based ***mitigation measures*** in accordance with the identified needs and/or gaps. 1.7. Community awareness is created regarding updated national policies, rules and regulations as well as international rules, conventions, treaties and agreements.
2. Participate in environmental impact assessment	2.1. Applications of environmental impacts assessment are identified and explained. 2.2. Environmental impact assessment rules and regulations

	2.4. Major components of environmental impacts and mitigation measures are identified for the designated land resources area
3. Conduct basic environment impact analysis	3.1. Initial Environmental Examination/Evaluation (IEE) is developed and environmental sensitivity are classified according to projects range of environmental impacts 3.2. Major components of environmental issues and/or impacts are identified and their scope of impacts are analyzed, estimated and prioritized for the land resources area. 3.3. Major components mitigation measures are Identified and prioritized for the designated land resources area 3.4. Environmental impact assessment results are reported for the designated area
4. Integrate environmental management plan with mitigation measures	4.1. ***Major components of an Environmental Management Plan (EMP)*** are identified. 4.2. Environmental ***management plan objectives*** are identified and defined for the land ***resources*** area. 4.3. Timelines for development of the management plan and reporting arrangements to client are established. 4.4. Resources required for the development of management strategies are identified and allocated. 4.5. Site information is clearly described for the designated land resources area. 4.6. ***Management strategies*** and mitigation measures are outlined in accordance with the defined objectives. 4.7. Site information and management strategies are summarized and documented into a draft management plan for consultation. 4.8. ***Environmental management plan*** is drafted and presented. 4.9. Mitigation measures to be integrated into environmental management plan are identified and described. 4.10. Anticipated mitigation measures are integrated in to the plan and implementation of environmental management actions are planned
5. Implement environmental management plan and mitigation	5.1. ***Local by-laws*** are formulated in accordance with the environmental management plan, and environmental protection policies and legislations

	protection policies and legislations 5.4. By-laws are compromised with existing rules and regulations 5.5. Implementation of environmental protection local by-laws are facilitated 5.6. Regional and national legislations, rule and regulations to environmental protection are applied 5.7. Good lines of communication with key stakeholders and interest groups are established and maintained
6. Monitor implementation of environmental management plan and mitigation measures	6.1. Environmental management procedures are identified 6.2. Environmental management monitor plan is prepared for the designated area 6.3. Monitoring activities are facilitated 6.4. Monitoring findings are reported and records maintained

Variable	**Range**
Environmental management policies	May include, but not limited to: • Environmental load reduction and waste minimization • Tenders for the provision of goods and services that specify environmentally preferred selection criteria • Protection of land and habitat • Environmentally sustainable work practices • Continuous improvement policies
Rules and regulations	May include, but not limited to: • Sets forth the operational powers or provisions and the use restrictions adopted by the association. Or • Specific articles describing and/or • Prohibiting behavior, actions or conduct.
Clients	May include, but not limited to: • Government agency or associated body • Private landholder, or • Community group.
Environmental impacts	May include, but not limited to: • Climate change • Environmental degradation • Environmental health • Environmental issues with energy • Environmental issues with war - • Overpopulation • Pollution:

	• Waste
Mitigation measures	May include, but not limited to: • Ecosystems Conservation • Fishing Conservation • Natural resources Conservation • Energy conservation • Renewable energy • Water conservation • Disaster mitigation • Environmental law
Major environmental impacts assessment criteria comprise	May include, but not limited to: • environmental loss and deterioration; • social impacts resulting directly or indirectly from environmental change; • Non-conformity with environmental standards, objectives and guidelines; and likelihood and acceptability of risk.
Land resource area	May include, but not limited to: • Land resource areas are a hierarchal segmentation of the earth's surface based primarily upon natural resource attributes and properties which influence use and management. The seven resource attributes used in defining land resource units are climate, geology, soils, vegetation, water resources, physiography, and land use to the land available for exploitation: • Natural fertilizer • Underground water • Minerals
Major components of an EMP	May include, but not limited to: • Summary of environmental impacts • Description of mitigation measures • Description of monitoring program • Institutional arrangements • Implementation schedule and reporting procedures • Cost estimates and sources of funds
Management plan Objectives	May include, but not limited to: • Objectives to provide habitat for wildlife and native predators (such as insect eating birds, parasitic wasps), maintain biodiversity, • Moderate local weather conditions (e.g., wind speed, rainfall run-off, water table recharge • Provide shade) • Selective removal of tree limbs for firewood and timber, selective harvest of seed for vegetation or human

	to enterprise(such as a home-stay farm, for tourism).
Resources	May include, but not limited to: • Private finance • Government funding assistance • Natural resource regulations and legislation • Consideration for neighboring enterprises • Community in-kind support • Existing indigenous flora and fauna • Labor and existing administration facilities and infrastructure. • Topographical, vegetation, and aerial maps, • Government • University and library based consultation • Literature and internet resources • Local written and oral histories of migrant and catchment area information and catchment management associations • local experts such as flora and fauna preservation • cultivation and identification community groups.
Management strategies	May include, but not limited to: • Protect the natural resource area from grazing and pest animals, • Control pest plants and diseases, • Control human impact • Manage fire events (e.g., controlled use of hot and cold fires, wildfire prevention) • Establish vegetation links to nearby habitat islands • Remove and redirect infrastructure such as roads, troughs and fences, • Conserve and enhance biodiversity and • Habitat balance, and monitor native habitats over time.
Environmental management plan	May include, but not limited to: • Financial resources • Human resources management plan and production management plan; it define the core principles, objectives and responsibilities of the managing agent, • Cover the allocation of enterprise resources, and • Set parameters for resource access and use.
Local by-laws	May include, but not limited to a local bind rules established by interested community.

Evidence Guide	
Critical Aspects of Competence	A person must be able to demonstrate ability to: • Prepare environmental management plan with a team

	• Apply environmental management procedures
Underpinning Knowledge	Demonstrate knowledge of: • Management planning principles and issues. • Environmental assessment, survey and analysis techniques and practical application to a range of habitats and landscapes. • Native fauna and flora identification physiology, habitat requirements, and seasonal and nutritional influences on life cycle. • Pest plant and animal and disease identification, physiology, control techniques, and equipment, pesticides and habitat requirements. • Techniques and strategies for use in the management, rehabilitation and enterprise use of a range of native habitats, species and landscapes. • Indigenous flora regeneration and re-vegetation techniques, equipment and methods of application in relation to a range of landscape characteristics. • Management and rehabilitation techniques for the wildlife and habitat relevant to the natural resource area. • Wildlife habitats associated with the natural resource area and local geographic region. • Soil, plant and water testing processes and procedures, interpretation and application of results.
Underpinning skills	Demonstrates skills to: • Define the need for a management plan. • Undertake preliminary planning activities. • Prepare a site description. • Analyze site information and description. • Identify management strategies. • Prepare the management plan.
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	**AGR RLA4 05 1117**
Unit Descriptor	This unit covers the knowledge, skills and attitude required to conduct advanced Global Positioning System (GPS)/global Navigation Satellite System (GNSS) surveys for both data collection and engineering set outs, as related to land surveying, an engineering/construction environment. It requires the ability to interpret and analyze information and apply technical skills, in a team environment, often in the lead role.

Elements	Performance Criteria
1. Prepare for the survey	1.1. Scheme diagram and survey plan are prepared and resources are identified. 1.2. Key activities and timelines are scheduled with full consideration of the ***specifications*** and available resources. 1.3. ***Organizational GPS/GNSS survey requirements*** are identified, complied with and recorded. 1.4. Data collecting methodologies are identified in relation to surveying requirements 1.5. ***Equipment setup*** is obtained. 1.6. ***Equipment*** is prepared for the survey with consideration of the specific ***projection parameters and survey requirements***. 1.7. GPS/GNSS processing software are identified and configured with consideration of the specific ***reference system*** 1.8. Existing survey control data are obtained and ***validated***. 1.9. Set out data are collated, validated, manipulated as required, and uploaded into the GPS/GNSS receiver. 1.10. Work is allocated to team, designated staff responsibilities are communicated to ***relevant personnel*** to ensure clarity of understanding of the work & provide a basis for ongoing assessment. 1.11. Skills and knowledge are updated to accommodate changes in data.
2. Conduct the survey	2.1. GPS/GNSS equipment is operated according to ***manufacturer specifications***, operator manuals and ***organizational guidelines***.

	to organizational guidelines.
3. Process and Finalize the survey data	3.1 ***Appropriate software*** is used to process the data according to organizational guidelines to determine ***required information***. 3.2 Validation checks are completed according to ***project specifications***. 3.3 Any discrepancies between specifications and the actual data collected are identified and evaluated. 3.4 All ***required documentation*** is completed according to organizational guidelines.

Variable	**Range**
Specifications	May include, but not limited to: • Detailed technical descriptions of survey data and its requirements • Preparation of cross-sections and plans with all information included.
Organizational GPS/GNSS survey requirements	May include, but not limited to: • Administration (e.g. Federal, regional, town and districts) • Analysis of environmental, land and geographic information • Asset management • Cartographic services • Digital imagery • Utility service point and line data for water, electricity, telephone. • Emergency services management • Environmental datasets • Geographic information systems • integrated services environmental, land and geographic related datasets • Land ownership tenure system • Local government • Location-based services • Global positioning • Mapping facilities • Site analysis • Survey marks • Sewerage • Telecommunications • Town planning
Equipment setup	May include, but not limited to:

	• Associated equipment capable of differential and real time modes of operations.
Projection parameters and requirements	May include, but not limited to: • Coordinate systems • Datum • Display formats • Information displays • Outputs • Projection • Scale factor • Transformation
Reference system	May include, but not limited to: • Projection and datum parameters required for GPS/GNSS equipment and processing software.
Validation	May include, but not limited to: • Reflecting the true state of a test result, including tests for systematic distortions such as: ➢ confounding bias ➢ information/data bias ➢ observational bias ➢ recall bias ➢ Selection bias.
Relevant personnel	May include, but not limited to: • Colleagues • Registered surveyors • Site personnel • Staff or employee representatives • Supervisors or line managers • Suppliers • Users or legal representatives of users.
Manufacturer specifications	May include, but not limited to: • Equipment specifications • Operator manuals
Organizational guidelines	May include, but not limited to: • Appropriate timelines • Code of ethics • Company policy • Final product formats • Formal design parameters • Legislation relevant to the work or service function, • Manuals • OHS policies and procedures

	• Field manual
OHS	May include, but not limited to: • Development of site safety plan • Identification of potential hazards • Inspection of work sites • Training staff in OHS requirements • Use of personal protective clothing
Quality assurance processes	May include, but not limited to: • Internal and external • Product or service measurement against set criteria • Standard verification • Target monitoring. • Accuracy and precision
Appropriate software	May include, but not limited to: • GPS/GNSS software package designed for GPS/GNSS • Survey planning, • Down loading, • Processing and adjusting of raw GPS/GNSS data
Required information	May include, but not limited to: • Calculated information • Metadata • Positional data. • Set out positional accuracy
Project specifications	May include, but not limited to: • Detailed technical descriptions of required GPS/GNSS • Survey data users.
Required documentation	May include, but not limited to: • Electronic or paper-based correspondence with client • Field records • Final report • Records of conversation • Survey plots • Organizational work activity sheets. • Station log

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Prepare and manage documentation • Read and write technical reports • Negotiation skills • Identify, analyze, and eliminate errors and mistakes • Interpret and analyze statistics

	• Ensure that achievement of required accuracy has been attempted by accessing and interpreting design information to identify the components to be measured and monitored • Perform measurements • Plan the survey and resources • Apply solutions to a range of problems • Document and report information • Perform GPS/GNSS data processing, reduction and perform adjustment activities, • Organize and prioritize activity • Ensure that non-conformity aspects are recorded and reported • Interpret project requirements • Locate and interpret legislation and other written documentation • Manage risk • Plan contingency
Underpinning Knowledge and Attitudes	Demonstrates the knowledge of: • Accuracy and precision requirements related to GPS/GNSS network surveys • Data formats • Errors, accuracy and precision in set out surveys • GPS/GNSS data processing and data manipulation • Guidelines of projects • Limitations of equipment • Organizational policies and guidelines, such as OHS guidelines • Planning and control processes • Project review and reporting procedures • Safe work practices • Surveying reference systems • Professional code of ethics • Patience and tactful dealing with customers • Neat and accurate note keeping and drafting • Professional code of ethics
Underpinning Skills	Demonstrates the skills to: • Prepare and manage documentation and information flow • Estimate costs • Exercise precision and accuracy in relation to GPS/GNSS survey and data collection • Perform spatial data archival and retrieval and train others in this task

	activity and virtual representation • Interpret project requirements. • Locate and interpret legislation and other written documentation • Plan survey • Equipment setup • Make adjustment of instruments • Undertake accurate computations • Error and mistake elimination/isolation capability • Neat drafting
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 06 1117
Unit Descriptor	This unit covers the knowledge, skills and attitude required to conduct an advanced total station data collection and plotting surveying for both data collection and land surveying preparation set out. It requires the ability to interpret and analyze information and apply technical skills.

Elements	Performance Criteria
1. Prepare for the survey	1.1. Key activities and timelines are scheduled with full consideration of the ***specifications*** and available resources. 1.2. Organizational an advanced ***total station survey requirements*** are identified, complied with and recorded. 1.3. ***Equipment setup*** is obtained. 1.4. ***Equipment*** is prepared for the survey with consideration of the specific ***projection parameters and survey requirements.*** 1.5. Total Station processing software are identified and used with consideration of the specific ***reference system*** 1.6. Existing survey control data is obtained and ***validated***. 1.7. Set out data is collated, validated, manipulated as required, and uploaded into the total station receiver. 1.8. Designated staff responsibilities are communicated to ***relevant personnel*** to ensure clarity of understanding of the work & provide a basis for ongoing assessment. 1.9. Skills and knowledge are updated to accommodate changes in data.
2. Conduct the survey	2.1. Total station equipment are operated according to rural planning rules and ***organizational guidelines***. 2.2. Total station data is collected using methodologies detailed in the data collection plan according to planed survey area. 2.3. ***OHS*** requirements are planned for and adhered to. 2.4. ***Quality assurance processes*** are adhered to according to organizational guidelines.
3. Process and Finalize the survey data	3.1. ***Appropriate software*** is used to process the data according to organizational guidelines to determine ***required information*** and plotting the data.

	3.4. All ***required documentation*** are completed according to organizational guidelines.

Variable	Range
Specifications	May include, but not limited to: • Detailed technical descriptions of survey data and its requirements • Preparation of infrastructure provision plan and land plans with all information are included
Organizational total station survey requirements	May include, but not limited to: • Administration (e.g. street cods suburbs development parceillation) • Analysis of environmental, land and geographic information • Infrastructure asset management plan data • Cartographic services • Geographic information systems • Integrated services environmental, land and geographic related datasets • Land ownership tenure system • Location-based services • Global positioning • Mapping facilities • Site analysis • Survey boundary marks • Sewerage lines • Telecommunications lines • Urban /town planning • Water distribution lines
Equipment setup	May include, but not limited to: • Equipment adjustment • Mounting equipment
Equipment	May include, but not limited to: • Total station • Range poles • Tripods • Computer • Plotter • Associated equipment capable of differential and real time modes of operations
Projection parameters and survey requirements	May include, but not limited to: • Coordinate systems • Datum

	• Projection and datum parameters required for Total station equipment and processing software
Validation	May include, but not limited to: • Confounding bias • GCP/benchmark • Information/data bias • Observational bias • Recall bias • Selection bias
Relevant personnel	May include, but not limited to: • Colleagues • Registered surveyors • Site personnel • Staff or employee representatives • Supervisors or line managers • Suppliers • Users
Organizational guidelines	May include, but not limited to: • Appropriate timelines • code of ethics • the rural sector policy • field survey formats • Formal design parameters • Legislation relevant to the work or service function, • Manuals • OHS policies and procedures • Personnel practices and guidelines outlining • Teamwork, work roles and responsibilities • Requirements for data processing
OHS	May include, but not limited to: • Development of site safety plan • Identification of potential hazards • Inspection of work sites • training staff in OHS requirements • Use of personal protective clothing
Quality assurance processes	May include, but not limited to: • Internal and external • Product or service measurement against set criteria • Standard verification • Target monitoring
Appropriate software	May include, but not limited to: • Total station software package designed for total station

	• Plot/parcel boundary demarcation data • GCP data • Road right of way data • Forward and backward reading • Positional data • Set out positional accuracy
Project specifications	May May include, but not limited to: • Detailed technical descriptions of required an advanced total station data • Survey data users
Required documentation	May include, but not limited to: • Electronic or paper-based correspondence with client • Field records • Base map: ➢ Final report ➢ Records of conversation ➢ Survey plots ➢ Organizational work activity sheets

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Prepare and manage documentation • Read and write technical reports • Negotiation skills • Analyze errors • Conduct total station survey and analysis • Interpret and analyze the data • Perform mental calculations • Plot a and identify the accuracy and precision • Undertake high level computations • Matches objectives with resources to ensure project proceeds in an organized and timely manner • Ensure that achievement of required accuracy has been attempted by accessing and interpreting design information to identify the components to be measured and monitored • Perform measurements • Plan resources • Apply solutions to a range of problems • Document and report information • Perform GPS data reduction • Organize and prioritize activity • Ensure that non-conformity aspects are recorded and

Underpinning Knowledge and Attitudes	Demonstrates the knowledge of: • Accuracy and precision requirements related to GPS network surveys • Data formats • Errors, accuracy and precision in set out surveys • Total station data processing and data manipulation • Guidelines of projects • Limitations of equipment • Organizational policies and guidelines, such as OHS guidelines • Planning and control processes • Project review and reporting procedures • Safe work practices • Surveying reference systems (high level)
Underpinning Skills	Demonstrates the skills to: • Exercise precision and accuracy in relation to an advanced total station survey and data collection • Perform spatial data archival and retrieval and train others in this task • Perform spatial data management and manipulation perform file management • Solve problems relating to height, depth, breadth, dimension, direction and position in actual operational activity and virtual representation • Interpret project requirements • Locate and interpret legislation and other written documentation • Equipment setup
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Title	Develop Spatial Database
Unit Code	**AGR RLA407 1117**
Unit Descriptor	This unit specifies the outcomes required to develop a spatial database from a range of storage media, including digital or hard copy storage, often in a supervisory capacity. It requires the ability to analyze and evaluate spatial information from a variety of sources. It also requires the ability to identify required data set and access spatial information.

Elements	Performance Criteria
1. Prepare for the storage of spatial data	1.1. S***patial data*** storage requirements and ***constraints*** are defined according to written spatial ***specifications*** and ***client requirements***. 1.2. Details of storage ***techniques*** to be used are considered and evaluated according to ***organizational guidelines***. 1.3. Data ***design*** is interpreted to identify ***spatial data components*** to be maintained. 1.4. ***OHS*** and ***legislative requirements*** are adhered to. 1.5. Pertinent ***legal and statutory standards*** are considered and adhered to. 1.6. Work is allocated to appropriate personnel and ***supervisory processes***, checks and measures are implemented to ensure work is completed within ***time available***. 1.7. Skills and knowledge are updated to accommodate changes in data storage.
2. Store spatial data	2.1. Arrangements are put in place for the creation of data indexes to assist in retrieval and storage according to organizational spatial data and legal requirements. 2.2. Spatial database is created in accordance with organization spatial data and legal requirement. 2.3. ***Administrative and legal requirements*** for data storage are complied with and recorded. 2.4. Spatial data is recorded in an ***index*** according to ***organizational guidelines***. 2.5. ***Method of spatial data storage*** is selected according to organizational guidelines 2.6. Spatial data is backed up according to organizational

spatial data	***system*** to locate spatial data source. 3.2. Spatial data is translated into required format where necessary.
4. Manage contingencies	4.1. All reasonable ***contingencies*** and potential problems are considered in the development of a ***risk management plan***. 4.2. Contingency plans are communicated to ***relevant personnel*** and implemented where necessary.

Variable	**Range**
Spatial Data	May include, but not limited to: • Include data combinations from: ➢ global positioning system ➢ level ➢ Photogrammetry ➢ remote sensing ➢ total stat ➢ depth ➢ dimension ➢ direction ➢ height ➢ position ➢ the manner in which data combinations and contingencies interact
Constraints	May include, but not limited to: • coverage • datum • environmental factors • industry requirements • legal and statutory • financial
Specifications	May include, but not limited to: • detailed technical descriptions of the survey data and its requirements
Client requirements	Refer to description of outputs and may be contained in: • contracts • memos • tender briefs • verbal instructions • written instructions
Techniques	May include, but not limited to: • field

	• company policy • final product formats • formal design parameters • legislation relevant to the work or service function • manuals • OHS policies and procedures • personnel practices and guidelines outlining teamwork, work roles and responsibilities • requirements for data processing
Design	May include, but not limited to: • digital information • hard copy plans • maps • written instructions
Spatial data components	May include, but not limited to: • depth • dimension • direction • position • slope • Point • Line • Polygon • Pixel/cell
OHS	May include, but not limited to: • development of site safety plan • identification of potential hazards • inspection of work sites • training staff in OHS requirements • use of equipment and signage
Legislative requirements	May include, but not limited to: • award and enterprise agreements • certification requirements • codes of practice • copyright • quality assurance requirements
Legal and statutory standards	May include, but not limited to: • local government requirements • national standards • state statutes and regulations
Supervisory processes	May include, but not limited to: • directing activity

	• reviewing • targeting
Time available	May involve estimates for time duration of project, including: • client instructions • consideration of contingencies • consideration of past project experiences • experience of project personnel • location of project • methods to be employed • resources and equipment to be used
Administrative and legal requirements	May include, but not limited to: • access protocols and obligations • quality assurance and certification requirements • award and enterprise agreements • licensing arrangements • organizational protocols for accessing physical, financial and human resources • reimbursements • Indigenous considerations • relevant codes of practice • relevant state, territory and federal legislation affecting organizational operations, including: ➢ anti-discrimination and diversity ➢ copyright and digital copyright ➢ equal employment opportunity (EEO) ➢ industrial relations • royalty obligations • title search processes • Understanding of company OHS guidelines.
Index	May include, but not limited to: • complexity may require several notations for cross-referencing • may be in digital format • Hard copy
Organizational guidelines	May include, but not limited to: • electronic format • equipment specifications • operator manuals • printed product instructions and information • spatial database • warranty documents
Method of spatial data storage	May include, but not limited to: • cross-referencing

	accommodate storage in digital or hard copy format
Indexing system	May include, but not limited to: • using name • using Parcel ID • using Index • using Holding type • using land use type
Contingencies	May include, but not limited to: • duplicates • fireproof storage • insurance • media malfunction • media and formats becoming outdated • offsite storage • Storage in different media
Risk management plan	May include, but not limited to: • Effective management • budgetary constrains • timelines • clearly identified project stages • sound internal audit processes
Relevant personnel	May include, but not limited to: • colleagues • managers / supervisors • personnel such as field hands and administrative staff • surveyors

Evidence Guide	
Critical Aspects of Competence	A person who demonstrates Competence in this unit must be able to provide evidence of: • Creating a workable complex index system • Implementing data security and backup measures • Managing contingencies • Retrieving spatial data • Managing a team
Underpinning Knowledge	Demonstrate knowledge on: • Classification systems, processes and products linked to specification • Coordinating reference systems • Corporate information database environment • Current indexing systems • Data formats

	• Network and security guidelines • OHS requirements • Organizational policies and guidelines • Risk management principles as applied to spatial data storage • Safe work practices • Spatial data input technologies including digitizing, scanning, remote sensing and satellite imagery • Spatial data management practices • Spatial data maintenance systems • Spatial data output and distribution technologies including scripting, query language, macro development, graphic interfaces, networks and remote access • Spatial data formats and structure requirements • Spatial reference systems and their relationship to each other • Storage media
Underpinning Skills	Demonstrate skills to: • Interpret technical manuals • Verify reliability • Administration • Analytical skills • Communication skills to: ➢ Consult effectively with clients and colleagues ➢ Impart knowledge and ideas through oral, written and visual means ➢ Computer skills (high technical user level) to complete business documentation and use software, hardware and networking applications ➢ Information management • Literacy skills to: ➢ Assess and use workplace information ➢ Locate and interpret legislation and other written documentation • Prepare and manage documentation • Read and write technical reports • Research and evaluate • Negotiation skills • Numeracy skills to: ➢ Analyze errors ➢ Conduct image analysis ➢ Perform mental calculations ➢ Interpret and analyze statistics ➢ Record with accuracy and precision ➢ Undertake computations

	➢ Project management skills • Spatial skills to: ➢ Perform spatial data archival and retrieval and train others in this task ➢ Perform spatial data management and manipulation and train others in this task
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit of competency specifies the outcomes required to implement a full cycle of spatial data maintenance, including updating, backup, recovery and archiving. The unit covers editing, updating and integrating existing and new spatial data, and problem solving to test and validate data currency and retrieval and backup systems. The unit requires the ability to use computers and software to display and manipulate data and create metadata. It also covers recording information and completing documentation.

Elements	**Performance Criteria**
1. Evaluate spatial data.	1.1. Task requirements are clarified with ***appropriate persons***. 1.2. Equipment are selected, set up and checked to ensure correct operation and functionality. 1.3. Spatial data updates are accessed and checked to confirm currency and relevance, and recorded in consultation with appropriate persons. 1.4. Spatial data is checked and edited to ensure it is compatible and in acceptable format according to task specifications. 1.5. Entities and attributes are used to display spatial information while maintaining integrity and consistency of data.
2. Edit and update spatial data.	2.1. Spatial data is amended and replaced to meet task requirements in consultation with appropriate persons. 2.2. Existing and new data is edited, prepared and integrated according to task requirements. 2.3. Spatial datasets are tested and validated to ensure integrity and quality according to task requirements. 2.4. Documentation is amended and updated according to organizational requirements.
3. Carry out data backup and recovery.	3.1. Data backups are implemented to ensure data is accessible in contingency situations according to organizational requirements. 3.2. Backup system is tested to ensure that data can be retrieved, and problems are resolved in consultation with appropriate persons.
4. Archive data.	4.1. Spatial dataset to be archived is checked for completeness and manipulated where necessary, in consultation with

	4.3. Archived spatial data is stored in a secure location, and details are recorded according to organizational requirements.

Variable	Range
Appropriate persons	May include, but not limited to: • End user • Supervisor or line manager • Technical staff.
Metadata	May include, but not limited to: • Availability • Conditions of use • Coordinate system • Currency • Custodian • Data accuracy • Data description • Date of acquisition • Licence • Quality • Source • Spatial data acquisition methodologies • Version control.

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Comply with administrative and legal requirements for storing and retrieving spatial data, including data privacy and information copyright • Comply with organizational requirements and manufacturer specifications when using the equipment specified in the assessment conditions • Comply with organizational requirements for recording data, completing documentation, and working safely when using screen-based equipment • Display spatial information using vector and raster data, including: ➢ Arcs ➢ Circles ➢ Colour ➢ Hatch ➢ Imagery ➢ Layer

	➢ Text ➢ Raster ➢ Vector.
Underpinning Knowledge and Attitudes	Demonstrates the knowledge of: • Administrative and legal requirements for accessing, storing, retrieving and archiving digital and hard copy spatial data, including data privacy and information copyright • Methods for validating test results to identify systematic distortions • Querying and browsing techniques for obtaining information from databases • Key features of spatial reference systems • Types of spatial data formats • Types of storage media for a range of spatial data.
Underpinning Skills	Demonstrates the skills to: • Conduct research to source spatial data. • Interpret and compare data version information. • Ask questions to clarify process and instructions. • Interpret graphical and technical information from maps and imagery. • Enter data into a database or document using a computer and software. • Verify accuracy of data and identify errors..
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 09 1117
Unit Descriptor	This unit of Competence specifies the knowledge, skill and attitude required to integrate different surveying datasets and to manipulate the combined data in a processing package. It requires the ability to interpret and analyze information and apply technical skills.

Elements	Performance Criteria
1. Integrate different datasets into a processing package**.**	1.1. ***Objectives***, deliverables, constraints and principal work activities are defined and documented according to ***project specifications*** and legislative requirements. 1.2. ***Measured datasets*** are imported or downloaded into a ***processing package***. 1.3. ***Measurements*** are checked, validated and recorded according to project specifications. 1.4. Data is edited according to ***organizational guidelines***. 1.5. Skills and knowledge are updated to accommodate changes in dataset requirements.
2. Process integrated data using a processing package.	2.1. Objectives and principal work activities are defined. 2.2. Measured survey data is processed for comparison with dataset ***design***. 2.3. Measurements are ***validated*** and recorded according to project specifications. 2.4. Checks on integrated data are completed according to requirements. 2.5. Pertinent standards are considered and adhered to. 2.6. Impact of contingencies and problems is effectively managed.
3. Conduct follow-up activity.	3.1. All ***required documentation*** is completed promptly, accurately and according to organizational guidelines. 3.2. ***Relevant personnel*** are informed of the results according to organizational guidelines. 3.3. Spatial data is archived according to project specifications.

Variable	Range
Objectives	May include, but not limited to: • Client requirements • Written survey data specifications

	• Depth • Dimension • Direction • Height • Position
Processing package	Computations of measured datasets
Measurements	May include, but not limited to: • GPS/GNSS • Leveling • Orthopotos • Tape and Total station
Organizational guidelines	May include, but not limited to: • Appropriate timelines • Final product formats • Format design parameters • Guidelines for working with teams • Particular requirements for data processing
Design	May include, but not limited to: • Digital information • Hard copy plans • Maps
Validated	May include, but not limited to: • Check or prove the validity or accuracy of measurements
Required documentation	May include, but not limited to: • Field records • Final product reports and Survey plots
Relevant personnel	May include, but not limited to: • Managers • Site personnel such as field hands • Supervisors and surveyors

Evidence Guide	
Critical Aspects for Competence	Assessment requires evidence that the candidate: • Integrate different datasets into a processing package. • Process integrated data using a processing package. • Leading and working in a team • Performing measurements • Reduce and manipulate survey data • Understand mathematical concepts and techniques • Conduct follow-up activity
Underpinning Knowledge and	Demonstrates knowledge of: • Accuracy and precision requirements

	• Spatial reference systems • Surveying equipment for survey data capture • Surveying data capture methodologies
Underpinning Skills	Demonstrate a skills to: • Consult effectively with clients and colleagues • Computer skills to complete business documentation • Prepare and manage documentation • Read and write technical reports • Research and evaluate • Conduct image analysis & analyze errors • Interpret and analyze statistics • Record with accuracy and precision • Undertake high level computations • Exercise precision and accuracy in the use of datasets • Perform spatial data management and manipulation
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Title	**Utilize GIS for Spatial and Non-Spatial Data Capturing, Analysis and out Put**
Unit Code	**AGR RLA4 10 1117**
Unit Descriptor	This unit covers the knowledge, skill and attitude required to apply Geographic Information Systems (GIS) software to analyze and present spatial and non-spatial data in an integrated manner.Apply GIS to spatial and non-spatial data capturing, analysis and output. It requires the ability to operate GIS software, preferably open source, software applications correctly in order to perform the required tasks of a spatial project. It also includes Creating, displaying and manipulating spatial information by using Point features, poly line features and polygon features.

Elements	Performance Criteria
1. Capture spatial data input	1.1. ***Computer hardware equipment*** and GIS application software are prepared for spatial data capturing 1.2. Geo-database structures are created 1.3. GIS application is applied in spatial data capturing.
2. Analyze and manage spatial and non-spatial information	2.1. Spatial information are displayed, manipulated and analyzed by using point, poly line, polygon features and raster data. 2.2. Non spatial data are manipulated, stored, analyzed and displayed. 2.3. Spatial and non-spatial data are edited, projected and bookmarked.
3. Use GIS software to query and retrieve spatial and non-spatial data	3.1. ***Spatial data*** updates are accessed, read, interpreted and edited to ensure they are in an acceptable format to meet ***functional requirements***. 3.2. ***Entities*** and ***attributes*** are used to display ***spatial information*** that will assist in the delivery of ***spatial information services*** reported. 3.3. Entity and attribute queries of spatial data are used to generate summary results. 3.4. Results from queries are used to present spatial data graphically according to ***organizational guidelines***. 3.5. Entity and attribute queries are applied when using ***unvaried statistics*** to explore the dataset. 3.6. Routine spatial data problems or irregularities are solved in

4. Solve problems using GIS software	4.1. Existing spatial and a spatial data are adjusted to integrate with new data to meet ***documentation and reporting*** requirements and to add to personal learning and organizational intelligence. 4.2. ***Geospatial techniques*** on ***appropriate software*** are used to combine spatial layers data to solve problems, highlight selected data features and improve the visual aspect and understanding of the project. 4.3. ***Spatial overlay techniques*** are used to solve problems and generate results pertaining to the ***spatial project*** as specified by relevant personnel. 4.4. Cartographic integrity is tested and ***validated*** to solve accuracy and quality problems spatial project as specified by relevant personnel. 4.5. Systematic distortion are avoided and correction measures are undertaken in accordance with organizational accuracy and quality requirement
5. Produce reports based on basic spatial analysis.	5.1. Map or plans is/are integrated into project reports. 5.2. Results, summary statistics and graphs from a mapping application are incorporated into a project. 5.3. Legal and ***ethical requirements*** are adhered to according to organizational guidelines.
6. Archive data	6.1. Spatial dataset to be archived is manipulated where necessary to ensure completeness. 6.2. ***Metadata*** is created according to accepted industry standards. 6.3. New and existing spatial data is stored and archival details are recorded according to organizational guidelines.

Variable	**Range**
Computer hardware equipment	May include, but not limited to: • Mobile devices, multimedia devices • Networked systems personal computers, • Printers and scanners
Spatial data	May include, but not limited to: • Digital • Hard copy • Image, text • Raster and vector

	➢ Arc ➢ Circle ➢ Hatch ➢ Line ➢ Text
Attributes:	May include, but not limited to: • Properties associated with an entity and may include: ➢ Color and layer, ➢ Level ➢ Line type & width ➢ Text
Spatial information	May include, but not limited to: • Virtual data related to the location of objects on the earth.
Spatial information services	May include, but not limited to: • Virtual data that is: ➢ Collected, analyzed ➢ Displayed ➢ Manipulated and stored ➢ Virtual images used for planning and implementing the efficient administration and development of natural and built resources
Organizational guidelines	May include, but not limited to: • Code of ethics, • Company policy legislation relevant to the work or service function, • Manuals • OHS policies and procedures • Personnel practices and guidelines outlining work roles and responsibility
Unvaried statistics	May include, but not limited to: • Arithmetic mean • Histograms that illustrate the concepts of normal & other distributions • Maximum & minimum • Median, mode, • range standard deviation and variance
Relevant personnel	May include, but not limited to: • Colleagues, staff or employee representatives • Supervisors or line managers • Suppliers and users.
Documentation and reporting	May include, but not limited to: • Audit trails • Naming standards

	➢ Clip ➢ Dissolve ➢ Intersect ➢ Merge ➢ Union
Appropriate software	May include, but not limited to: • Computer-Aided Design (CAD) • Database • GIS, preferably open source • Graphic • Internet • Presentation applications: ➢ QGIS ➢ ESRI's Arc View GIS and Arc GIS ➢ ERDAS Imagine ➢ FREEWARE or other similar applications ➢ Intergraph Geo Media ➢ Manifold Professional ➢ MapInfo Professional ➢ remote sensing
Spatial overlay techniques	May include, but not limited to: • Raster, including: ➢ Aerial photography and/or satellite imagery in digital format ➢ Vector overlay, geo processing and the incorporation of other spatial information
Spatial project	May include: but not limited to: • Administration (e.g. Postcodes, suburbs, and federal) • Analysis of environmental, land and geographic information • Cartographic services • Digital imagery • Electricity • Emergency services management • Environmental datasets • GIS • Hydrograph • Integrated services – environmental, land and geographic related datasets • Land ownership tenure system • Local government • Location-based services • Global positioning • Mapping facilities

	• Terrestrial survey • Town planning • Utility services such as water
Validation	May include: but not limited to • Reflecting the true state of a test result, including tests for systematic distortions such as: ➢ Confounding bias ➢ Information/data bias ➢ Observational bias ➢ Recall bias ➢ Selection bias
Ethical requirements	May include, but not limited to: • Confidentiality • Privacy
Metadata	May include, but not limited to: • Summarized information about a spatial dataset describes the characteristics of the dataset, including availability, conditions of use, coordinate system, currency, spatial data acquisition methodologies, date of acquisition, quality, source and version control

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Use GIS software to query spatial data. • Produce reports based on basic spatial analysis. • Perform spatial data archival and retrieval • Perform spatial data management and manipulation • Avoid muscle strain • Load spatial data into a mapping application and perform entity and attribute queries • Operate relevant software packages • Print and image formats for map production • Perform spatial database operation • Solve basic problems relating to height, depth, breadth, dimension, direction and position in actual operational activity and virtual representation
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Cartographic design principles • Datum and projections • Geo processing • Logging procedures relating to a computer • OHS principles and responsibilities, • Avoid muscle strain

	• Technical terminology in relation to reading help files and prompts
Underpinning Skills	Demonstrates skills to: • Perform spatial data archival and retrieval • Perform spatial data management and manipulation • Perform file management • Solve basic problems relating to height, depth, breadth, dimension, direction and • Exercise precision and accuracy in all operations • Load spatial data into a mapping application and perform entity and attribute queries • Operate relevant software packages • Print and image formats for map production • Perform spatial database operation • Organize spatial information system
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 11 1117
Unit Descriptor	This unit of competency specifies the outcomes required to apply cartographic design principles and conventions to design and produce maps and associated products for use in surveying and spatial information services applications. The unit covers activities to identify specifications and information on which to base the map design and layout, and produce a map that includes elements, features and spatial reference systems and which meets client needs. It requires using Geographic Information System (GIS) or map design and production software.

Elements	Performance Criteria
1. Plan map design	1.1. Project requirements, and ***map type*** and purpose are determined in consultation with ***appropriate persons***. 1.2. Information is gathered and analyzed to determine geographic coverage of map area according to project requirements. 1.3. Required datasets are identified, sourced and assessed for suitability according to project requirements. 1.4. Geo-processing workflow is planned according to project requirements. 1.5. Scale and map layout are designed according to project requirements. 1.6. Cartographic and info-graphic principles, standards and conventions are identified and applied according to project requirements. 1.7. ***Equipment and software*** are selected and operated according to organizational requirements.
2. Produce map	2.1. Geo-processing is carried out on source datasets to produce the data required for map content. 2.2. ***Map components*** are identified and incorporated into map according to project requirements. 2.3. Spatial reference systems are adopted and applied to locate and align features on map according to project requirements. 2.4. Map is produced to meet project and organizational requirements and guidelines. 2.5. Accuracy of map layout and position is checked against

	3.2. Documentation is completed according to organizational requirements.

Variable	Range

Map type	May include, but not limited to:
	• General purpose maps
	  ➢ General reference map
	  ➢ Thematic map
	  ➢ Topographic map
	• Specific purpose
	  ➢ Info-graphic map
	  ➢ Cadastral map
	  ➢ Special purpose map
	• Based on scale
	  ➢ Large scale
	  ➢ Medium scale
	  ➢ Small scale

Appropriate persons	May include, but not limited to: • Client • Experienced colleague • Qualified cartographer • Supervisor or line manager.

Equipment and software	May include, but not limited to:
	• GIS, preferably open source
	• Graphic
	• Internet
	• Presentation applications:
	  ➢ ERDAS Imagine
	  ➢ FREEWARE or other similar applications
	  ➢ Intergraph Geo Media
	  ➢ Manifold Professional
	  ➢ MapInfo Professional
	• Remote sensing
	  ➢ GPS/GNSS
	  ➢ Total station
	  ➢ Computer
	  ➢ Printer
	  ➢ Plotter
	  ➢ Photocopier and
	  ➢ Scanner

Map components	May include, but not limited to: • Elevations • Spatial data features • Spatial data references

	attributes from sourced data in order to produce the data that comprises map content • Communicate clearly with others to clarify project requirements and required map design and detail • Comply with organizational requirements relating to: ➢ Records and documentation ➢ Health and safety when working on screen-based equipment ➢ Quality assurance • Exercise precision and accuracy relating to map design and layout • Incorporate appropriate marginal information, including data sources, geo-referencing system, map graticule, legend and scale • Incorporate raster data • Insert content into the map frame data that shows the application of cartographic principles • Use equipment, including a computer, printer and mapping software required to produce maps.
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Cartographic and info-graphic design principles and conventions • Common scales used on maps • Key features of spatial reference systems • Procedures for applying datums and projections to map making • Main types of geo-processing functions in mapping software • Map features and how they are represented • Organizational procedures for map production, reporting and equipment use • Typical characteristics and content of different types of maps, as listed in the range of conditions.
Underpinning Skills	Demonstrates skills to: • Apply datums and projections to map • Read data attributes and numeric datasets. • Ask questions to clarify map requirements. • Interpret cartographic information, including symbols, colour, images, labels and typography. • Use the functions of mapping software applications to geo-process data.
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to

Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Title	**Records**
Unit Code	**AGR RLA4 12 1117**
Unit Descriptor	This unit covers the knowledge, skills and attitude required to verify and collect natural and manmade features, interpret, sketch, organize output map information using map and Orthophotos. It requires the ability to combine technical applications to collect and organize map information for map production in a team environment with sound communication skills at field and office environment.

Elements	**Performance Criteria**
1. Plan and prepare for field work	1.1. Work instructions are confirmed and applied according to organization's regulations. 1.2. ***Field verification*** and compilation methods and ***equipment*** are selected in accordance with job and accuracy requirements. 1.3. The ***materials*** should be ready for the given activities. 1.4. Safety requirements are obtained from the site safety plan, other regulatory specifications or legal obligations are applied. 1.5. Operating equipment selected to carry out tasks are made consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported. 1.6. ***Job requirements*** are determined in accordance with workplace procedures.
2. Perform field data collection and verification	2.1. Work area is determined according to map coverage. 2.2. Reading, identifying, interpreting, ***different features*** that are found on a map and on an Orthophotos are compared to the features on the field. 2.3. Place names are collected and inserted and/or omitted on the map according to mapping procedures. 2.4. Each of the necessary existing features and their names are identified in relation to accepted accuracy. 2.5. Sketches are prepared in field works. 2.6. The ***precision*** of field verification requirement should be mentioned clearly. 2.7. Features are chosen to suit the task in accordance with mapping procedures. 2.8. Analysis of the features is checked on the map or

verification results	and requirements. 3.2. The field verification result is presented to relevant personnel. 3.3. Presentation and documentation of field work results are checked according to continuity of adjoining map sheets.

Variable	Range
Field verification	May include, but not limited to: • Features • Feature names • Place name
Equipment	May include, but not limited to: • Pocket stereoscope, • Hand held GPS • Audio tape • Tape meter
Materials	May include, but not limited to: • Relevant enterprise and work place guide lines • Relevant base map Orthophotosand check plot
Job requirements	May include, but not limited to: • Features: ➢ Man made ➢ Natural • Administration area: ➢ Town ➢ District
Different features	May include, but not limited to: • River • Road • Hill/mountain • Forest/Plantation • Building
Precision	May include, but not limited to: • Location • Name and Language
Outcomes	May include, but not limited to: • Collected names • Omitted and inserted features

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Accuracy and precision • Organizational policies and procedures including quality

	• Accurate recording of the results of each field verification • Team work
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Map reading • Aerial photograph interpretation • Pocket Stereoscope and handheld GPS, characteristics, technical capabilities and limitations • Site and equipment safety requirements • Project quality requirement
Underpinning Skills	Demonstrates skills to: • Plan and prepare for work • Perform field verification • Prepare for a field verification • Develop and present field verification plan. • Perform Map reading and Aerial photograph interpretation. • Operate pocket stereoscope, handheld GPS and computer and manipulate appropriate soft wares
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 13 1117
Unit Descriptor	This Competence standard covers the process of assessing applications for legislative compliance relating to changes in land Use and /or administration issues. It requires the ability to prepare for assessment, collect site evidence and compile final report. Assessing applications for legislative requirements requires knowledge of relevant Federal and regional State legislation and regulations on land use changes, land administration issues, interpreting aerial photographs, satellite images maps and GIS, communicating with stakeholders, agency policies and procedures, and formats for compiling reports.

Elements	Performance Criteria
1. Prepare for assessment	1.1. Existing data concerning suitability of application for ***land use*** and ***administration issue*** are reviewed and confirmed consistent with legislative requirements. 1.2. Intention to process formal application is communicated following program guidelines. 1.3. Title of right search is completed in line with program standards. 1.4. Specific issues relating to collection of evidence are communicated by aligning with ***technical guidelines***. 1.5. Timing of inspection and data collection is established with client following the client service delivery program up on the organizational guidelines.
2. Collect site evidence	2.1. ***Relevant data*** is collected following legislative requirements. 2.2. Accuracy of site details is checked in line with program guidelines. 2.3. Potential threats are checked in line with procedures according to organizational guidelines and industry best practice. 2.4. Impact of the causes is assessed consistent with proposed land use and rural land, administration development and management principles. 2.5. Cultural heritage issues are investigated and recorded according to enterprise guidelines and industry best practice.

	3.2. Report recommendations are supported by evidence following assessment criteria and ***legislative requirements*** or procedures according to enterprise guidelines and industry best practice. 3.3. Final report and supporting documentation are presented in line with policy guidelines.

Variable	**Range**
Land Use	May include, but not limited to: • Maps • Different land use factions such as residence, commerce, industry, social services etc.
Administration issues	May include, but not limited to: • Dispute causes • Holding and use right complain • Illegal occupations/squatter settlements • Court causes
Technical guidelines	May include, but not limited to: • Assuring Coordinates • Legality of the title • Land use function • Interpreting plans and maps • Using GIS Data • Surveying works
Relevant data	May include, but not limited to: • Holding and use rights • Area/Size of parcel • Geo-reference of spatial data • Minutes
Stakeholders	May include, but not limited to: • Land managers at all level of administration • local recreational land users, • Regional and rural land management bodies, • Local regulatory authorities and land care Committees. • Complaints including women's and vulnerable groups
Assessment criteria	May include, but not limited to: • Registry book • Use right certificate • Committees
Legislative requirements	May include, but not limited to: • OHS regulations • Rural Land administration rules and regulations

	legislative compliance have been appropriately assessed according to enterprise guidelines and industry best practice. • The skills and knowledge required to assess applications for legislative compliance must be transferable to a range of work of rural land administration contexts. For example, this could include: ➢ negotiation skill ➢ techniques of investigation ➢ consideration of coordinates ➢ land use functions and maps
Underpinning Knowledge	Demonstrate knowledge of: • Relevant Federal and regional legislation and regulations on rural land administration. • Interpreting aerial photographs, maps and GIS. • Communicating with stakeholders. • Agency policies and procedures. • Formats for compiling reports. • Assessment approaches for area of notification.
Underpinning Skills	Demonstrate skills to: • Prepare for assessment • Collect site evidence • Communication skill • Computer skill • Interpreting rules and regulations • Conflict resolution skill • Interpreting aerial photographs, maps and GIS. • Identification of land use function • Report writing skill
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Title	**Participate in Property Valuation**
Unit Code	**AGR RLA4 14 1117**
Unit Descriptor	This unit of competency specifies the outcomes required in participating to asses and value the existing, housing unit and different supportive elements found in plot area, it includes obtaining valuation instructions from the clients, conducting relevant information on the property. It includes main buildings, service quarters fence, plantation and crops and water stand posts are offered for valuation, inspecting the relevant properties and selecting and applying the appropriate valuation methodology, and reporting to the client on the outcomes of the assessment and valuation process.

Elements	**Performance Criteria**
1. Obtain valuation provision	1.1. ***Purpose of valuation*** of property in a given plot is confirmed with client by application and court orders are the basic for ***property valuation*** in line with rural sector practice, ethical standards and legislative requirements. 1.2. Written confirmation of valuation ***provision*** is obtained from client in line with organization practice. 1.3. Time, date and place of inspection of property are arranged in line with rural sector practice.
2. Participate in conducting valuation to property offered for valuation	2.1. Preliminary ***market evidence*** of value of the land related property is assessed and obtained from relevant sources of rural sector. 2.2. The market and material cost of the construction and agriculture products have to be updated according the rural sector practice. 2.3. Advice on replacement cost of the property is obtained from relevant sources. 2.4. ***Historical accounting records*** with relevant property units are obtained from relevant source. 2.5. Compliance of land and land related ***property*** is determined with safety and other relevant legislative requirements. 2.6. Details of maintenance cost history of the property are obtained from relevant sources.
3. Participate in inspecting land and land related	3.1. Identity land and land related property type are confirmed in line with rural sector practice.

	3.4. ***Field notes*** on inspection are compiled in line with the organization practice.
4. Participate in undertaking site inspection	4.1. Cost and ***market information*** are obtained and analyzed in line with rural sector practice. 4.2. Appropriate ***valuation methodology*** is selected and applied for property. 4.3. Determination of value of property is used based on verifiable information in line with rural sector, ethical and legislative requirements. 4.4. Report on value of the property is prepared for client in line with rural sector practice. 4.5. Communication is maintained with client throughout the assessment and valuation process.
5. Report to client	5.1. Report on the outcomes of the valuation is presented and explained to client in line with agency practice. 5.2. ***Professional issues*** arising from the report are discussed with client in line with agency practice.

Variable	**Range**
Purpose of valuation	May include, but not limited to: • Transaction of property market (sale. Inheritance and through gift) • Compensation • Acquisition • Auction • Financial reporting • Financing • Forced sale • Investment areas in the inner city and expansion area • Litigation/court case, court order • Management buyout • Mergers • Private treaty sale • Reinstatement • Replacement • Taxation
Property valuation	May include, but not limited to: • The process of developing an opinion of value for property taking into account all of the features and issues relating to a particular property
Provision	May include, but not limited to:

	development issues) • Legal documents.
Market evidence	May include, but not limited to: • Costing guides • Sales and leasing transactions • Brokers information • Up dated different construction materials cost
Historical accounting records	May include, but not limited to: • Balance sheet • Budgets and forecasts • Profit and loss statement • Statement of cash flows
Property	May include, but not limited to: • Housing unit or building • Service quarter • Fence • (Tukul) houses (rural cultural house) • Water stand post • Agricultural products (Permanent and temporary)
Field notes	May include, but not limited to: • File notes • Inspection file • Market evidence
Market information	May include, but not limited to: • Historical manuals • Urban sector standards and codes of practice • Legislative and regulatory compliance standards • Productivity benchmarks for agricultural products • Sale and leasing transactions.
Valuation methodology	May include, but not limited to: • Capitalization method • Direct comparison method • Discounted cash flow method.
Professional issues	May include, but not limited to: • The process followed, while valuing • valuation method

Evidence Guide	
Critical Aspects of Competence	Critical evidence of knowledge and skills include: • Demonstrate land and land related property type • Demonstrate of market and material cost of the construction and agriculture products.

	• OHS • Taxation rules and regulation (Over return tax and user fee) its aim for development • Risks and risk management strategies associated with assessing and valuing property and supportive components/equipment in the plot • Sources of information on market conditions • Describe valuation methods, including: ➢ Income method ➢ Sales comparison method ➢ Cost method ➢ Valuation analysis.
Underpinning Knowledge and Attitudes	Demonstrate knowledge and attitudes on: • Expansion area agricultural products types and Names • Read the base map , take the Sketch of the plot and the building • Utilities, and water lines and septic tanks • Relevant federal, and state or territory legislation and local government regulations • Transparent valuation, fair service delivery and practices • OHS) • Privacy • Taxation rules and regulation (Over return tax and user fee) its aim for development • Risks and risk management strategies associated with assessing and valuing property and supportive components/equipment in the plot • Sources of information on market conditions • Valuation methods, including: ➢ Capitalization method ➢ Direct comparison method ➢ Discounted cash flow method • Valuation analysis
Underpinning Skills	Demonstrate skills on: • Expansion of area for agricultural products types and names • Read the base map , take the sketch of the plot and the building, utilities, • Ability to communicate with and relate to a range of people from diverse social, economic and cultural backgrounds and with varying physical and mental abilities, • Analytical skills to interpret documents such as legislation, regulations, contracts of sale and auction rules

	• Decision making and problem solving skills to analyze situations and make decisions associated with assessing and valuing the property and equipment • literacy skills to prepare general information, papers, formal and informal letters, reports and applications; and complete standard forms • Skills to calculate marketing expenses within agreed budget • Planning, organizing and scheduling skills to undertake work-related tasks associated with assessing and valuing property and equipment • Basic research skills to identify and locate documents and information required to assess and value property and equipment. • Risks and risk management strategies associated with assessing and valuing property and equipment in the plot • Sources of information on market conditions • Valuation methods, including: ➢ Capitalization method ➢ Direct comparison method ➢ Discounted cash flow method • Valuation analysis
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	**AGR RLA4 15 1117**
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to respond to claims for expropriation and compensation, determining and settling compensation. It deals with settlement of expropriation and compensation claims with respect to land right and property.

Elements	Performance Criteria
1. Identify expropriation and Compensation laws	1.1. Expropriation and compensation related policies and legislations and industrial ***rules and regulations*** are properly identified and documented. 1.2. The roles of formal and informal institutions related to expropriation and compensation are identified
2. Respond to claims for expropriation and compensation	2.1. ***Evidences*** are collected and organized in accordance with ***organizational procedures.*** 2.2. Claims are assessed and responded to within statutory timeframes. 2.3. Expropriation and compensation claims are served in the required format within the specified time period. 2.4. A determination is made as to whether a ***claimant*** is entitled to compensation in accordance with legislation, organizational policy and procedures.
3. Determine expropriation and compensation	3.1. ***Settlement terms*** are determined according to ***legislation, organizational policy and procedures***. 3.2. Advice is obtained as necessary to deal with any non-routine aspects of claims. 3.3. Agreement is negotiated with the claimant in accordance with organizational policy and procedures. 3.4. If agreement cannot be reached, an action is prepared and processed through court or compensation court in accordance with organizational procedures***.*** 3.5. Settlement documents are prepared in accordance with the compensation determination containing ***information supplied for a claim*** that is technically correct.
4. Settle expropriation and compensation	4.1. Once a settlement is reached, compensation is paid in the required timeframe in accordance with agreements or court determination. 4.2. Settlement release is obtained from client and/or third

Variable	Range
Rules and regulations	May include, but not limited to: • Sets forth the operational powers or provisions that deals with settlement of expropriation and compensation claims. Or Specific articles describing settlement of expropriation and compensation claims
Evidences	May include, but not limited to: • Relevant use at or about date of claim • Information from user interface • Information from archives • Information from land book • Information supplied by government authorities • Land title right. • Photographs. • Field inspection. • Reserve trust records • Letters of request for use of land • The concerned urban lands protection entity. • Peri-urban farmers associations • Land use history. • Fencing details • Documentation proving occupation of land at date claim
Organizational procedures	May include, but not limited to: • Regulatory requirements • Industry practices • Manual or electronic applications
Claimants	May include, but not limited to: • Proprietors with tenure right eligible for compensation. • Developers • Neighborhoods • Communities • Public • Farmers
Settlement terms	May include, but not limited to: • Cash settlement for real property • Cash settlement for agricultural production • Expropriation time
Legislation, organizational policy and procedures	May include, but not limited to: • Legislations related to public land administration • Legislation related to compensation • Legislation related to property valuation estimation

	code/s of ethics • Organizational standards
Information supplied for a claim	May include, but not limited to: • Legal application letter • Titles/Right • Real property information • survey plans • field inspection report • Aerial photographs/ locational map

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Dealt compensation issues according to rules and regulations. • Reduce of court litigations regarding compensations • Negotiate compensation claimants with regard to the fairness of compensation. • Satisfy customers with the fairness of the property compensation according to the prevailing rules and regulations. • Sought workplace issues effectively • Respond to workplace issues promptly • Present information clearly and effectively written form • Use appropriate sources of information
Underpinning Knowledge and Attitude	Demonstrate knowledge of: • Legislation, policies and procedures relating to property estimation for compensation. • Legislation and regulations of Land administration • Organizational processes and protocols relating to the handling of compensation claims. • Court procedures. • Public sector legislation including occupational health and safety and environment in the • Context of compensation
Underpinning Skill	Demonstrate skills of: • Interpreting and applying legislation relating to land administration. • Investigating compensation claim in line with organizational regulations and policies. • Communicating with diverse stakeholders including effective negotiation • Generating documentation to organizational standards • Writing reports requiring formality of language and

	situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 16 1117
Unit Descriptor	This unit describes the legal procedures for investigating encumbrances before authorizing formal property transaction. The encumbrances or title defect modalities that obliges inspecting before endorsing property transaction includes transfer of title to mortgage when property is used as collateral by financial institutions, the banning of transaction due to court order, pending of transfer due to boundary dispute, inheritance dispute, or other pending cases.

Elements	Performance Criteria
1. Apply Preliminary procedures for property transaction	1.1. Legal documents related to property transition are Identified 1.2. ***Legally acceptable documents*** are fulfilled between signing parties according to the contract legal agreement criteria of the authorized organization. 1.3. The legally acceptable documents between signing parties are approved by the authorized organization.
2. Complete property transaction	2.1. The stamped ***contract agreement*** of the contractual parties is submitted for the ***pertinent entity***. 2.2. The legality of the title deed is searched and inspected from digital information, archives and if necessary contacting ***third parties***. 2.3. ***Type of property transaction*** is identified and checked based on the request. 2.4. Title/right ***encumbrance*** is checked according to ***tenure regulations***. 2.5. If there is not title defect, property transaction is approved. 2.6. Registration change on title is updated and confirmed 2.7. New ***title/right*** is provided.
3. Maintain property transaction records	3.1. ***Property transaction records*** are maintained in accordance with organizational policy and procedure 3.2. Information in relation to property transactions are provided

Variables	Range
Legally acceptable documents	May include, but not limited to: • Legal agreement • Court decision documents

Pertinent entity	May include, but not limited to: • Land administration entity
Third parties	May include, but not limited to: • Bank. • Financial institutions. • Land institutions. • Court • Authorized office/organization • Cooperative housing institutions.
Type of property transaction	May include, but not limited to: • Inheritance. • Sale of improved property • Gift. • Lease/rent • Divorce • Land to land exchange
Encumbrance	May include, but not limited to: • Lease payment • Transfer of title deed to Mortgage • Inheritance dispute • Parcel boundary dispute • Court injection
Tenure regulations	May include, but not limited to: • Pursuant articles for property transaction.
Title/Right	May include, but not limited to: • Certificate of title assuring ownership right to land.
Property transaction records	May include, but not limited to: • Contracts of sale, • Written leases, • Earlier and current holder and user, • Encumbrances/claim on property • Agency contracts, including any notes and supporting documentation, and any other records pertaining to Property transaction.

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Checks that all documentation and transaction is accurate. • Assures new title provision is free from any title defect of whatsoever. • Implements government laws and regulations. • Meets timelines of document preparation, including those

Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Relevant legislation and regulations • Practice procedures • Process monitoring • Quality assurance • File reconciliation procedures. • Spread sheet and database management programs. • Interpreting notary agreement.
Underpinning Skills	Demonstrate skill to: • Communicate in a range of business environments with diverse people • Plan contingency measures. • Analyze the responses of third parties. • Negotiate with a range of people in diverse situations • Manage time efficiently • Solve problems • Operate appropriate technology for data storage and archiving. • Advocate on a range of issues • Obtain ongoing instructions
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 17 1117
Unit Descriptor	This unit covers building, rebuilding and maintaining trusting relationships with individuals and communities by rural sector. It includes setting the parameters for relationships or partnerships, providing information relating to community engagement, and building community engagement and community problem solving capacity.

Elements	Performance Criteria
1. Set the parameters of relationships and partnerships	1.1. ***A contextual framework*** is developed to assist in analyzing and setting parameters for relationships/ partnerships in accordance with organizational policy and procedure. 1.2. The parameters and purpose for the ***relationships/ partnerships*** are established and agreed. 1.3. The emergence of new ideas and options are allowed for in the flexibility of the purpose. 1.4. The dynamics within and across relationships/partnerships are identified and managed. 1.5. Benefits for both parties are identified and agreed in accordance with organizational policy and procedure. 1.6. ***Constraints*** are identified, including time, procedural and resource limitations and resources are allocated in accordance with organizational requirements.
2. Provide information relating to community engagement	2.1. Current community understanding of the roles and responsibilities of rural sector officials is assessed, and information is provided to clarify the roles and responsibilities in accordance with organizational policy and procedures. 2.2. The rights and responsibilities of individuals and communities to be involved in government processes and decision making are explained in a manner accessible to the audience. 2.3. Government/agency priorities, strategic direction, systems, decision making and approval processes are communicated using language, materials and timelines to suit the audience and the occasion. 2.4. Opportunities for community involvement in government/ agency processes and decision making are communicated in ways suited to the diversity of the community.

	needs. 3.2. Opportunities for individuals and communities are identified collaboratively, resourced and promoted to develop their capacity to engage with government in accordance with organizational policy and procedures. 3.3. Innovative strategies are developed and implemented to identify and reach out to those who have not yet connected with government, and those who have had a previous poor experience in attempting to engage with government. 3.4. Informal and formal community networks are tapped into to strengthen local capital and to ensure ongoing capacity. 3.5. Barriers to community engagement are identified and solutions formulated and implemented in accordance with organizational policy and procedures and community context.
4. Build community problem-solving capacity	4.1. Information and opportunities for involvement are provided in government processes and decision making to individuals and communities in accordance with their needs and preferences. 4.2. Existing and new ways are identified and promoted to engage with government in a variety of ways suited to diverse communities. 4.3. Mechanisms for communities to raise their own issues with government are developed, implemented and promoted in accordance with organizational policy and procedures and community context. 4.4. A range of strategies are developed to address community issues in partnership with communities. 4.5. Mutually developed and agreed solutions to community issues are implemented in accordance with organizational policy and procedures. 4.6. Strategies are identified and utilized for reporting developments to communities.

Variable	**Range**
A contextual framework	May include, but not limited to: • Dynamics of community • Community power structures • Collaborations

	• Level of agency support
Relationships/ partnerships	May include, but not limited to: • Level of agency support • Individuals • Community groups • Ethnic communities • Local residents through place-based initiatives • Non-government organizations • Private sector organizations • Other public sector agencies • Media organizations • Business community • Industry specific target groups
Constraints	May include, but not limited to: • Industry specific target groups • Lack of knowledge • Lack of understanding • Lack of decision making powers • Lack of time and resources • Geographic location • Previous experiences with engagement processes • Community angst or lack of trust • Organizational capacity to respond to community • External factors (including non-negotiable) • Perceived status of organization in the community • Community expectations of the partnership/relationship • Cost for the community to be involved, such as transport, time off work

Evidence Guide	
Critical Aspects of Competence	Critical evidence of knowledge and skills include: • Setting the parameters of relationships and partnerships • Providing information relating to community engagement • Building community engagement capacity • Building community problem-solving capacity
Underpinning Knowledge and Attitudes	Demonstrate knowledge and attitudes on: • Legislation, regulations, policies, procedures and guidelines relating to community engagement • Community engagement theory, principles, practices and techniques • Community development practices and principles • Rural sector values and codes of conduct

	principles • Workplace safety procedures relating to community engagement activities
Underpinning Skills	Demonstrate skills on: • Establishing and fostering transparent, trusting relationships/partnerships with individuals and communities • Maintaining multiple and potentially conflicting relationships/partnerships • Working with diverse communities using a range of communication styles to suit different audiences and purposes • Explaining complex and formal policies and concepts to a variety of audiences responding to diversity, including gender and disability • Applying lateral thinking to provide solutions and overcome barriers to community engagement • Linking people to appropriate capacity-building opportunities • Applying workplace safety procedures to community engagement activities • Preparing community engagement information requiring the presentation of complex information using simple language structures and precision of expression
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	**AGR RLA4 18 1117**
Unit Descriptor	This competency covers the knowledge, skills and attitudes required to plan and organize adjudication activities for Legal Cadastre and apply registration and certification activities. It requires the ability to plan and schedule of tasks/activities, allocation of resources, facilitation of awareness raising programs, verification of application and identification of land holders and users, verification of adjudication for legally recognized rights, mapping, registration and certification, and. It also requires the ability to verify legal Cadastre by ascertaining through land holdings and other legally recognized use rights to ensure a legal Cadastre: through facilitating negotiation and legal agreement reached among involved parties (adjoining landholders, witnesses, local representatives, adjudicators) and fixing the boundary mark accurately through surveying by maintaining the tolerance of legal Cadastre.

Element	**Performance Criteria**
1. Plan and schedule for adjudication, registration and certification activities	1.1. Tasks/work activities to be completed are identified and prioritized as required. 1.2. Tasks/work activities are broken down into steps in accordance with set time frames achievable components in accordance with set time frames. 1.3. ***Resources*** are allocated as per requirements of the activity. 1.4. ***Schedule of work activities*** is coordinated with personnel concerned.
2. Facilitate and manage preliminary procedures before adjudication, registration and certification activities	2.1. ***Tools and equipment***, ***source of data and information*** and group of community participate in registration are organized. 2.2. Awareness creations for different target groups are facilitated and managed. 2.3. Impacts and ***potential benefits of rural land registration and titling/certification*** on land tenure security and on agricultural production and productivity are clearly identified and promoted 2.4. Land Administration committees are trained/mentored and supervised 2.5. The delineation process from aerial photograph or Cadastre or topography map for easy identification of

	2.7. ***Occupational Health and safety*** is maintained.
3. Facilitate and manage adjudication/ ascertainment and mapping of right to land in case of unclear boundary	3.1. Surveying of adjudication area is supervised on the ground initiating from a known point, preferably a geodetic benchmark. 3.2. The process of negotiations with ***adjoining landholders*** is facilitated and managed to clearly demarcate the boundary. 3.3. Keble land administration committee and other dwellers of the Keble are aware their role as witnesses for observing and signing on each demarcated parcel boundary amongst adjoining landholders. 3.4. Peg/Stone is fixed on the agreed adjoining landholders' boundary of the parcel and surveying is supervised and verified accordingly by tying with the national grid by ***surveying personnel***. 3.5. The ***legal format*** is signed by the legal landholder, adjoining landholders, witnesses, surveying and legal registry technicians is verified. 3.6. Pertinent ***legal*** **and** ***statutory standards*** are adhered to.
4. Supervise registration and cadastral Process	4.1. ***Methods of land registration*** are selected and applied. 4.2. Advanced surveying techniques are applied according to work place procedures. 4.3. Information and materials collection process from field sheet are supervised and verified based on requirements. 4.4. Identification and demarcation of boundaries are verified. 4.5. Public hearing/ display are facilitated, managed and supervised 4.6. Registration and cadastral activities and work performance are monitored and compared with set objectives.
5. Supervise Certification Process	5.1. Data quality is assured. 5.2. Book of registry, book of holding and primary certificates are verified. 5.3. Parcel map is verified based on guidelines 5.4. Certification activities and work performance are monitored and compared with set objectives.
6. Review and document the task	6.1. Review of adjudication, registration and certification activities for legal cadastre is undertaken against

	6.3. Legal and government requirements are fulfilled and verified in the correct manner. 6.4. Performance appraisal is conducted in accordance with organization rules and regulations. 6.5. ***Required documentation*** is completed according to organizational guidelines. 6.6. ***Constraints of implementation*** of land registration and Certification are identified and documented

Variable	**Range**
Resources	May include, but not limited to: • Personnel • Equipment and technology • Services • Supplies and materials • Sources for accessing specialist advice • Budget
Schedule of work activities	May include, but not limited to: • Daily • Work-based • Contractual • Regular • Confidential Disclosure/Non-disclosure
Tools and equipment	May include, but not limited to: • Pocket stereoscope • Hand held GPS • Audio tape • Rope • HHGPS • Total station • Theodolites • Line level • String • Graduated staff • Measuring tape • Digging instruments • Ranging pole • Pegs • Compass • Top maps • Automatic level,

	• Provide security for credit • Facilitate the management and protection of state lands • Facilitate rural land reform • Support for land and property taxation • Develop and monitor land markets • Improve urban planning and infrastructure development • Protect land resources and support environmental management • Produce statistical data.
Occupational Health and safety	May include, but not limited to: • OHS identification • Risk assessment and control • Implement procedures for dealing with conflict resolution Hazards may include: • Disturbance or interruption of services • Solar radiation • Parcel possessed by several landholders • Dust • Sharp hand tools and equipment • Manual handling • Falling objects, and • Uneven surfaces.
Adjoining landholders	May include, but not limited to: • Neighbours sharing common parcel boundary who agree on who owns what land and the legal extent of land during land adjudication
Surveying personnel	May include, but not limited to: • Personnel includes Legal registry technicians • Surveyor • Spatial service technicians/administrators
Legal format	May include, but not limited to: • A legal format certifying the agreement amongst adjoining parties on who owns what land and the legal extent. The legal format normally informs the name and signature of owners, adjoining owners, witnesses and surveyor, survey plan number, location information, and legal area extent of the owner
Legal and statutory standards	May include, but not limited to: • Local government requirements and national standards • Organizational policy
Methods of land registration	May include, but not limited to: • Traditional/non-conventional way of registration

	• Organizational work activity sheets • Control point list • Previous adjoining block diagram.
Constraints of implementation	May include, but not limited to: • Technical issues and constraints: • Institutional issues and constraints • Legal issues and constraints: • Economic issues and constraints:

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: • Plan and schedule activities • Performance appraisal • Prepare work procedures • Be familiar with the inspection and the history of land acquisition • Assures adjoining land holders and witnesses are agreed and signed on the boundary mark • Performs surveying based on the agreed boundary mark • Uses agreed boundary, fences or road as a basis for demarcating legal extent of holders • Checks and harmonize the area on tax bill of old occupant with the measured area obtained from existing marks, fences or any agricultural or other boundaries from surveying • Assures new title provision or temporary certificate is free from any title defect whatsoever • Implements government laws and regulations • Meets timelines of surveying and boundary delineation • Ensures reconciliation takes place prior to settlement • Implements government procedures. • Prepares contingency plans in the event of a party being unable to fulfill contractual obligations • Resolves conflicts • Applies surveying techniques • Collects tools and equipment • Develops map
Underpinning knowledge	Demonstrate knowledge of: • Local knowledge of socio-cultural conditions • Legal cadastre principles • Parcel size standard regulations • Land regularization, adjudication and consolidation

	• Interpreting aerial photograph and/or satellite imagery. • Practice procedures • Process monitoring • Quality assurance • Spread sheets and database management programs • Interpreting legal official agreements • Basic principles of survey • Operating different survey instruments • Proper handling techniques of instruments • Map development techniques • Dealing with conflicts
Underpinning skills	Demonstrates skills to: • Appraise performance • Work in teams • Safe work practices • Communicate with communities • Interpret aerial photograph or satellite image. • Land consolidation • Legal format preparation • Negotiate • Communicate in a range of business environments with • Diverse people • Plan contingency measures • Analyze the responses of third parties • Negotiate with a range of people in diverse situations • Manage time efficiently • Solve problems • Operate appropriate technology for data storage and archiving • Advocate on a range of issues • Obtain ongoing instructions
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	**AGR RLA4 19 1117**
Unit Descriptor	This unit defines the competence required to apply skills and knowledge in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology. To this end, the person is typically engaged in on-going review and research in order to discover and apply new technology or techniques to improve aspects of the organization's activities.

Elements	**Performance Criteria**
1. Apply existing knowledge and techniques to technology and transfer	1.1. Situations are identified where existing knowledge can be used as the basis for developing new skills. 1.2. New or upgraded technology skills reacquired and used to enhance learning. 1.3. New or upgraded equipment are identified, classified and used where appropriate, for the benefit of the organization.
2. Apply functions of technology to assist in solving organizational problems	2.1. Testing of new or upgraded equipment is conducted according to the specification manual. 2.2. Features of new or upgraded equipment are applied within the organization. 2.3. Features and functions of new or upgraded equipment are used for solving organizational problems. 2.4. Sources of information relating to new or upgraded equipment are accessed and used.
3. Evaluate new or upgraded technology performance	3.1. New or upgraded equipment is evaluated for performance, usability and against OHS standards. 3.2. ***Environmental considerations*** are determined from new or upgraded equipment. 3.3. ***Feedback*** is sought from users where appropriate.

Variables	**Range**
Environmental Considerations	May include, but not limited to: • Recycling, safe disposal of packaging (e.g. Cardboard, polystyrene, paper, plastic) and correct disposal of waste materials by an authorized body
Feedback	May include, but not limited to: • Surveys,

Competence	of existing skills and knowledge to new technology
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Broad awareness of current technology trends and directions in the industry (e.g. systems/procedures, services, new developments, new protocols) • Vendor product directions • Ability to locate appropriate sources of information regarding metal manufacturing and new technologies • Current industry products/services, procedures and techniques with knowledge of general features • Information gathering techniques
Underpinning Skills	Demonstrate skills of: • Research skills for identifying broad features of new technologies • Ability to assist in the decision making process • Literacy skills in regard to interpretation of technical manuals • Ability to solve known problems in a variety of situations and locations • Evaluate and apply new technology to assist in solving organizational problems • General analytical skills in relation to known problems
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Code	AGR RLA4 20 1117
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.

Elements	Performance Criteria
1. Establish quality specifications for product	1.1. Market specifications are ***sourced*** and ***legislated requirements*** identified. 1.2. Quality specifications are developed and agreed upon. 1.3. Quality specifications are documented and introduced to organization staff / personnel in accordance with the organization policy. 1.4. Quality specifications are updated when necessary.
2. Identify hazards and critical control points	2.1. Critical control points impacting on quality are identified. 2.2. Degree of risk for each hazard is determined. 2.3. Necessary documentation is accomplished in accordance with organization quality procedures
3. Assist in planning of quality assurance procedures	3.1. Procedures for each identified control point are developed to ensure optimum quality. 3.2. Hazards and risks are minimized through application of appropriate controls. 3.3. Processes are developed to monitor the effectiveness of quality assurance procedures.
4. Implement quality assurance procedures	4.1. Responsibilities for carrying out procedures are allocated to staff and contractors. 4.2. Instructions are prepared in accordance with the enterprise's quality assurance program. 4.3. Staff and contractors are given induction training on the quality assurance policy. 4.4. Staff and contractors are given in-service training relevant to their allocated ***safety procedures***.
5. Monitor quality of work outcome	2.1. Quality requirements are identified. 2.2. Inputs are inspected to confirm capability to meet quality requirements

	2.5. Processes are adjusted to maintain outputs within specification.
6. Participate in maintaining and improving quality at work	6.1. Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements. 6.2. Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements. 6.3. Corrective action is taken within level of responsibility, to maintain quality standards. 6.4. Quality issues are raised with designated personnel.
7. Report problems that affect quality	7.1. Potential or existing quality problems are recognized. 7.2. Instances of variation in quality are identified from specifications or work instructions. 7.3. Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.

Variable	**Range**
Sourced	May include, but not limited to: • End-users • Customers or stakeholders
Legislated requirements	May include, but not limited to: • Verification of product quality as part of consumer legislation or specific legislation related to product content or composition.
Safety procedures.	May include, but not limited to: • Use of tools and equipment for fabrication/production/ manufacturing works • Workplace environment and handling of material safety, • Following occupational health and safety procedures designated for the task • Respect the policies, regulations, legislations, rule and procedures for manufacturing/production/fabrication works

Evidence Guide	
Critical Aspect of Competence	Demonstrates skills and knowledge to: • Monitor quality of work • Establish quality specifications for product • Participate in maintaining and improving quality at work • Identify hazards and critical control points in the production of quality product • Assist in planning of quality assurance procedures

	• Quality policies and procedures • Improving quality at work • Hazards and critical points of operation • Obtaining and using information • Applying federal and regional legislation within day-today work activities • Accessing and using management systems to keep and maintain accurate records • Requirements for correct preparation and operation • Technical writing
Underpinning Skills	Demonstrates skills to: • Monitor quality of work • Establish quality specifications for product • Participate in maintaining and improving quality at work • Identify hazards and critical control points in the production of quality product • Assist in planning of quality assurance procedures • Report problems that affect quality • Implement quality assurance procedures
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit covers the knowledge, skills and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

Elements	Performance Criteria
1. Provide team leadership	1.1. ***Learning and development needs*** are systematically identified and implemented in line with ***organizational requirements***. 1.2. Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented. 1.3. Individuals are encouraged to self-evaluate performance and identify areas for improvement. 1.4. ***Feedback on performance*** of team members is collected from relevant sources and compared with established team learning process.
2. Foster individual and organizational growth	2.1. Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards. 2.2. ***Learning delivery methods*** are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources. 2.3. Workplace learning opportunities and coaching/ mentoring assistance are provided to facilitate individual and team achievement of competencies. 2.4. Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.
3. Monitor and evaluate workplace learning	3.1. Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements. 3.2. Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support. 3.3. Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning. 3.4. Records and reports of competence are maintained within organizational requirement.
4. Develop team	4.1. Open communication processes to obtain and share

	4.3. Mutual concern and camaraderie are developed in the team.
5. Facilitate accomplishment of organizational goals	5.1. Team members are actively participated in team activities and communication processes. 5.2. Individual and joint responsibility is developed by team's members for their actions. 5.3. Collaborative efforts are sustained to attain organizational goals.

Variable	**Range**
Learning and development needs	May include, but not limited to: • Coaching, monitoring and/or supervision • Formal/informal learning program • Internal/external training provision • Work experience/exchange/opportunities • Personal study • Career planning/development • Performance evaluation • Workplace skills assessment • Recognition of prior learning
Organizational requirements	May include, but not limited to: • Quality assurance and/or procedures manuals • Goals, objectives, plans, systems and processes • Legal and organizational policy/guidelines and requirements • Safety policies, procedures and programs • Confidentiality and security requirements • Business and performance plans • Ethical standards • Quality and continuous improvement processes and standards
Feedback on performance	May include, but not limited to: • Formal/informal performance evaluation • Obtaining feedback from supervisors and colleagues • Obtaining feedback from clients • Personal and reflective behavior strategies • Routine and organizational methods for monitoring service delivery
Learning delivery methods	May include, but not limited to: • On the job coaching or monitoring • Problem solving • Presentation/demonstration

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • Identify and implement learning opportunities for others • Give and receive feedback constructively • Facilitate participation of individuals in the work of the team • Negotiate plans to improve the effectiveness of learning • Prepare learning plans to match skill needs • Access and designate learning opportunities
Underpinning Knowledge and Attitude	Demonstrates knowledge of: • Coaching and monitoring principles • How to work effectively with team members who have diverse work styles, aspirations, cultures and perspective • How to facilitate team development and improvement • Methods and techniques to obtain and interpreting feedback • Methods for identifying and prioritizing personal development opportunities and options • Career paths and competence standards in the industry
Underpinning Skills	Demonstrates skills to: • Read and understand a variety of texts, preparing general information and documents according to target audience; spell with accuracy; use grammar and punctuation effective relationships and conflict management • Communicate including receiving feedback and reporting, maintaining effective relationships and conflict management • Plan and organize required resources and equipment to meet learning needs • Coach and mentor skills to provide support to colleagues • Report to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes • Facilitate and conduct small group training sessions • Relate to people from a range of social, cultural, physical and mental backgrounds
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group discussions, and contribute to the development of communication strategies.

Elements	**Performance Criteria**
1. Meet common and specific communication needs of clients and colleagues	1.1. Specific communication needs of clients and colleagues are identified and met. 1.2. Different approaches are used to meet communication needs of clients and colleagues. 1.3. Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization.
2. Contribute to the development of communication strategies	2.1. ***Strategies*** for internal and external dissemination of information are developed, promoted, implemented and reviewed as required. 2.2. Channels of communication are established and reviewed regularly. 2.3. Coaching in effective communication is provided 2.4. Work related network and relationship are maintained as necessary. 2.5. Negotiation and conflict resolution strategies are used where required. 2.6. Communication with clients and colleagues is made appropriate to individual needs and organizational objectives.
3. Represent the organization	3.1. When participating in internal or external fora, presentation is relevant, appropriately researched and presented in a manner to promote the organization. 3.2. Presentation is made clear and sequential and delivered within a predetermined time. 3.3. Appropriate media is utilized to enhance presentation. 3.4. Differences in views are respected. 3.5. Written communication is made consistent with organizational standards. 3.6. Inquiries are responded in a manner consistent with organizational standard.

	4.3. Objectives and agenda are routinely set and followed for meetings and discussions. 4.4. Relevant information are provided to group to facilitate outcomes. 4.5. Evaluation of group communication strategies is undertaken to promote participation of all parties. 4.6. Specific communication needs of individuals are identified and addressed.
5. Conduct interview	5.1. A range of appropriate communication strategies are employed in ***interview situations***. 5.2. Different ***types of interview*** is conducted in accordance with the organizational procedures. 5.3. Records of interviews are made and maintained in accordance with organizational procedures. 5.4. Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.

Variable	**Range**
Strategies	May include, but not limited to: • Recognizing own limitations • Utilizing techniques and aids • Providing written drafts • Verbal and non verbal communication
Effective group interaction	May include, but not limited to: • Identifying and evaluating what is occurring within an interaction in a non-judgmental way • Using active listening • Making decision about appropriate words, behavior • Putting together response which is culturally appropriate • Expressing an individual perspective • Expressing own philosophy, ideology and background and exploring impact with relevance to communication
Interview situations	May include, but not limited to: • Establish rapport • obtain facts and information • Facilitate resolution of issues • Develop action plans • Diffuse potentially difficult situation
Types of Interview	May include, but not limited to:

	• Disclosure

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: • Demonstrate effective communication skills with clients and work colleagues accessing service • Adopt relevant communication techniques and strategies to meet client particular needs and difficulties
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: • Communication process • Dynamics of groups and different styles of group leadership • Communication skills relevant to client groups
Underpinning Skills	Demonstrates skills to: • Full range of communication techniques including: ➢ Active listening ➢ Feedback ➢ Interpretation ➢ Role boundaries setting ➢ Negotiation ➢ Establishing empathy ➢ Communication strategies • Communicate to fulfill job roles as specified by the organization
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit covers knowledge, skills and attitude required in running Micro, Small and Medium enterprises. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed.

Elements	**Performance Criteria**
1. Develop and communicate Strategic work plan	1.1. The importance of planning is sensitized before acting and about the importance of plans to reduce risks and to inhibit impulsive actions and discussed. 1.2. The basics of planning and beginning with goal setting are communicated. 1.3. The achievement of measurable and realistic short-term business objective is addressed. 1.4. How to develop realistic activities plans and schedule is discussed. 1.5. ***Major components of work plan*** are introduced and understood. 1.6. The importance of constant reviewing their plans is understood by monitoring the results.
2. Identify daily work requirements and Develop effective work habits	2.1. Basic concept about effect working culture is discussed and understood. 2.2. Different approaches to work culture are developed and understood. 2.3. Work requirements are identified for a given time period by taking into consideration of ***resources*** and constraints. 2.4. Work activities are prioritized based on business needs, requirements and deadlines. 2.5. If appropriate, work is allocated to relevant staff or contractors to optimize efficiency. 2.6. Work and personal priorities are identified and a balance is achieved between competing priorities using appropriate ***time management strategies***. 2.7. Input is sought from ***internal and external sources*** and used to develop and refine new ideas and approaches. 2.8. Business or inquiries is/are responded to promptly and effectively. 2.9. Information is presented in a format appropriate to the

	3.2. Marketing mix and components are evaluated. 3.3. Marketing mix for specific target market is determined. 3.4. Marketing mix is monitored and continual adjusted against marketing performance.
4. Manage Human Resources	4.1. ***Human resource rules, regulations law and procedures*** are identified and determined. 4.2. The existing human resource is audited, and gaps are identified. 4.3. Recruitment and selection are conducted based on the organizational requirements. 4.4. Selected candidates are oriented and placed for the appropriate position. 4.5. Appraisal of employees' performance is conducted. 4.6. Appraisal result is used for training and development, promotion, compensation, disciplinary measures and other purposes as required. 4.7. ***Employee relations*** are maintained.
5. Manage production and Operation	5.1. Production /operation plan is developed and implemented. 5.2. Required inputs are purchased and adequate inventories maintained. 5.3. Production /operation process is checked and controlled. 5.4. Quality control is applied and maintained.
6. Maintain financial records and use for decision making	6.1. The objective and benefits of financial records are discussed and understood. 6.2. Asset, liabilities and capital are identified and recorded. 6.3. Balance sheet and different journals are discussed. 6.4. Business transactions are discussed, analyzed, classified and recorded. 6.5. Daily financial records are maintained correctly in accordance with legal and accounting requirements. 6.6. Invoices and payments are prepared and distributed in timely manner and in accordance with legal requirements. 6.7. Outstanding accounts are collected or followed-up. 6.8. Revenue, expense and costs are identified and discussed. 6.9. Different ledgers and subsidiary ledgers are discussed and

	the appropriate person. 6.12. Financial manual is prepared.
7. Monitor, Manage and Evaluate work performance	7.1. People, resources and/or equipment are coordinated to provide optimum results. 7.2. Staff, clients and/or contractors are communicated within a clear and regular manner, to monitor work in relation to ***business goals*** or timelines. 7.3. ***Problem solving techniques*** are applied to work situations to overcome difficulties and achieve positive outcomes. 7.4. Opportunities for improvements are monitored according to business demands. 7.5. Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements. 7.6. Proposed changes are clearly communicated and recorded to aid in future planning and evaluation. 7.7. Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.

Variable	**Range**
Major components of work plan	May include, but not limited to: • Objective • Responsibilities • Resources (human, materials, finance, time, etc) • Activities
Resources	May include, but not limited to: • Human resource • Money • Time • Machines • Equipment and Space
Time management strategies	May include, but not limited to: • Prioritizing and anticipating • Short term and long term planning and scheduling • Creating a positive and organized work environment • Clear timelines and goal setting that is regularly reviewed and adjusted as necessary • Breaking large tasks into smaller tasks • Getting additional support if identified and necessary

	• Professional associations
Human resource rules , regulations law and procedures	May include, but not limited to: • Recruitment and selection • Orientation and placement • Training and development • Performance appraisal and reward system • Disciplinary procedures • Movement and separation • Industrial relation
Employee relations	May include, but not limited to: • Relationship within employees • Relationship among employees and management and labor union • Relationship between labor union and government
Business goals	May include, but not limited to: • Sales targets • Budgetary targets • Team and individual goals • Production targets • Reporting deadlines
Problem solving techniques	May include, but not limited to: • Brainstorming • Fish bone • Focus group discussion and Problem tree

Evidence Guide	
Critical Aspects of Competence	A person must be able to demonstrate: • Ability to identify daily work requirements and allocate work appropriately • Ability to interpret financial documents in accordance with legal requirements • The ability to prepare strategic plan • The ability to develop effective work habit • The ability to manage marketing of MSEs • The ability to manage human resources of MSEs • the ability to manage production/operation of MSEs • The ability to maintain financial records of MSEs • The ability to manage, monitor and evaluate work performance of MSMEs
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: • Strategic plan • Working culture

	• Production/operation functions • Monitoring and evaluation • Problem solving techniques • Federal and Local Government legislative requirements affecting business operations, especially in regard to OHS, equal employment opportunity, industrial relations and anti-discrimination • Relevant industry code of practice • Planning techniques to establish realistic timelines and priorities • Identification of relevant performance measures • Quality assurance principles and methods
Underpinning Skills	Demonstrate skills to: • Technical or specialist skills relevant to the business operation • Interpret legal requirements, company policies and procedures and immediate, day-to-day demands • Strategic planning skills • Human relation skills • Communicate using questioning, clarifying, reporting, and giving and receiving constructive feedback • Numeracy skills for performance information, setting targets and interpreting financial documents and reports • Technical skills to interpret business document, reports and financial statements and projections • Relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • Solve problem and develop contingency plans • Using computers and software packages to record and manage data and to produce reports • Evaluate using assessment work and outcomes • Observe for identifying appropriate people, resources and to monitor work
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Unit Descriptor	This unit of competency covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis.

Elements	**Performance criteria**
1. Identify and select theme/problem.	1.1. ***Safety requirements*** are followed in accordance with safety plans and procedures. 1.2. All possible problems related to the process /Kaizen elements are listed using ***statistical tools and techniques***. 1.3. All possible problems related to kaizen elements are identified and listed on Visual Management Board/Kaizen Board. 1.4. Problems are classified based on obviousness of cause and action. 1.5. Critical factors like the number of customers affected, Potentials for bottlenecks, and number of complaints etc… is selected. 1.6. Problems related to priorities of ***Kaizen Elements*** are given due emphasis and selected.
2. Grasp current status and set goal.	2.1. The extent of the problem is defined. 2.2. Appropriate and achievable goal is set.
3. Establish activity plan.	3.1. The problem is confirmed. 3.2. High priority problem is selected. 3.3. The extent of the problem is defined. 3.4. Activity plan is established as per ***5W1H***.
4. Analyze causes of a problem.	4.1. All possible causes of a problem are listed. 4.2. Cause relationships are analyzed using***4M1E***. 4.3. Causes of the problems are identified. 4.4. Root causes are selected. 4.5. The root cause which is most directly related to the problem is selected. 4.6. All possible ways are listed using ***creative idea generation*** to eliminate the most critical root cause. 4.7. The suggested solutions are carefully tested and evaluated

5. Examine countermeasures and their implementation.	5.1. Action plan is implemented by ***medium KPT*** members. 5.2. Implementation is monitored according to the agreed procedure and activities are checked with preset plan.
6. Assess effectiveness of the solution.	6.1. ***Tangible and intangible results*** are identified. 6.2. The results are verified over time. 6.3. Tangible results are compared with targets using ***various types of diagram***.
7. Standardize and sustain operation.	7.1. If the goal is achieved, the new procedures are standardized and made part of daily activities. 7.2. All employees are trained on the new ***Standard Operating Procedures (SOPs)***. 7.3. SOP is verified and followed by all employees. 7.4. The next problem is selected to be tackled by the team.

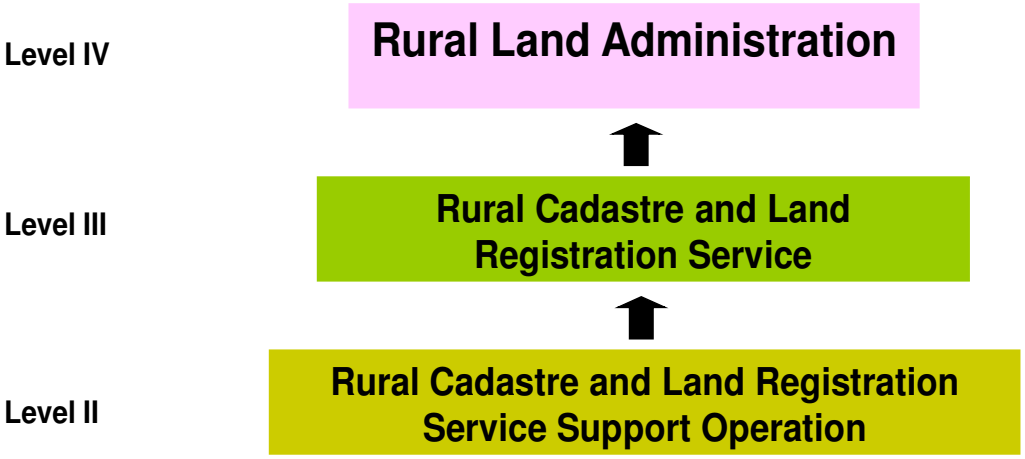
Variables	**Range**
Safety requirements	May include, but not limited to: • OHS requirements include legislation, material safety, managements system, hazardous substances and dangerous goods code and local safe operating procedures • Work is carried out in accordance with legislative obligations, environmental legislations, relevant health regulation, manual handling procedure and organization insurance requirements
Statistical tools and techniques	May include, but not limited to: • 7 QC tools May include, but not limited to: ➢ Stratification ➢ Pareto Diagram ➢ Cause and Effect Diagram ➢ Check Sheet ➢ Control Chart/Graph ➢ Histogram and Scatter Diagram • QC techniques May include, but not limited to: ➢ Brain storming ➢ Why analysis ➢ What if analysis ➢ 5W1H
Kaizen Elements	May include, but not limited to: • Quality • Cost • Productivity

	• Who: person in charge • Why: objective • What: item to be implemented • Where: location • When: time frame • How: method
4M1E	May include, but not limited to: • Man • Machine • Method • Material and Environment
Creative idea generation	May include, but not limited to: • Brainstorming • Exploring and examining ideas in varied ways • Elaborating and extrapolating • Conceptualizing
Medium KPT	May include, but not limited to: • 5S • 4M (Machine, Method, Material and Man) • 4p (Policy, Procedures, People and Plant) • PDCA cycle • Basics of IE tools and techniques
Tangible and intangible results	May include, but not limited to: • Tangible result may include quantifiable data • Intangible result may include qualitative data
Various types of diagram	May include, but not limited to: • Line graph • Bar graph • Pie-chart • Scatter and Affinity diagrams
Standard Operating Procedures (SOPs)	May include, but not limited to: • The customer demand • The most efficient work routine (steps) • The cycle times required to complete work elements • All process quality checks required to minimize defects/errors • The exact amount of work in process required

Evidence Guide	
Critical Aspects of Assessment	Demonstrates skills and knowledge competencies to: • Apply all relevant procedures and regulatory requirements to ensure quality and productivity of an organization.

Knowledge and Attitude	• QC story/PDCA cycle/ • QC story/ Problem solving steps • QCC techniques • 7 QC tools • Basic IE tools and techniques. • SOP • Quality requirements associated with the individual's job function and/or work area • Workplace procedures associated with the candidate's regular technical duties • Relevant health, safety and environment requirements • organizational structure of the enterprise • Lines of communication • Methods of making/recommending improvements. • Reporting procedures
Underpinning Skills	Demonstrates skills to: • Apply problem solving techniques and tools • Apply statistical analysis tools • Apply Visual Management Board/Kaizen Board. • Detect non-conforming products or services in the work area • Document and report information about quality, productivity and other kaizen elements. • Contribute effectively within a team to recognize and recommend improvements in quality, productivity and other kaizen elements. • Implement and monitor improved practices and procedures. • Organize and prioritize activities and items. • Read and interpret documents describing procedures • Record activities and results against templates and other prescribed formats.
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: • Interview/Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

RURAL LAND ADMINISTRATION



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This occupational standard was developed on December 2016 in Addis Ababa, Ethiopia.