This sub-discipline is concerned with the competencies required to create, model and manage graphical representations of data used within an organisation. It also includes those competencies required to interpret, use and apply information contained within IT architecture models to support data analysis activities.

**Level 2 competencies**

**Carry out specified data analysis activities 4022.01**

**Performance Criteria 4022.01C**

b) Correctly follow the processes, tools and techniques applicable to data analysis activities and their deliverables

c) Fully comply with all organisational standards relating to data analysis activities and their deliverables

f) Correctly source and use any existing data flow diagrams and conceptual data models that are appropriate to any particular data analysis assignment

h) Correctly use information and data about any non-structured data that may need to be considered

i) Conduct data analysis on a small scale assignment in line with all policies, procedures and standards and under direction of superiors

**Knowledge 4022.01K**

a) source

- any existing data flow diagrams that are appropriate to any particular data analysis assignment
- any existing conceptual data models that are appropriate to any particular data analysis assignment
- any data naming conventions and standards that need to be used in data analysis activities
- any rules that need to be applied to any data normalisation activities

b) use

- the processes, tools and techniques applicable to data analysis activities and their deliverables
- data naming conventions and standards in data analysis activities
- any existing data flow diagrams that are appropriate to any data analysis assignment
- any existing conceptual data models that are appropriate to any data analysis assignment
- information and data about the data that needs to be included in any particular data analysis assignment
- information and data about the flows of information and data around into and out of an organisation
- the sources and formats of data that will be used in any particular data analysis assignment
- information and data about the data entities that need to be incorporated into any particular data model
- information and data about the data attributes for any data entities
- information and data about the relationships between data entities
- information and data about any non-structured data that may need to be considered

c) operate with

- reference to professional and ethical standards relating to data analysis activities and their deliverables
- integrity and confidentiality during data analysis activities

d) comply with

- any relevant legislation, regulation and external standards relating to data analysis activities and their deliverables
- any relevant internal policies, approaches and standards relevant to data analysis activities and their deliverables
e) take action
   - to conduct data analysis on a small scale assignment

**Understanding 4022.01U**

a) what is meant by
   - data analysis and what it involves
   - a conceptual data model
   - the term data flow diagram and what it represents
   - the term data entity
   - the term data attribute
   - a key
   - data repetition and redundancy

b) what is involved in defining relationships between data entities

c) the fact that
   - data analysis assignments need to be clearly scoped
   - data analysis activities and their deliverables must support the identified business requirements
   - data is a valuable asset for organisations
   - information about the data used by an organisation needs to be recorded

d) the processes tools and techniques that can be used to conduct data analysis

**Document specified information and data 4022.02**

**Performance Criteria 4022.02C**

a) Correctly source and document any rules that need to be applied to any data normalisation activities

b) Correctly use and accurately document information and data about the flows of information and data around into and out of an organisation

c) Correctly use and accurately document information and data about the data entities that need to be incorporated into any particular data model, the attributes associated with them and the relationships between data entities

d) Correctly document the sources and formats of data that will be used in any particular data analysis assignment

e) Correctly document and store any data flow diagrams that are appropriate to any data analysis assignment

**Knowledge 4022.02K**

a) use
   - the processes tools and techniques applicable to data analysis activities
   - data naming conventions and standards used in data analysis activities

b) document
   - any data flow diagrams that are appropriate to any data analysis assignment
   - information and data about the flows of information and data around into and out of an organisation
   - the sources and formats of data that will be used in any particular data analysis assignment
   - information and data about the data entities that need to be incorporated into any particular data model
   - the rules that need to be applied to any data normalisation activities

**Understanding 4022.02U**
a) the importance of
   - accurately recording the flows of information within into and out of an organisation
   - representing accurately and completely information and data used within the organisation

Assist others with data relating to data analysis 4022.03

Performance Criteria 4022.03C

a) Assist others in the interpretation of any existing data flow diagrams and conceptual data model(s) relevant to a data analysis assignment
b) Assist others in updating any data flow diagrams and data models as a result of a particular data analysis assignment

Understanding 4022.03U

a) the fact that
   - the information documented in data analysis deliverables needs to be understood by a wide range of sponsors stakeholders and other individuals
   - organisations frequently have IT/technology systems services and assets that need to exchange data with other organisations and individuals

Level 3 competencies

Contribute to data analysis assignment 4023.01

Performance Criteria 4023.01C

a) Correctly identify source and accurately document what information needs to be included in any particular data analysis assignment
b) Correctly identify and document the flows of information around into and out of a data model
c) Correctly identify and document the data entities that need to be incorporated into any particular data model the attributes associated with them and the relationships between data entities
d) Correctly identify source and accurately document any non structured data that may need to be considered during a data analysis assignment

Knowledge 4023.01K

a) identify source and document:
   - what information needs to be included in any particular data analysis assignment
   - the flows of information around into and out of an organisation
   - who needs to use the deliverables produced by any particular data analysis assignment
   - any non structured data that may need to be considered
   - the data that needs to be included in any particular data analysis assignment

b) identify and document:
   - the data entities that need to be incorporated into any particular data model
   - the data attributes for any data entities
   - the relationships between data entities
   - the sources and formats of data that will be used in any particular data analysis assignment
   - information relating to IT/technology architectures together with analysis deliverables in order to inform data design activities and their deliverables
   - information relating to the information and data that comes into the organisation and what data is sent out from it
   - information relating to the destination/s of any item of information/data
   - information relating to any external organisations or bodies with whom an organisation needs to exchange information and data
Understanding 4023.01U

a) the systems development lifecycle as it relates to data analysis activities

b) what are the
   - rules that apply to data normalisation
   - data naming conventions and standards that need to be used during data analysis activities
   - processes tools and techniques relating to data analysis activities and their deliverables
   - types of keys that may be defined during data analysis activities

c) why
   - data is a valuable asset for organisations
   - data needs to be normalised during data analysis activities
   - information about the data used by an organisation needs to be recorded

d) the importance of:
   - aligning data analysis activities and their deliverables with the business requirements
   - correctly identifying and accurately documenting the source format composition and usage of the data within an organisation
   - identifying all of the attributes associated with any particular data entity
   - eliminating repetition and redundancy during data analysis
   - identifying the relationship between data entities during data analysis
   - identifying the source of all items of data
   - defining the correct format/s of any item of data
   - identifying the owner/s of any particular item of data
   - identifying the destination/s of any item of information/data
   - soliciting accurate and timely information from others both internally and externally in order to inform data analysis activities and their deliverables
   - verifying the accuracy currency completeness and relevance of information created collected used and documented during data analysis activities
   - having effective data models

Carry out specified data analysis activities 4023.02

Performance Criteria 4023.02C

a) Correctly follow the systems development lifecycle as appropriate to data analysis activities

b) Accurately gather and correctly apply information relating to IT/technology architectures together with analysis deliverables in order to inform data design activities and their deliverables

c) Correctly source all relevant information relating to any external organisations or bodies with whom an organisation needs to exchange information and data

d) Critically interpret any existing data flow diagrams and conceptual data model(s) relevant to a data analysis assignment

e) Critically analyse and fully document any further business requirements that have been identified so that they may be used to inform data analysis activities under direction

Knowledge 4023.02K

a) Operate with reference to
   - the systems development lifecycle as appropriate to data analysis activities
organisational strategy policies and standards in data analysis activities

IT/technology architecture models

b) apply

- the systems development lifecycle as appropriate to data analysis activities
- information relating to IT/technology architecture and analysis activities in order to inform data analysis activities
- business requirements so that they can be reflected in a conceptual data model
- business rules that need to be incorporated into the conceptual data model
- any further business requirements that are identified so that they can be reflected in a conceptual data model
- the business rules that need to be incorporated into the conceptual data model
- information relating to IT/technology architectures together with analysis deliverables in order to inform data design activities and their deliverables
- information relating to the data that comes into the organisation and what data is sent out from it
- the rules that need to be applied to any data normalisation activities
- information relating to the destination/s of any item of information/data
- information relating to any external organisations or bodies with whom an organisation needs to exchange information and data
- information relating to the owners of data within the organisation

Understanding 4023.03U

a) the fact that

- some individuals within organisations do not understand the value of their data
- data needs to be normalised during data analysis activities
- organisations need to understand how data supports their operational and strategic activities
- organisations need to understand what data supports their operational and strategic activities

Assist the maintenance of data models 4023.03

Performance Criteria 4023.03C

a) Logically and objectively abstract and decompose data within a conceptual data model under direction

b) Implement and maintain effective and accurate data flow diagrams required for a particular data analysis assignment under direction

c) Accurately update any data flow diagrams and data models as a result of a particular data analysis assignment under direction

d) Assist others in the production of conceptual data models

Knowledge 4023.03K

a) analyse any

- existing conceptual data model(s) relevant to a data analysis assignment
- existing data flow diagrams relevant to a data analysis assignment
- further business requirements that have been identified so that they may be used to inform data analysis activities

b) implement and maintain data flow diagrams

c) abstract and decompose data

Understanding 4023.03U

a) what
is the difference between structured and unstructured data

is the role and importance of data analysis in decomposing information and representing data used within an organisation

is meant by the term data abstraction

is meant by the terms data models/schema

is involved in data decomposition and normalisation

b) the need for monitoring
   - the progress of any particular data analysis assignment
   - the accuracy, currency and completeness of any data analysis deliverables
   - the alignment of data analysis deliverables with the business requirements

c) the processes, tools and techniques that can be used to monitor
   - the progress of any particular data analysis assignment
   - the accuracy, currency and completeness of any data analysis deliverables

Level 4 competencies

Contribute, under supervision, to the preparation of a data analysis assignment 4024.01

Performance Criteria 4024.01C

a) Correctly identify any existing data flow diagrams and data models

b) Correctly identify any existing IT/technology architecture and analysis deliverables data flow diagrams and data models

c) Correctly identify all relevant business requirements and any necessary business rules so that they can be reflected in a conceptual data model

d) Correctly identify the owners of data under direction

e) Correctly document all relevant information relating to the individuals, organisations and bodies who need to use information held about an organisation’s data

Knowledge 4024.01K

a) identify
   - the processes, tools and techniques relating to data analysis activities and their deliverables
   - data naming conventions and standards in data analysis activities
   - business requirements so that they can be reflected in a conceptual data model
   - business rules that need to be incorporated into the conceptual data model
   - information relating to IT/technology architectures together with analysis deliverables in order to inform data design activities and their deliverables
   - the owners of data for any particular data analysis assignment
   - who needs to authorise/sign off the deliverables from any data analysis assignment
   - the keys that that are needed in any conceptual data model
   - any existing data flow diagrams that are appropriate to any particular data analysis assignment
   - any existing conceptual data models that are appropriate to any particular data analysis assignment
   - what information and data comes into the organisation and what data is sent out from it
   - what rules need to be applied to any data normalisation activities
   - the destination(s) of any item of information/data
   - any external organisations or bodies with whom an organisation needs to exchange information and data

b) source
   - best practice in data analysis activities
   - any further business requirements so that they can be reflected in a conceptual data model
any business rules that need to be incorporated into the conceptual data model

c) document

- information relating to any external organisations or bodies with whom an organisation needs to exchange information and data
- information relating to the owners of data within the organisation
- information relating to the individuals organisations and bodies who need to use information held about an organisation's data
- best practice in data analysis assignments
- lessons learned from prior data analysis assignments
- all the deliverables from data analysis activities

Understanding 4024.01U

a) what

- is the value of data analysis deliverables as they relate to systems analysis data design and systems/service design activities
- is the relationship between data analysis and IT/technology architecture work
- is the importance and relevance of data analysis activities on the full life cycle of information within an organisation
- is the importance of data analysis activities as they relate to the systems development lifecycle
- is the role of data analysis activities and their deliverables in the full life cycle of IT/technology systems services and assets supporting an organisation
- is the range of issues associated with data analysis and its deliverables

b) what are the

- potential implications of data analysis deliverables being incorrect incomplete inadequate and/or inappropriate
- potential implications of failings of integrity confidentiality and information security during data analysis activities
- professional and ethical standards relating to data analysis work within an organisation
- standards relating to data analysis activities and their deliverables
- internal and external sources of data that are used within the organisation
- formats of data that may be used within the organisation

c) why

- organisations need to understand how data supports their operational and strategic activities
- organisations need to understand what data supports their operational and strategic activities
- the impact of any legislation regulation and external standards relevant to the organisation's data handling needs to be reflected in data analysis activities and their deliverables
- the impact of integrity confidentiality and information security requirements needs to be reflected during data analysis activities
- the deliverables from data analysis activities must be reflected in data design work
- the alignment of data analysis activities and their deliverables with all relevant legislation regulation and external standards in line with organisational strategy policies and standards needs to be monitored
- the alignment of data design work with the deliverables from data analysis needs to be monitored

Assist in the development of data analysis models 4024.02

Performance Criteria 4024.02C

a) Produce effective conceptual data models under direction

b) Verify all data and information used to produce and contained within data analysis deliverables

c) Ensure that all that data analysis deliverables align with business needs IT/technology architecture and other analysis deliverables

d) Present clearly and precisely the data models produced from any particular data analysis assignment to sponsors stakeholders and other individuals under
Knowledge 4024.02K

a) verify all data and information used to produce and contained within data analysis deliverables

b) provide information and data contained within data analysis deliverables to internal/external individuals and groups involved in design and development activities as appropriate

c) communicate
   - what information and data is contained within data analysis deliverables to owners sponsors stakeholders and other individuals
   - with external organisations or bodies with whom an organisation needs to exchange information and data

d) take action
   - to produce effective conceptual data models
   - to align data analysis deliverables with IT/technology architecture deliverables
   - to integrate analysis activities and their deliverables where appropriate into projects and programmes where appropriate
   - to ensure that data analysis deliverables align with business needs and IT/technology architecture and analysis deliverables

Understanding 4024.02U

a) who
   - are the owners of specific items of data within the organisation
   - are the sponsors of and stakeholders for any particular data analysis assignment
   - needs to use the deliverables produced by any particular data analysis assignment
   - needs to authorise/sign off the deliverables from any data analysis assignment

b) the importance of
   - data analysis activities and their deliverables on the full life cycle of information within an organisation
   - and role of data analysis in aligning IT/technology systems services and assets with the organisation’s data handling needs
   - integrating data analysis activities where appropriate into projects and programmes
   - updating data analysis deliverables as a result of projects programmes and data/systems design activities where appropriate
   - taking account of external factors during data analysis activities and their deliverables
   - managing relationships with sponsors stakeholders and external bodies on matters relating to data analysis
   - maintaining the integrity and confidentiality of information during data analysis activities
   - ensuring that sensitive information is not disclosed inappropriately during data analysis activities
   - integrating data analysis activities and their deliverables where appropriate into projects and programmes
   - and role of effective communication with a range of individuals groups and bodies during data analysis activities
   - applying lessons learned from previous data analysis assignments
   - the systems development lifecycle as it relates to data analysis activities
   - using information relating to IT/technology architecture and business analysis activities in order to inform data analysis activities and their deliverables
   - creating a conceptual data model that correctly illustrates what data exists within the organisation
   - abstracting and decomposing data within a conceptual data model
   - verifying the accuracy currency completeness and relevance of data and information contained within data analysis deliverables
   - making data analysis deliverables available to individuals and groups who require them from both inside and outside the organisation

Manage the outcomes from the data analysis assignment 4024.03
Performance Criteria 4024.03C

a) Design implement maintain and manage an effective conceptual data model relating to a particular data analysis assignment
b) Accurately implement any business rules that need to be incorporated into any particular conceptual data model
c) Provide clear and timely information and data contained within data analysis deliverables to internal/external individuals and groups involved in design and development activities as appropriate under direction
d) Be fully accountable for the quality and effectiveness of the deliverables from any particular data analysis assignment
e) Negotiate effectively with external organisations or bodies with whom an organisation needs to exchange information and data

Knowledge 4024.03K

a) design a conceptual data model relating to a particular data analysis assignment
b) use
   ◦ information relating to the individuals organisations and bodies who need to use information held about an organisation's data
   ◦ standards relating to data analysis activities and their deliverables
   ◦ best practice in data analysis assignments
   ◦ lessons learned from prior experience in IT data analysis assignments
c) implement and maintain
   ◦ a conceptual data model for a given data analysis assignment
   ◦ any business rules that need to be incorporated into any particular conceptual data model
d) report any issues arising from data analysis activities
e) manage a conceptual data model supporting a particular data analysis assignment
f) interpret
   ◦ all deliverables from IT/technology architecture and analysis activities in order to produce accurate data analysis deliverables
g) present the data models produced from any particular data analysis assignment
h) negotiate
   ◦ with external organisations or bodies with whom an organisation needs to exchange information and data
   ◦ with owners of data where necessary in order to conduct a data analysis assignment
i) be accountable for the quality and effectiveness of the deliverables from any particular data analysis assignment

Understanding 4024.03U

a) the fact that
   ◦ the impact of any legislation regulation and external standards relevant to the organisation's data handling needs to be reflected in data analysis activities and their deliverables
   ◦ the impact of integrity confidentiality and information security requirements needs to be reflected during data analysis activities
   ◦ the deliverables from data analysis activities must be reflected in data design work
   ◦ there are disadvantages and benefits of using external providers of data analysis services
   ◦ there are internal and external individuals groups and bodies who require access to the deliverables form data analysis activities
   ◦ information and data can be generated
b) the need for monitoring of
   ◦ the alignment of data analysis activities and their deliverables with all relevant legislation regulations and external standards in line with organisational strategy policies and standards
   ◦ the interpretation and use of data analysis deliverables within data design activities
   ◦ the quality and effectiveness of data analysis activities and their deliverables
Level 5 competencies

Prepare for data analysis activities 4025.01

Performance Criteria 4025.01C

a) Implement and maintain effectively strategy policies plans standards processes tools and techniques applicable to data analysis activities
b) Implement and maintain appropriate data naming conventions and standards to be used in all data analysis activities
c) Correctly identify the impact of any legislation regulation and external standards on data analysis activities
d) Correctly identify the owners of data within the organisation and who uses information held about an organisation's data
e) Correctly identify the range of approaches that can be taken to data analysis and use the most appropriate in a range of business and IT/technology contexts

Knowledge 4025.01K

a) identify
   - the owners of data within the organisation
   - who needs to use information held about an organisation's data
   - standards relating to data analysis activities and their deliverables
   - the range of approaches that can be taken to undertake data analysis and their appropriateness in a range of business and IT/technology contexts
   - internal and external factors that may impact on data analysis activities and their deliverables
   - the range of issues associated with data analysis and its deliverables
   - the impact of any legislation regulation and external standards on data analysis activities and their deliverables
b) implement and maintain
   - the processes tools and techniques applicable to data analysis activities and their deliverables
   - the processes tools and techniques to monitor the alignment of data analysis activities and their deliverables with all relevant legislation regulations and external standards
   - standards relating to data analysis activities and their deliverables
   - the rules that need to be applied to all data normalisation activities
   - data naming conventions and standards to be used in all data analysis activities
c) negotiate with external providers of data analysis services

Understanding 4025.01U

a) what
   - is the range of approaches that can be taken to undertake data analysis and their appropriateness in a range of business contexts
   - data is used within the organisation
   - data comes into the organisation and what data is sent out from it

b) what are the
   - types and range of data analysis deliverables that can be used to represent an organisation's data handling needs and their appropriateness to meet specific business purposes
potential implications and constraints of data being derived from/owned by external sources
potential implications of an organisation’s data being required by external individuals, groups, and bodies
internal and external factors and their implications on data activities and their deliverables
implications of any legislation, regulations, and external standards on data analysis work and its deliverables
implications of data analysis activities and their deliverables on data design activities
implications of particular data being unstructured on data analysis activities

c) who
- are the sponsors of and stakeholders for any data analysis activities
- are potential external providers of data analysis services
- needs to use information held about an organisation’s data

d) the importance of
- managing relationships with external providers offering data analysis services
- differentiating between data that is owned by an organisation and data that is used/accessed by an organisation

Manage effective data analysis activities 4025.02

Performance Criteria 4025.02C

a) Carry out any integrity, confidentiality, and information security requirements that need to be reflected during data analysis activities
b) Verify that all business requirements are accurately reflected in a conceptual data model
c) Ensure that any data design and development activities align with data analysis deliverables
d) Ensure that any conceptual data model(s) are signed off by appropriately authorised individuals prior to them being used in design and development activities

Knowledge 4025.02K

a) identify
- any integrity, confidentiality, and information security requirements that need to be reflected during data analysis activities
- the sponsors of and stakeholders for data analysis activities
- who needs to be involved in any particular data analysis assignment
- opportunities to improve data analysis activities and their deliverables
- best practice in data analysis assignments
- learning from prior data analysis assignments

b) verify that business requirements are accurately reflected in a conceptual data model

c) use the most appropriate approach for any particular data analysis assignment

d) manage
- any issues arising from a particular data analysis assignment
- the impact of any internal and external factors on a particular data analysis assignment
- the progress of any data analysis assignment
- the accuracy, currency, and completeness of any data analysis deliverables
- the alignment of data analysis deliverables with the business requirements
- the alignment of data analysis activities with IT/technology architecture and other analysis deliverables
- the alignment of data analysis activities and their deliverables with any relevant legislation, regulations, and external standards in line with organisational strategy, policies, and standards
- relationships with external providers of data analysis services
relationships with sponsors of and stakeholders for data analysis activities

e) take action
   - to establish effective relationships with external providers of data analysis services
   - in the event of the deliverables and outcomes of data analysis being incorrect, incomplete, or inadequate to ensure that any conceptual data model(s) are signed off by appropriately authorised individuals prior to them being used in design and development activities
   - that any data design and development activities align with data analysis deliverables

f) communicate
   - the need for data design and development activities to align with data analysis deliverables to those individuals involved in them
   - with external providers of data analysis services
   - with sponsors, stakeholders, and external bodies on all matters relating to data analysis activities and their deliverables

g) advise and guide others on
   - best practice in data analysis assignments
   - both internally and externally on all aspects of data analysis activities and their deliverables

Understanding 4025.02U

a) the need for monitoring of
   - the alignment of data analysis deliverables with any relevant IT/technology architecture models and roadmaps
   - the quality and effectiveness of external providers of data analysis services

b) the importance of
   - aligning data analysis deliverables as appropriate to IT/technology architecture models
   - identifying the data analysis deliverables required to meet specific business purposes

Maintain effective data analysis deliverables 4025.03

Performance Criteria 4025.03C

a) Effectively manage and routinely monitor the progress of any data analysis assignment reporting the status to sponsors, stakeholders, and other individuals and bodies as appropriate

b) Critically monitor and manage the accuracy, currency, and completeness of any data analysis deliverables and their alignment with both the business requirements and with IT/technology architecture and other analysis deliverables

c) Critically review the data models produced from any particular data analysis assignment undertaken by others

Knowledge 4025.03K

a) monitor
   - the progress of any data analysis assignment
   - the accuracy, currency, and completeness of any data analysis deliverables
   - the alignment of data analysis deliverables with the business requirements
   - the interpretation and use of data analysis deliverables within data design activities
   - the alignment of data analysis activities with IT/technology architecture and other analysis deliverables
   - the alignment of data analysis activities and their deliverables with any relevant legislation, regulations, and external standards in line with organisational strategy, policies, and standards
   - the quality and effectiveness of data analysis activities and their deliverables
   - the quality and effectiveness of external providers of data analysis services
   - the quality and effectiveness of external providers of data analysis services
b) report
   - the progress of any particular data analysis assignment
   - findings from monitoring the quality and effectiveness of data analysis activities
   - findings from monitoring the quality and effectiveness of external providers of data analysis activities


c) present and review
   - the data models produced from any particular data analysis assignment
   - the quality and effectiveness of data analysis activities and their deliverables
   - findings from monitoring the alignment of data analysis deliverables with the business requirements and/or IT/technology architecture and other analysis deliverables
   - findings from monitoring the alignment of data analysis activities and their deliverables with any relevant legislation regulation and external standards in line with organisational strategy policies and standards
   - the findings from monitoring the quality and effectiveness of external providers of data analysis services

Understanding 4025.03U

a) the processes tools and techniques that can be used to
   - monitor the alignment of data analysis deliverables with any relevant IT/technology architecture models and roadmaps
   - monitor the quality and effectiveness of external providers of data analysis services

Level 6 competencies

Direct the data analysis activities 4026.01

Performance Criteria 4026.01C

a) Design effective strategy policies plans standards processes tools and techniques applicable to data analysis activities and their deliverables

b) Design appropriate data naming conventions and standards to use in all data analysis activities

c) Correctly select the most appropriate individuals to undertake data analysis activities

d) Make well reasoned decisions on when and how to use external providers of data analysis services selecting the preferred organisations and negotiating/contracting with them accordingly on behalf of the organisation

Knowledge 4026.01K

a) design
   - the processes tools and techniques applicable to data analysis activities and their deliverables
   - the processes tools and techniques to monitor the alignment of data analysis activities and their deliverables with all relevant legislation regulations and external standards
   - standards relating to data analysis activities and their deliverables
   - the rules that need to be applied to all data normalisation activities
   - data naming conventions and standards used in all data analysis activities

b) select
   - who are the most appropriate individuals to undertake data analysis activities
   - when and how to use external providers of data analysis services
   - which external providers of data analysis services to use


c) authorise agree and contract
   - actions
   - approaches
- strategy policies plans procedures standards methods tools and techniques
- contractual arrangements with external providers of data analysis services
- decisions

**Understanding 4026.01U**

a) what are the benefits and disadvantages of using external providers of data analysis services

**Provide direction and guidance on data analysis activities and outcomes 4026.02**

**Performance Criteria 4026.02C**

a) Critically review the quality and effectiveness of data analysis activities and their deliverables undertaken by others making decisions for improvement as a result

b) Make objective clear and timely decisions on the appropriateness accuracy and completeness of any conceptual data models produced by others

c) Correctly identify what actions may be taken in the event of data analysis activities not meeting the business needs and/or IT/technology architecture and analysis deliverables advising others accordingly

d) Make objective clear and timely decisions on the actions that may be taken in the event of IT/technology architecture activities and their deliverables not meeting the business needs and/or IT/technology and analysis deliverables

e) Critically and regularly review the findings from monitoring the quality and effectiveness of external providers of data analysis services

**Knowledge 4026.02K**

a) Identify
   - what actions may be taken in the event of data analysis activities not meeting the business needs and/or IT/technology architecture and analysis deliverables
   - what actions may be taken in the event of data analysis activities not meeting the service and operational performance needs

b) make decisions
   - to improve the quality and effectiveness of data analysis activities and their deliverables within an organisation
   - on the appropriateness accuracy and completeness of any conceptual data models produced
   - on when and how to use external providers of data analysis services
   - on which external providers of data analysis services to use
   - on the results provided by monitoring data analysis activities and their deliverables
   - on the actions that may be taken in the event of IT/technology architecture activities and their deliverables not meeting the business needs and/or IT/technology and analysis deliverables

c) review
   - the quality and effectiveness of data analysis activities and their deliverables
   - findings from monitoring the alignment of data analysis deliverables with the business requirements and/or IT/technology architecture and other analysis deliverables
   - findings from monitoring the alignment of data analysis activities and their deliverables with any relevant legislation regulation and external standards in line with organisational strategy policies and standards
   - the findings from monitoring the quality and effectiveness of external providers of data analysis services
   - recommend actions in the event of data analysis deliverables not meeting the business needs and/or IT/technology architecture and analysis deliverables

d) take action
   - in the event of data analysis activities not supporting the business needs and IT/technology architecture and analysis deliverables
   - in the event of external providers not providing the appropriate quality of data analysis service

e) advise and guide others on
   - what actions may be taken in the event of data analysis activities not meeting the business needs and/or IT/technology architecture and analysis deliverables
what actions may be taken in the event of data analysis activities not meeting the service and operational performance needs