

The logo for the Australian Institute of Health and Welfare (AIHW), consisting of the letters 'AIHW' in a bold, white, sans-serif font.

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The logo for the Metadata Online Registry (METEOR), consisting of the word 'METEOR' in a bold, white, sans-serif font.

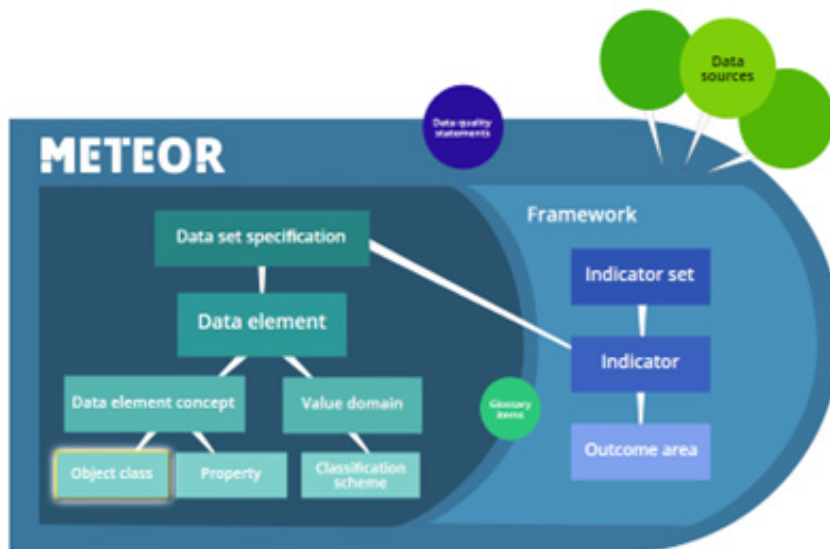
METEOR

Metadata Online Registry

meteor.aihw.gov.au

12. Data set specification business rules

12 Data set specification business rules



12.1 Introduction

A 'data set specification' is a grouping of data elements and/or other data set specifications, and the conditions under which the grouping should be collected or reported.

In METEOR there are generally three types of data set specifications:

- National minimum data set (NMDS)—a minimum set of data elements agreed for mandatory collection and reporting at a national level (e.g., Admitted patient care NMDS).
- Data set specification (DSS)—a metadata set that is not mandated for collection, but which is recommended as best practice (e.g., Youth justice DSS).
- Data element cluster—a group of data elements that are collected together for a specific purpose (e.g., Aged care person cluster). Clusters generally do not stand alone, but are included within other data set specifications.

In some sectors (e.g. the health sector) DSSs are further sub-divided into two types:

- National best endeavours data set (NBEDS)—a metadata set that is not mandated for collection, but where there is a commitment to provide data nationally on a best endeavours basis (e.g., Emergency service care NBEDS) and
- National best practice data sets (NBPDS)—a metadata set that is not mandated for collection, but which is recommended as best practice (e.g., Dementia NBPDS).

Remember the 'create once, use often' principle:

Before creating a new object class, it is important to check that a suitable object class does not already exist in METEOR. See section 2.2

12.1.1 For developers: Overview of data set specification attributes

Table 12.1.1.1 below provides an overview of the attributes requiring action by a developer when a data set specification is created in METEOR. The business rules relating to these attributes are provided in the relevant sections in this chapter.

Table 12.1.1.1: Overview of data set specification attributes for developer action

Attribute	Definition	Obligation to complete	Section in this Chapter
Name	A single or multi-word designation assigned to the data set specification	Mandatory	12.2.1
Data set specification type	Whether a data set specification is a National minimum data set, other data set specification, or data element cluster.	Mandatory	12.2.2
Scope	A description of the circumstances under which the collection of specified data are required or recommended.	Optional	12.2.3
Data elements/ Data set specifications	A list of the metadata items (either data elements or data set specifications) which are included in this data set specification	Mandatory/ Conditional. A total of at least two elements (i.e. any combination of DSS, cluster or data element) must be implemented in a DSS.	12.2.4
Data elements/ Data set specifications (Sequence number)	An indicator of the order of the data element or data set specification within the data collection or transmission	Optional	12.2.4.1
Data elements/ Data set specifications (Obligation)	An indicator of whether the data element or DSS is mandatory, optional or conditional for the collection of data within the data set.	Mandatory	12.2.4.2
Data elements/ Data set specifications (Maximum occurrences)	The maximum number of occurrences of the data element or DSS within the data set (i.e. single use or repeating group).	Mandatory	12.2.4.3
Data elements/ Data set specifications (conditional obligation)	A description of any conditions that apply to collection of data for a specified data element (or DSS) within a data set specification that has been set to 'conditional'.	Conditional: this attribute should be completed if the obligation has been set to 'conditional'.	12.2.4.4
Data elements/ Data set specifications (Other dataset specific information)	Any additional information relevant to the collection of a data item within the context of a particular DSS.	Optional	12.4.4.5

Attribute	Definition	Obligation to complete	Section in this Chapter
Statistical unit	The basic counting unit for a collection; i.e., a record is created within a collection for each new occurrence of the statistical unit.	Optional	12.2.5
Guide for use	Advice or instructions for the interpretation or application of the data set specification.	Optional	12.2.6
Collection methods	Advice or instructions for the actual capture of data.	Optional	12.2.7
Implementation start date	The date on which the collection of data for the data set specification is implemented for the first time.	Conditional: Must be completed if the data set specification is a National minimum data set.	12.2.8
Implementation end date	The date on which the collection of data for the data set specification is completed.	Conditional: Complete if the data set specification is a National minimum data set and has a specified implementation end date.	12.2.9
Comments	Any additional information that adds to the understanding of the data set specification.	Optional	12.2.10
Submitting organisation	One or more organisations responsible for the submission of the metadata item for endorsement as a standard.	Mandatory	12.2.11
Steward	The name of the organisation responsible for ongoing maintenance and management of a metadata item.	Optional: Complete if a steward has been endorsed and has agreed to perform steward role.	12.2.12
Origin	Any publication(s), website(s), organisation(s) and/or committee(s) from which any content of the metadata item originates.	Conditional: Complete for metadata items based on the content outside of METEOR.	12.2.13
Reference documents	Significant publication(s) and/or website(s) used in the aid of the development of the metadata item.	Conditional: Complete for metadata items developed in consultation with a significant publication and/or website outside of METEOR.	12.2.14
Relationship type	An indicator for relationships between metadata items.	Mandatory	12.2.15

Attribute	Definition	Obligation to complete	Section in this Chapter
Unresolved issues	Comments which highlight unresolved issues for data committee or registrar consideration.	Completed by Registrar	12.2.16
Submitting organisation contact details	The details of at least one contact person for each listed submitting organisation	Optional	12.2.17
Steward contact details	The details of at least one contact person for the Steward organisation.	Optional	12.2.18

12.1.2 For registrars: Overview of data set specification attributes

Table 12.1.2.1 below provides an overview of the attributes requiring action by a registrar when a data set specification is submitted for review. The business rules relating to these attributes are provided in the relevant sections in this chapter.

Table 12.1.2.1: Overview of data set specification attributes for registrar action

Attribute	Definition	Obligation to complete	Section in this Chapter
Steward	The name of the organisation responsible for ongoing maintenance and management of a metadata item.	Optional: Complete if a steward has been endorsed and has agreed to perform steward role.	12.2.12
Unresolved issues	Comments which highlight unresolved issues for data committee or registrar consideration.	Optional	12.2.16
Submitting organisation contact details	The details of at least one contact person for each listed submitting organisation	Optional	12.2.17
Steward contact details	The details of at least one contact person for the Steward organisation.	Optional	12.2.18

12.2 Attributes requiring developer or registrar action

Attributes in the data set specification template requiring action by a developer or registrar are described below.

12.2.1 Name

A single or multi-word designation assigned to the data set specification.	
Obligation to complete:	Mandatory
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. The name must be concise and indicative of the content of the data set specification. 2. The name must begin with a capital letter. The use of capital letters is only permitted at the beginning of the name, for proper nouns, or when necessary for an acceptable abbreviation. 3. If the data set specification covers a financial year period, use an endash to separate years (e.g., Perinatal NMDS 2019–20). A quick way to insert an endash is to use the keyboard shortcut: Alt + 0150. 4. If the data set specification is open-ended, use an endash at end of first year period (e.g., Specialist homelessness services NMDS 2019–) 5. Slashes (/) are permitted. Do not leave any spaces before or after the slash. 6. Hyphens are permitted only when used in a compound word (e.g., 'non-admitted'). Do not leave any spaces before or after the hyphen. 7. The following are not permitted: <ul style="list-style-type: none"> • colons • commas (exception is if required to separate two or more terms in a name (e.g., 'ear, nose and throat')) • full stops • square brackets • quotation marks
Notes	<p>In a data set specification name, it is acceptable to use the acronym for the type of data set specification; for example:</p> <ul style="list-style-type: none"> • Disability services NMDS 2018–19 • Adoptions DSS 2018–19 • Prisoner health NBEDS • Person and provider identification in healthcare NBPDS

12.2.2 Data set specification type

Provides information about whether a data set specification is a National minimum data set, other data set specification, or data element cluster.

Obligation to complete:	Mandatory
Completed by:	Developer
Visibility:	All users
Rules:	<p>1. Only one of the following data set specification types may be selected:</p> <ul style="list-style-type: none"> • National minimum data set (NMDS): An NMDS reflects a national agreement to collect a consistent data set for a specified purpose. A data set specification must be agreed by relevant stakeholders for mandatory national reporting before it is approved as an NMDS. • Data set specification (DSS): A DSS is recommended as best practice if data are to be collected, but not mandated for collection. See note 1 below for information on National best endeavours data sets and National best practice data sets used in the health sector. • Data element cluster: A data element cluster consists of at least two data elements that relate to each other for a specific purpose. See Appendix H 'Data element clusters' for further information.
Notes	<p>In a data set specification name, it is acceptable to use the acronym for the type of data set specification; for example:</p> <ul style="list-style-type: none"> • Disability Services NMDS 2018–19 • Adoptions DSS 2018–19 • Prisoner health NBEDS • Person and provider identification in healthcare NBPDS

12.2.3 Scope

A description of the circumstances under which the collection of specified data are required or recommended.	
Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. The scope should be expressed precisely and unambiguously so that the specified data can be collected under the same circumstances by different data collectors. 2. The scope should clearly identify all boundaries between those circumstances where collection is appropriate and those circumstances where it is not. These boundaries may potentially include geography, sources of funding, administering authorities, the type of services provided or the legal or administrative status of the people receiving services. 3. More than one boundary may be relevant to the scope of the collection. Complex boundaries may be explained with the use of an example.
Notes	<p>In a data set specification name, it is acceptable to use the acronym for the type of data set specification; for example:</p> <ul style="list-style-type: none"> • Disability Services NMDS 2018–19 • Adoptions DSS 2018–19 • Prisoner health NBEDS • Person and provider identification in healthcare NBPDS

12.2.4 Data elements/Data set specification

A list of the metadata items (either data element or data set specifications) which are included in this data set specification.

Obligation to complete:	Mandatory/Conditional. A total of at least two elements (i.e. any combination of DSS, cluster or data element) must be implemented in a DSS.
Completed by:	Developer
Visibility:	All users
Rules:	<p>At least two metadata items (any combination of DSS, data element cluster or data element) must be implemented in the data set specification.</p> <p>To assign metadata items to the DSS:</p> <ol style="list-style-type: none"> 1. Click the Add item button. This will bring up a facility in which to choose metadata items from. 2. Click the Choose button. Select from the drop-down list: <ul style="list-style-type: none"> • A-Z listing • data element by data element concept • data element by value domain • data set specification by authority 3. Fill in Sequence Number to indicate the order of the data element with the data collection by typing directly into the text field (optional.) 4. Choose type of obligation (mandatory, conditional or optional) from the drop-down list. 5. Choose maximum occurrences of the data element from the drop-down list. 6. To add another metadata item click the Add button again and repeat steps 2 and 3. 7. Continue this process until all items are recorded. 8. To remove any of the values added, click the Cancel button.
Notes	<ol style="list-style-type: none"> 1. When adding a cluster and/or data set specification, additional attribute fields will appear, some of which are mandatory completion. See 12.2.4.1 to 12.2.4.5 for associated additional attribute fields. 2. On completion of this attribute, METEOR automatically generates a list of the clusters/data set specifications implemented under the heading 'Metadata items in this Data Set Specification'.

12.2.4.1 Sequence number

An indicator of the order of the data element or data set specification within the data collection or transmission.

Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. Upon saving, the elements in a data set specification appear in the order of their sequence numbers. 2. Where the sequence number is left blank, the elements in a data set specification appear in the following order: <ol style="list-style-type: none"> a. data set specifications/clusters alphabetically, then b. data elements alphabetically.

12.2.4.2 Obligation

An indicator of whether the data element or data set specification (DSS) is mandatory, optional or conditional for the collection of data within the data set.

Obligation to complete:	Mandatory
Completed by:	Developer
Visibility:	All users
Rules:	<p>Click on the drop-down list to choose from the type of obligation required.</p> <ol style="list-style-type: none"> 1. Mandatory completion means that the data element/DSS must be included. 2. Conditional completion means that under specific criteria, a data element/DSS must be included. For items which are of conditional inclusion, the criteria for inclusion of the value must be specified within the Conditional obligation attribute box. 3. Optional completion means that a data element/DSS may or may not be collected. 4. Click the Remove button to remove data element.
Notes	<ol style="list-style-type: none"> 1. NMDSs must only contain elements with an obligation of mandatory or conditional (i.e. no elements should be optional.) 2. It is recommended that NBEDSs only contain elements with an obligation of mandatory or conditional (i.e. no elements should be optional.) An NBEDS is often a preliminary step to an NMDS, and should show how data is to be collected once full national agreement is reached. In practice, the agreement to provide data on a best endeavours basis means that some elements are in fact reported optionally.

12.2.4.3 Maximum occurrences

The maximum number of occurrences of the data element or data set specification (DSS) within the data set (i.e. single-use or repeating).

Obligation to complete:	Mandatory
Completed by:	Developer
Visibility:	All users
Rules:	Click on the arrow in the drop-down list to select required occurrence.
Notes	<ol style="list-style-type: none">1. Choose the logical number of potential maximum occurrences of the metadata element. For example, if a data element collecting the types of analgesia administered has 6 permissible values, and all may be collected, the maximum occurrences should be '6.'2. '99' represents an unlimited number.

12.2.4.4 Conditional obligation

A description of any conditions that apply to collection of data for a specified data element (or data set specification) within the context of a particular data set specification.

Obligation to complete:	Conditional (this attribute should be completed if the obligation for collecting data or DSS within a data set has been set to conditional)
Completed by:	Developer
Visibility:	All users
Rules:	<p>In the attribute text box, document clearly any particular conditions relating to when a data element (or data set specification) is to be collected as part of a data set specification.</p> <p>For example, a conditional obligation is where one data element is only collected if another data element within the same data set specification has a particular value (e.g., only collect 'number of cigarettes smoked per day' when a person's is recorded as a 'regular smoker.')</p>

12.2.4.5 Other dataset specific information

Any additional information relevant to the collection of a data item within the context of a particular data set specification.

Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. Inclusion of a data item within a data set specification not covered by sequence, obligation, maximum occurrences or conditional obligation attributes. 2. This information should clearly document what other information is relevant to this data set. It may include the rules for subsequent data verification or justification for the collection of a particular data item within the data set specification. 3. Commonly, dataset specific information may provide clarifying information as to how a generic element is to be collected in this specific context, e.g., that a data element collecting a postcode should collect the postcode of the patient's address, rather than that of the hospital.

12.2.5 Statistical unit

The basic counting unit for a collection, meaning a record is created within a collection for each new occurrence of the statistical unit.

Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	<p>The text field box should be used to clearly identify the statistical unit of the data set specification.</p> <ol style="list-style-type: none"> 1. The statistical unit(s) must reflect the actual underlying methodology of the collection (i.e. a record is created within a data collection for each new occurrence of the statistical unit(s)). 2. Where a statistical unit is defined as a metadata item elsewhere in METEOR, such as an object class or glossary item, (e.g., the statistical unit 'Household' which is an object class) it should be linked to the metadata item using hypertext.
Notes	<p>Where the purpose of a data collection is for statistical analysis, it is important to give some consideration to the statistical unit by which the data will be grouped. The statistical unit determines the level at which data will be collected and/or reported and is fundamental to a data set. For example, for a client-based collection the data could be collected at the client level, at the service contact level, the service episode level or at the service provider level (i.e. all clients to which a provider has provided services).</p> <p>While this attribute is optional, it is recommended that a statistical unit be specified for NMDSs and NBEDSs.</p>

12.2.6 Guide for use

Advice or instructions for the interpretation or application of the data set specification.

Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	Describe how the data set specification is intended to be interpreted or applied within the specified context.

12.2.7 Collection methods

Advice, comments or instructions for the actual capture of data.

Obligation to complete:	Optional
Completed by:	All users
Visibility:	Developer
Rules:	Outline any collection guidelines for the data set specification.

12.2.8 Implementation start date

The date on which the collection of data for the data set specification is implemented for the first time.

Obligation to complete:	The date on which the collection of data for a particular data set specification was implemented for the first time, i.e. the date after which the definitions in the data set specification apply.
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none">1. Select the implementation start date from the calendar.2. When the implementation start date calendar is selected it automatically defaults to today's date. To specify the implementation start date, select the relevant day, month and year from the drop-down date selector to indicate a fully formed date (i.e., 15 February 2006).3. An NMDS should be approved as a standard on a date that is before its implementation start date.4. If data set specification does not have an implementation start date (e.g., it is not an NMDS), tick the Not applicable box.

12.2.9 Implementation end date

The date on which the collection of data for a particular data set specification was completed, i.e. the last date when the definitions in the data set specification apply.

Obligation to complete:	Conditional: mandatory if the data set specification is a National Minimum Data Set (NMDS) which has an end date, or where the definitions in the data set specification cease on a specific date.
Completed by:	Developer
Visibility:	All users
Rules:	<p>The implementation end date often corresponds to the end of the reporting period for a collection</p> <ol style="list-style-type: none"> 1. Select the implementation end date from the calendar. 2. When the implementation end date calendar is selected it automatically defaults to today's date. To specify the implementation end date, select the relevant day, month and year from the drop-down date selector to indicate a fully formed date (i.e., 15 February 2006). 3. Where a data set specification has open end dates, this attribute should be left blank (i.e. the attribute should be set to Not applicable by ticking the checkbox to the right of the date selector).

12.2.10 Comments

Any additional information that adds to the understanding of the data set specification.

Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	Describe any relevant additional information that facilitates understanding of the data set specification. For example, whether the data set specification is likely to be reviewed in the near future, considerations for further development, or to list the glossary items used in the data set specification.
Notes	<ol style="list-style-type: none"> 1. Any glossary items implemented in the data set specification should be listed in 'comments' under the heading 'glossary items' with lead-in wording such as, 'Glossary terms that are relevant to this data set specification are:...' 2. Insert each glossary term by using the WYSIWIG editor toolbar. 3. Click on the METEOR drop-down menu. This brings up three options: metadata items, image and file. 4. Choose 'metadata items'. 5. Insert the glossary item ID number and click the OK button. 6. Repeat process if more items are needed.

12.2.11 Submitting organisation

One or more organisations responsible for the submission of the metadata item for endorsement as a standard.

Obligation to complete:	Mandatory
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none">1. For each organisation responsible for the submission of the metadata item, state the full official organisation title at the time of submission.2. Abbreviations and symbols should only be used when they are part of the official organisation title.3. Conclude and separate each organisation's name with a new line (without a full stop).
Notes	<ol style="list-style-type: none">1. Click on down arrow to show drop-down list of departments and organisations.2. Click on chosen organisation.3. If you skip this process, you will not be able to proceed to change registration status to <i>Standard</i> when you update the status later down the track. You must fill this template in.4. In the case of a metadata with missing submitting organisation, go back to the item and choose 'edit item' to add the submitting organisation, in order to update registration status.

12.2.12 Steward

The name of the organisation responsible for ongoing maintenance and management of a metadata item.

Obligation to complete:	Optional: Complete if a steward has been endorsed and has agreed to perform steward role.
Completed by:	Registrar
Visibility:	Registrar
Rules:	<ol style="list-style-type: none">1. Each metadata item may be associated with only one steward.2. The steward has responsibility for ensuring that the metadata item is kept up-to-date for all registration authorities to which it has been proposed.3. Leave this field blank until an organisation has agreed and has been approved by a registration authority to provide ongoing maintenance and management of the metadata item.4. State the complete and official organisation title for the steward (including a committee where necessary).5. Abbreviations and symbols should only be used when they are part of the official organisation title.

12.2.13 Origin

Any publication(s), website(s), organisation(s) and/or committee(s) from which any content of the metadata item originates.	
Obligation to complete:	Conditional: Complete for metadata items based on the content outside of METEOR.
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. Origin references should comply with the referencing guidelines in Appendix C 'Referencing guidelines'. 2. List the full reference for any in-text references cited in the body of that metadata item. 3. Conclude and separate each reference with a new line (without a full stop).
Notes	References included in the 'origin' attribute are not included in the 'references' attribute and vice versa.

12.2.14 Reference documents

Significant publication(s) and/or website(s) used in the aid of the development of the metadata item.	
Obligation to complete:	Conditional: Complete for metadata items developed in consultation with a significant publication and/or website outside of METEOR.
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. References should comply with the referencing guidelines in Appendix C 'Referencing guidelines'. 2. Conclude and separate each reference with a new line (without a full stop).
Notes	References included in the 'reference' attribute are not included in the 'origin' attribute and vice versa.

12.2.15 Relationship type

An indicator for relationships between metadata items.	
Obligation to complete:	Optional
Completed by:	Developer
Visibility:	All users
Rules:	<ol style="list-style-type: none"> 1. Relationships may be created between any two metadata items. Note that some relationship types can only be created to link items of the same metadata type (e.g., between two data elements). See also relationships may be created to link items of a different metadata type (e.g., between a property and a value domain). 2. Related metadata relationships should not duplicate information stored or available elsewhere in METEOR. For example, where data element A implements data element concept B, this is already explicit in both the name of the data element and the Data element concept attributes of the data element. A related metadata relationship would thus be superfluous. Similarly, if data element C is normally collected together with data element D, this will be apparent from the fact that both occur in the same DSS. Valid relationships are listed in the table F1. METEOR will automatically create the complementary relationship within the second metadata item (listed in the second column of the table F1). 3. A See also relationship may be used to draw the reader's attention to another element, however should not take the place of another valid relationship type, or duplicate information stored elsewhere. A See also relationship should be applied judiciously, i.e. where it is critical for the reader to know that the other item exists, and not just because there are similarities between the linked elements. 4. When creating a Superseded relationship, the registration status of the superseded item must be changed to Superseded once the new item becomes Standard. <p>To create a relationship:</p> <ul style="list-style-type: none"> • select a value from the 'relationship type' drop-down list • click the Add button to open the metadata item browser • select the metadata item and click the Add button • select or enter the item you wish to create a relationship to and click the Add button • the relationship will then be listed on the metadata item creation window. <p>The relationship can be deleted by clicking on the Cancel button</p>
Notes	See Appendix F for more detailed information on relationship types and their associated meanings.

12.2.16 Unresolved issues

Comments which highlight unresolved issues for data committee or registrar consideration.	
Obligation to complete:	Optional
Completed by:	Registrar
Visibility:	Registrar
Rules:	<ol style="list-style-type: none">1. This field should be used to document issues which are relevant to the quality of the metadata item and its management within METEOR.2. Unresolved issues can only be created and viewed by registrars and have been designed to assist communication between registrars.
Notes	This attribute can only be created and viewed by registrars.

12.2.17 Submitting organisation contact details

The details of at least one contact person for each listed submitting organisation.	
Obligation to complete:	Optional
Completed by:	Registrar
Visibility:	Registrar
Rules:	<ol style="list-style-type: none">1. Approval from each submitting organisation contact person must be provided before any contact information is stored within METEOR.2. For each submitting organisation contact, list their name, position title, organisational unit, telephone number and email address.
Notes	This attribute can only be created and viewed by registrars.

12.2.18 Steward contact details

The details of at least one contact person for the steward organisation.	
Obligation to complete:	Optional
Completed by:	Registrar
Visibility:	Registrar
Rules:	<ol style="list-style-type: none">1. Approval from the steward contact person must be received before any contact information is stored within METEOR.2. For each steward contact, list their name, position title, organisational unit, telephone number and email address.
Notes	This attribute can only be created and viewed by registrars.