

Aquisition Information

I need to provide information about the mission, and the platforms, instruments and sensors associated with the resource.

Overview

The Acquisition Information package is used for describing the acquisition of imagery and gridded datasets. This package includes fields for describing hardware (platforms, instruments, sensors, etc), requirements, plans, operations and objectives.

Recommendations

Documentation Objectives

- Add platform identification information to the metadata.
- Add platform description information to the metadata.
- Add instrument identification information to the metadata.
- Add instrument description information to the metadata.
- Add an operations statement describing the scientific endeavor(s) to which the series/collection is associated to the metadata.

Conceptual Model

MI_AcquisitionInformation includes the following information:

MI_Instrument, designations of the measuring instruments used to acquire the data;

MI_Operation, designations of the overall data gathering program to which the data contribute;

MI_Platform, designations of the platform from which the data were taken;

MI_Objective, the characteristics and geometry of the intended object to be observed;

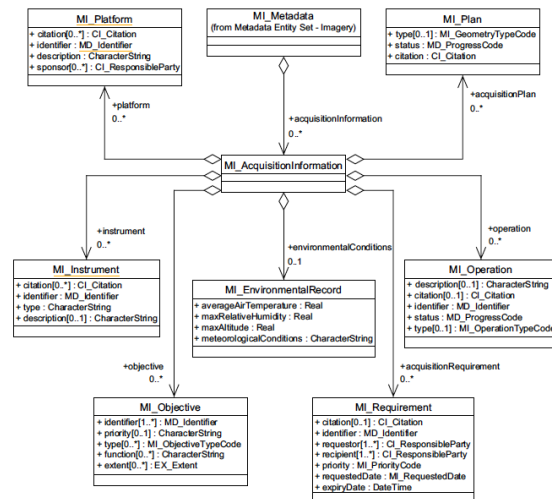
MI_Requirement, the user requirements used to derive the acquisition plan;

MI_Plan, the acquisition plan that was implemented to acquire the data.

Two additional classes are required to provide information on the acquisition of the data. These are:

MI_Event, describes a significant event that occurred during data acquisition. An event can be associated with an operation, objective, or platform pass, and

MI_PlatformPass, identifies a particular pass made by the platform during data acquisition. A platform pass is used to provide supporting identifying information for an event and for data acquisition of a particular objective.



Implementation (ISO)

```
<gmi:MI_AcquisitionInformation xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.isotc211.org/2005/gmi http://www.ngdc.noaa.gov/metadata/published/xsd
/schemas.xsd"
  xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:gco="http://www.isotc211.org/2005/gco"
  xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:srv="http://www.isotc211.org/2005/srv" xmlns:gml="http://www.opengis.net/gml/3.2"
  xmlns:gsr="http://www.isotc211.org/2005/gsr" xmlns:gss="http://www.isotc211.org/2005/gss"
  xmlns:gts="http://www.isotc211.org/2005/gts" xmlns:gmw="http://www.isotc211.org/2005/gmw"
  xmlns:gmi="http://www.isotc211.org/2005/gmi">
  <gmi:instrument>
    <!--
```

The MI_Instrument class provides a description of the instrument used to collect the data. Use the id attribute to provide

a unique identifier for the instrument in this file. This id will be used to reference the instrument information from platform descriptions in the same file.

```
-->
<gmi:MI_Instrument id="InstrumentShortName">
  <!--
    This is a citation to reference material that describes the instrument. Any number of these
    can be included in a metadata record.
  -->
```

```
    <gmi:citation>
      <gmd:CI_Citation>
        <gmd:title>
          <gco:CharacterString>Title for reference material</gco:CharacterString>
        </gmd:title>
        <gmd:date>
          <gmd:CI_Date>
            <gmd:date>
              <!--
                The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki/ISO_8601).
              -->
```

```
                <gco>Date>2016-01-01</gco>Date>
              </gmd:date>
            <gmd:dateType>
              <gmd:CI_DateTypeCode codeList="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.xml#CI_DateTypeCode"
                codeListValue="publication">publication</gmd:CI_DateTypeCode>
            </gmd:dateType>
          </gmd:CI_Date>
        </gmd:date>
      <gmd:citedResponsibleParty>
        <gmd:CI_ResponsibleParty>
          <gmd:individualName>
            <gco:CharacterString>Author Name</gco:CharacterString>
          </gmd:individualName>
          <gmd:role>
            <gmd:CI_RoleCode codeList="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.xml#CI_RoleCode"
              codeListValue="originator">originator</gmd:CI_RoleCode>
            </gmd:role>
          </gmd:CI_ResponsibleParty>
        </gmd:citedResponsibleParty>
      </gmd:CI_Citation>
    </gmi:citation>
  <!--
```

This is a permanent and unique identifier for the instrument. Typically the InstrumentShortNames are unique.

```
-->
  <gmi:identifier>
    <gmd:MD_Identifier>
      <!--
        Identifiers should include information about the authority that assigns the
        identifiers.
      -->
```

```
      <gmd:authority>
        <gmd:CI_Citation>
          <gmd:title>
            <gco:CharacterString>Name of the authority for the identifier.</gco:
CharacterString>
```

```
          </gmd:title>
          <gmd:date>
            <gmd:CI_Date>
              <gmd:date>
                <!-- The date is given in ISO 8601 format (see https://en.wikipedia.
org/wiki/ISO_8601). -->
                <gco>Date>2016-01-01</gco>Date>
              </gmd:date>
            <gmd:dateType>
              <gmd:CI_DateTypeCode codeList="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.xml#CI_DateTypeCode"
                codeListValue="publication">publication</gmd:CI_DateTypeCode>
```

```

        </gmd:dateType>
    </gmd:CI_Date>
</gmd:date>
</gmd:CI_Citation>
</gmd:authority>
<gmd:code>
    <gco:CharacterString>InstrumentShortName</gco:CharacterString>
</gmd:code>
</gmd:MD_Identifier>
</gmi:identifier>
<gmi:type>
    <gco:CharacterString>Instrument type</gco:CharacterString>
</gmi:type>
<gmi:description>
    <gco:CharacterString>Instrument Description</gco:CharacterString>
</gmi:description>
<!--
    The identifier is used to reference the platform that the instrument is mounted on.
-->
    <gmi:mountedOn xlink:href="#PlatformShortName"/>
</gmi:MI_Instrument>
</gmi:instrument>
<!--
    The operation is used to provide information about the mission during which the data were collected.
-->
<gmi:operation>
    <gmi:MI_Operation>
        <gmi:description>
            <gco:CharacterString>Mission description.</gco:CharacterString>
        </gmi:description>
        <!--
            This is a permanent and unique identifier for the mission.
        -->
        <gmi:identifier>
            <gmd:MD_Identifier>
                <gmd:authority>
                    <gmd:CI_Citation>
                        <gmd:title>
                            <gco:CharacterString>Name of the code authority</gco:CharacterString>
                        </gmd:title>
                        <gmd:date>
                            <gmd:CI_Date>
                                <gmd:date>
                                    <!--
                                        The date is given in ISO 8601 format (see https://en.wikipedia.
org/wiki/ISO_8601).
                                    -->
                                    <gco>Date>2016-01-01</gco>Date>
                                </gmd:date>
                            </gmd:dateType>
                        <gmd:CI_DateTypeCode codeList="http://www.isotc211.org/2005/resources
/Codelist/gmxCodelists.xml#CI_DateTypeCode"
                            codeListValue="revision">revision</gmd:CI_DateTypeCode>
                        </gmd:dateType>
                    </gmd:CI_Date>
                </gmd:date>
            <gmd:citedResponsibleParty>
                <gmd:CI_ResponsibleParty>
                    <gmd:organisationName>
                        <gco:CharacterString>Organization name</gco:CharacterString>
                    </gmd:organisationName>
                    <gmd:contactInfo>
                        <gmd:CI_Contact>
                            <gmd:address>
                                <gmd:CI_Address>
                                    <gmd:electronicMailAddress>
                                        <gco:CharacterString>email address for organization<
/gco:CharacterString>
                                    </gmd:electronicMailAddress>
                                </gmd:CI_Address>
                            </gmd:address>

```

```

        </gmd:CI_Contact>
        </gmd:contactInfo>
        <gmd:role>
            <gmd:CI_RoleCode codeList="http://www.isotc211.org/2005/resources
/Codelist/gmxCodelists.xml#CI_RoleCode"
                codeListValue="resourceProvider">resourceProvider</gmd:CI_RoleCode>
        </gmd:role>
        </gmd:CI_ResponsibleParty>
        </gmd:citedResponsibleParty>
        </gmd:CI_Citation>
        </gmd:authority>
        <gmd:code>
            <gco:CharacterString>Mission Identifier</gco:CharacterString>
        </gmd:code>
        </gmd:MD_Identifier>
    </gmi:identifier>
    <gmi:status>
        <!--
            The MD_ProgressCode can have values of completed, historicalArchive, obsolete, onGoing,
            planned, required, or underDevelopment.
        -->
        <gmd:MD_ProgressCode codeList="http://www.isotc211.org/2005/resources/Codelist/gmxCodelists.
xml#MD_ProgressCode"
            codeListValue="onGoing">onGoing</gmd:MD_ProgressCode>
    </gmi:status>
    <gmi:type>
        <!--
            The MI_OperationTypeCode can have a value of real, simulated, or synthetic.
            Other values can be added to the codelist if necessary.
        -->
        <gmi:MI_OperationTypeCode codeList="http://www.isotc211.org/2005/resources/Codelist
/gmxCodelists.xml#MI_OperationTypeCode"
            codeListValue="real">real</gmi:MI_OperationTypeCode>
    </gmi:type>
    <!--
        A hierarchy of missions is possible.
    -->
    <gmi:parentOperation gco:nilReason="inapplicable"/>
</gmi:MI_Operation>
</gmi:operation>
<gmi:platform>
    <gmi:MI_Platform id="PlatformShortName">
        <!--
            This is a citation to reference material that describes the platform. Any number of these
            can be included in a metadata record.
        -->
        <gmi:citation>
            <gmd:CI_Citation>
                <gmd:title>
                    <gco:CharacterString>Title for reference material</gco:CharacterString>
                </gmd:title>
                <gmd:date>
                    <gmd:CI_Date>
                        <gmd:date>
                            <!--
                                The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki
/ISO_8601).
                            -->
                            <gco>Date>2016-01-01</gco>Date>
                        </gmd:date>
                    </gmd:dateType>
                    <gmd:CI_DateTypeCode codeList="http://www.isotc211.org/2005/resources
/Codelist/gmxCodelists.xml#CI_DateTypeCode"
                        codeListValue="publication">publication</gmd:CI_DateTypeCode>
                </gmd:dateType>
            </gmd:CI_Date>
        </gmd:date>
        <gmd:citedResponsibleParty>
            <gmd:CI_ResponsibleParty>
                <gmd:individualName>
                    <gco:CharacterString>Author Name</gco:CharacterString>

```

```

        </gmd:individualName>
        <gmd:role>
          <gmd:CI_RoleCode codeList="http://www.isotc211.org/2005/resources/CodeList
/gmxCodeLists.xml#CI_RoleCode"
            codeListValue="originator">originator</gmd:CI_RoleCode>
        </gmd:role>
        </gmd:CI_ResponsibleParty>
        </gmd:citedResponsibleParty>
      </gmd:CI_Citation>
    </gmi:citation>
    <!--
      This is a permanent and unique identifier for the platform. Typically the PlatformShortNames
are unique.
    -->
    <gmi:identifier>
      <gmd:MD_Identifier>
        <gmd:code>
          <gco:CharacterString>PlatformShortName</gco:CharacterString>
        </gmd:code>
      </gmd:MD_Identifier>
    </gmi:identifier>
    <gmi:description>
      <gco:CharacterString>Platform description</gco:CharacterString>
    </gmi:description>
    <!--
      The identifier is used to reference the instrument that is mounted on this platform.
    -->
    <gmi:instrument xlink:href="#InstrumentShortName"/>
  </gmi:MI_Platform>
</gmi:platform>
</gmi:MI_AcquisitionInformation>

```

Implementation (NcML)

The XML implementations shown above work well in systems designed to manage metadata in internationally accepted XML dialects. Typically these systems manage metadata for collections and, in many cases, they are separate from the actual data files (or granules). Historically, the metadata in files has been generated and used by analysis and visualization tools. It is written and read by tools that understand the specifics of the data format and the organization and naming of the metadata elements. The ISO standards shown above provide an organization and a set of names. Can we take advantage of those in the granules?

We have recently explored this idea with a [standard transform between ISO metadata and NcML](#), a simple XML dialect originally developed as part of the netCDF ecosystem that includes groups and attributes and translated easily to the structure of an HDF file. The NcML version of the ISO 19115 quality information is shown below. This representation includes all of the ISO content and can be transformed back into ISO when it is appropriate.

```

<nc:netcdf xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://www.unidata.ucar.edu/namespaces/netcdf/ncml-2.2"
  xmlns:nc="http://www.unidata.ucar.edu/namespaces/netcdf/ncml-2.2">
  <nc:group name="gmi:MI_AcquisitionInformation">
    <nc:attribute name="__role" value="metadataRoot"/>
    <nc:attribute name="__type" value="gmi:MI_AcquisitionInformation"/>
    <nc:attribute name="@xsi:schemaLocation"
      value="http://www.isotc211.org/2005/gmi http://www.ngdc.noaa.gov/metadata/published/xsd
/schema.xsd"/>
    <!--
      The MI_Instrument class provides a description of the instrument used to collect the data. Use
the id attribute to provide
      a unique identifier for the instrument in this file. This id will be used to reference the
instrument
information from
      platform descriptions in the same file.
    -->
    <nc:group name="gmi:instrument">
      <nc:attribute name="__role" value="gmi:instrument"/>
      <nc:attribute name="__type" value="gmi:MI_Instrument"/>
      <nc:attribute name="@id" value="InstrumentShortName"/>
    <!--
      This is a citation to reference material that describes the instrument. Any number of these
can be included in a metadata record.
    -->

```

```

<nc:group name="gmi:citation">
  <nc:attribute name="__role" value="gmi:citation"/>
  <nc:attribute name="__type" value="gmd:CI_Citation"/>
  <nc:attribute name="gmd:title"
    value="Title for reference material"
    __isoType="gco:CharacterString"/>
  <nc:group name="gmd:date">
    <nc:attribute name="__role" value="gmd:date"/>
    <nc:attribute name="__type" value="gmd:CI_Date"/>
    <!--
      The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki
/ISO_8601).
      -->
    <nc:attribute name="gmd:date" value="2016-01-01" __isoType="gco:Date"/>
    <nc:group name="gmd:dateType">
      <nc:attribute name="__role" value="gmd:dateType"/>
      <nc:attribute name="__type" value="gmd:CI_DateTypeCode"/>
      <nc:attribute name="@codeList"
        value="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.
xml#CI_DateTypeCode"/>
      <nc:attribute name="@codeListValue" value="publication"/>
      <nc:attribute name="value" value="publication"/>
    </nc:group>
  </nc:group>
  <nc:group name="gmd:citedResponsibleParty">
    <nc:attribute name="__role" value="gmd:citedResponsibleParty"/>
    <nc:attribute name="__type" value="gmd:CI_ResponsibleParty"/>
    <nc:attribute name="gmd:individualName"
      value="Author Name"
      __isoType="gco:CharacterString"/>
    <nc:group name="gmd:role">
      <nc:attribute name="__role" value="gmd:role"/>
      <nc:attribute name="__type" value="gmd:CI_RoleCode"/>
      <nc:attribute name="@codeList"
        value="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.
xml#CI_RoleCode"/>
      <nc:attribute name="@codeListValue" value="originator"/>
      <nc:attribute name="value" value="originator"/>
    </nc:group>
  </nc:group>
  </nc:group>
  <!--
    This is a permanent and unique identifier for the instrument. Typically the
InstrumentShortNames are unique.
    -->
  <nc:group name="gmi:identifier">
    <nc:attribute name="__role" value="gmi:identifier"/>
    <nc:attribute name="__type" value="gmd:MD_Identifier"/>
    <!--
      Identifiers should include information about the authority that assigns the
identifiers.
      -->
    <nc:group name="gmd:authority">
      <nc:attribute name="__role" value="gmd:authority"/>
      <nc:attribute name="__type" value="gmd:CI_Citation"/>
      <nc:attribute name="gmd:title"
        value="Name of the authority for the identifier."
        __isoType="gco:CharacterString"/>
    <nc:group name="gmd:date">
      <nc:attribute name="__role" value="gmd:date"/>
      <nc:attribute name="__type" value="gmd:CI_Date"/>
      <!-- The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki/ISO_8601). -->
      <nc:attribute name="gmd:date" value="2016-01-01" __isoType="gco:Date"/>
      <nc:group name="gmd:dateType">
        <nc:attribute name="__role" value="gmd:dateType"/>
        <nc:attribute name="__type" value="gmd:CI_DateTypeCode"/>
        <nc:attribute name="@codeList"
          value="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.
xml#CI_DateTypeCode"/>
        <nc:attribute name="@codeListValue" value="publication"/>
        <nc:attribute name="value" value="publication"/>
      </nc:group>
    </nc:group>
  </nc:group>

```

```

        </nc:group>
    </nc:group>
</nc:group>
    <nc:attribute name="gmd:code"
                  value="InstrumentShortName"
                  __isoType="gco:CharacterString"/>
</nc:group>
    <nc:attribute name="gmi:type"
                  value="Instrument type"
                  __isoType="gco:CharacterString"/>
    <nc:attribute name="gmi:description"
                  value="Instrument Description"
                  __isoType="gco:CharacterString"/>
    <!--
        The identifier is used to reference the platform that the instrument is mounted on.
    -->
    <nc:group name="gmi:mountedOn">
        <nc:attribute name="@xlink:href" value="#PlatformShortName"/>
    </nc:group>
</nc:group>
    <!--
        The operation is used to provide information about the mission during which the data were collected.
    -->
    <nc:group name="gmi:operation">
        <nc:attribute name="__role" value="gmi:operation"/>
        <nc:attribute name="__type" value="gmi:MI_Operation"/>
        <nc:attribute name="gmi:description"
                      value="Mission description."
                      __isoType="gco:CharacterString"/>
    <!--
        This is a permanent and unique identifier for the mission.
    -->
    <nc:group name="gmi:identifier">
        <nc:attribute name="__role" value="gmi:identifier"/>
        <nc:attribute name="__type" value="gmd:MD_Identifier"/>
        <nc:group name="gmd:authority">
            <nc:attribute name="__role" value="gmd:authority"/>
            <nc:attribute name="__type" value="gmd:CI_Citation"/>
            <nc:attribute name="gmd:title"
                          value="Name of the code authority"
                          __isoType="gco:CharacterString"/>
        <nc:group name="gmd:date">
            <nc:attribute name="__role" value="gmd:date"/>
            <nc:attribute name="__type" value="gmd:CI_Date"/>
        <!--
            The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki/ISO\_8601).
        -->
        <nc:attribute name="gmd:date" value="2016-01-01" __isoType="gco:Date"/>
        <nc:group name="gmd:dateType">
            <nc:attribute name="__role" value="gmd:dateType"/>
            <nc:attribute name="__type" value="gmd:CI_DateTypeCode"/>
            <nc:attribute name="@codeList"
                          value="http://www.isotc211.org/2005/resources/Codelist/gmxCodelists.
xml#CI_DateTypeCode"/>
            <nc:attribute name="@codeListValue" value="revision"/>
            <nc:attribute name="value" value="revision"/>
        </nc:group>
    </nc:group>
    <nc:group name="gmd:citedResponsibleParty">
        <nc:attribute name="__role" value="gmd:citedResponsibleParty"/>
        <nc:attribute name="__type" value="gmd:CI_ResponsibleParty"/>
        <nc:attribute name="gmd:organisationName"
                      value="Organization name"
                      __isoType="gco:CharacterString"/>
        <nc:group name="gmd:contactInfo">
            <nc:attribute name="__role" value="gmd:contactInfo"/>
            <nc:attribute name="__type" value="gmd:CI_Contact"/>
            <nc:group name="gmd:address">
                <nc:attribute name="__role" value="gmd:address"/>
                <nc:attribute name="__type" value="gmd:CI_Address"/>
            </nc:group>
        </nc:group>
    </nc:group>

```

```

        <nc:attribute name="gmd:electronicMailAddress"
            value="email address for organization"
            __isoType="gco:CharacterString"/>
    </nc:group>
</nc:group>
<nc:group name="gmd:role">
    <nc:attribute name="__role" value="gmd:role"/>
    <nc:attribute name="__type" value="gmd:CI_RoleCode"/>
    <nc:attribute name="@codeList"
        value="http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.
xml#CI_RoleCode"/>
    <nc:attribute name="@codeListValue" value="resourceProvider"/>
    <nc:attribute name="value" value="resourceProvider"/>
</nc:group>
</nc:group>
<nc:attribute name="gmd:code"
    value="Mission Identifier"
    __isoType="gco:CharacterString"/>
</nc:group>
<!--
    The MD_ProgressCode can have values of completed, historicalArchive, obsolete, onGoing,
    planned, required, or underDevelopment.
-->
<nc:group name="gmi:status">
    <nc:attribute name="__role" value="gmi:status"/>
    <nc:attribute name="__type" value="gmd:MD_ProgressCode"/>
    <nc:attribute name="@codeList"
        value="http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.
xml#MD_ProgressCode"/>
    <nc:attribute name="@codeListValue" value="onGoing"/>
    <nc:attribute name="value" value="onGoing"/>
</nc:group>
<!--
    The MI_OperationTypeCode can have a value of real, simulated, or synthetic.
    Other values can be added to the codelist if necessary.
-->
<nc:group name="gmi:type">
    <nc:attribute name="__role" value="gmi:type"/>
    <nc:attribute name="__type" value="gmi:MI_OperationTypeCode"/>
    <nc:attribute name="@codeList"
        value="http://www.isotc211.org/2005/resources/Codelist/gmxCodeLists.
xml#MI_OperationTypeCode"/>
    <nc:attribute name="@codeListValue" value="real"/>
    <nc:attribute name="value" value="real"/>
</nc:group>
<!--
    A hierarchy of missions is possible.
-->
<nc:group name="gmi:parentOperation">
    <nc:attribute name="@gco:nilReason" value="inapplicable"/>
</nc:group>
<nc:group name="gmi:platform">
    <nc:attribute name="__role" value="gmi:platform"/>
    <nc:attribute name="__type" value="gmi:MI_Platform"/>
    <nc:attribute name="@id" value="PlatformShortName"/>
<!--
    This is a citation to reference material that describes the platform. Any number of these
    can be included in a metadata record.
-->
<nc:group name="gmi:citation">
    <nc:attribute name="__role" value="gmi:citation"/>
    <nc:attribute name="__type" value="gmd:CI_Citation"/>
    <nc:attribute name="gmd:title"
        value="Title for reference material"
        __isoType="gco:CharacterString"/>
    <nc:group name="gmd:date">
        <nc:attribute name="__role" value="gmd:date"/>
        <nc:attribute name="__type" value="gmd:CI_Date"/>
    <!--

```

The date is given in ISO 8601 format (see https://en.wikipedia.org/wiki/ISO_8601).

```
-->
<nc:attribute name="gmd:date" value="2016-01-01" __isoType="gco:Date"/>
<nc:group name="gmd:dateType">
  <nc:attribute name="__role" value="gmd:dateType"/>
  <nc:attribute name="__type" value="gmd:CI_DateTypeCode"/>
  <nc:attribute name="@codeList"
    value="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.
xml#CI_DateTypeCode"/>
  <nc:attribute name="@codeListValue" value="publication"/>
  <nc:attribute name="value" value="publication"/>
</nc:group>
</nc:group>
<nc:group name="gmd:citedResponsibleParty">
  <nc:attribute name="__role" value="gmd:citedResponsibleParty"/>
  <nc:attribute name="__type" value="gmd:CI_ResponsibleParty"/>
  <nc:attribute name="gmd:individualName"
    value="Author Name"
    __isoType="gco:CharacterString"/>
  <nc:group name="gmd:role">
    <nc:attribute name="__role" value="gmd:role"/>
    <nc:attribute name="__type" value="gmd:CI_RoleCode"/>
    <nc:attribute name="@codeList"
      value="http://www.isotc211.org/2005/resources/CodeList/gmxCodeLists.
xml#CI_RoleCode"/>
    <nc:attribute name="@codeListValue" value="originator"/>
    <nc:attribute name="value" value="originator"/>
  </nc:group>
</nc:group>
</nc:group>
<!--
```

This is a permanent and unique identifier for the platform. Typically the PlatformShortNames are unique.

```
-->
<nc:group name="gmi:identifier">
  <nc:attribute name="__role" value="gmi:identifier"/>
  <nc:attribute name="__type" value="gmd:MD_Identifier"/>
  <nc:attribute name="gmd:code"
    value="PlatformShortName"
    __isoType="gco:CharacterString"/>
</nc:group>
<nc:attribute name="gmi:description"
  value="Platform description"
  __isoType="gco:CharacterString"/>
<!--
  The identifier is used to reference the instrument that is mounted on this platform.
-->
<nc:group name="gmi:instrument">
  <nc:attribute name="@xlink:href" value="#InstrumentShortName"/>
</nc:group>
</nc:group>
<nc:group name="namespace_1">
  <nc:attribute name="prefix" value="xml"/>
  <nc:attribute name="uri" value="http://www.w3.org/XML/1998/namespace"/>
</nc:group>
<nc:group name="namespace_2">
  <nc:attribute name="prefix" value="xsi"/>
  <nc:attribute name="uri" value="http://www.w3.org/2001/XMLSchema-instance"/>
</nc:group>
<nc:group name="namespace_3">
  <nc:attribute name="prefix" value="gmd"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gmd"/>
</nc:group>
<nc:group name="namespace_4">
  <nc:attribute name="prefix" value="gco"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gco"/>
</nc:group>
<nc:group name="namespace_5">
  <nc:attribute name="prefix" value="xlink"/>
  <nc:attribute name="uri" value="http://www.w3.org/1999/xlink"/>
</nc:group>
```

```
</nc:group>
<nc:group name="namespace_6">
  <nc:attribute name="prefix" value="xs"/>
  <nc:attribute name="uri" value="http://www.w3.org/2001/XMLSchema"/>
</nc:group>
<nc:group name="namespace_7">
  <nc:attribute name="prefix" value="srv"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/srv"/>
</nc:group>
<nc:group name="namespace_8">
  <nc:attribute name="prefix" value="gml"/>
  <nc:attribute name="uri" value="http://www.opengis.net/gml/3.2"/>
</nc:group>
<nc:group name="namespace_9">
  <nc:attribute name="prefix" value="gsr"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gsr"/>
</nc:group>
<nc:group name="namespace_10">
  <nc:attribute name="prefix" value="gss"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gss"/>
</nc:group>
<nc:group name="namespace_11">
  <nc:attribute name="prefix" value="gts"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gts"/>
</nc:group>
<nc:group name="namespace_12">
  <nc:attribute name="prefix" value="gmx"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gmx"/>
</nc:group>
<nc:group name="namespace_13">
  <nc:attribute name="prefix" value="gmi"/>
  <nc:attribute name="uri" value="http://www.isotc211.org/2005/gmi"/>
</nc:group>
</nc:group>
</nc:netcdf>
```

Crosswalks

Notes
