

Data Center - Contact Group

- [Element Description](#)
- [Best Practices](#)
- [Element Specification](#)
- [Metadata Validation and QA/QC](#)
 - [DIF 10](#)
 - [ECHO 10](#)
 - [ISO 19115-2 MENDS](#)
 - [ISO 19115-2 SMAP](#)
- [UMM Migration](#)
- [History](#)
 - [UMM Versioning](#)
 - [ARC Documentation](#)

Element Description

The Data Center/ Contact Group metadata element is used to provide contact information for a group associated with the dataset. For example, these elements could be used to provide contact information for a research group within a data center responsible for generating a dataset.

Note that the Contact Group metadata element being described on this wiki page is nested under the [Data Center](#) element. Contact Group information can also be provided separate from the Data Center element (i.e. for a group unaffiliated with a data center) - see the [Contact Group](#) wiki page for details.

There are 5 options for providing contact information in the UMM:

1. [Data Center](#)
2. [Data Center/Contact Person](#)
3. **Data Center/Contact Group**
4. [Contact Person](#)
5. [Contact Group](#)

Details for each of these options is provided on a separate wiki page. This wiki page describes details for option 3 (Data Center/Contact Group).

Best Practices

Each Contact Group listed in the metadata must be affiliated with a **Role**. Providing a Role for the Contact Group is required and must be selected from a controlled vocabulary list. There are seven options for Role:

1. **DATA CENTER CONTACT**: a group affiliated with a data center. This will should be the same data center listed in the required 'Data Center' element.
2. **TECHNICAL CONTACT**: a group with technical (expert) knowledge about the data product.
3. **SCIENCE CONTACT**: a group with technical (expert) knowledge about the science principles involved in deriving the data product.
4. **INVESTIGATOR**: a group involved in the creation of the data product. For instance, this might be the principal investigator (PI) or co-PI of the project responsible for creating the data product.
5. **METADATA AUTHOR**: a group responsible for creating and/or maintaining the collection level and/or granule level metadata record(s) associated with the data product.
6. **USER SERVICES**: the user services office at the data center responsible for archiving, distributing, originating or processing the data.
7. **SCIENCE SOFTWARE DEVELOPMENT**: a group with knowledge of software(s) specifically developed for the data product.

The same contact group may be responsible for multiple roles. In this case, multiple roles may be assigned to the same contact group.

Other Contact Group metadata fields include:

Non Data Center Affiliation: The Contact Group metadata elements are sub-fields of the [Data Center](#) metadata element. Sometimes the Contact Group listed is not affiliated with the Data Center. This field can be used to specify the name of a larger organization the Group is affiliated with if it differs from the [Data Center](#). Providing a Non Data Center Affiliation is optional, however, it is recommended that this information be provided when the affiliation of the Contact Person differs from the [Data Center](#) they are listed under. *Alternatively*, if the Group is not affiliated with a particular [Data Center](#), the contact information can be provided in the [Contact Group](#) metadata elements instead (these are not nested under a [Data Center](#)).

Group Name: The name of the group. *Providing a group name is required.*

Contact Information: Any relevant contact information for the group. Providing contact information is optional, however, it is recommended that at least one piece of contact information (such as a link, email or phone number) be provided. Some examples of contact information include: phone number, email, fax, related links, service hours, and contact instructions. See the element specification table below for full details.

Examples:

Role: USER SERVICES

GroupName: GHRC User Services

ContactInformation/ServiceHours: 8 AM to 5 PM ET

ContactInformation/ContactMechanism/Type: Email

ContactInformation/ContactMechanism/Value: support-ghrc@earthdata.nasa.gov

ContactInformation/RelatedURLs/Url: <https://ghrc.nsstc.nasa.gov/home/contact-us>

ContactInformation/RelatedURLs/UrlContentType: DataContactURL

ContactInformation/ContactMechanism/Type: HOME PAGE

/ContactInformation/RelatedURLs/Description: How to contact GHRC user services

Role: TECHNICAL CONTACT

GroupName: MODAPS User Support Team

ContactInformation/ContactMechanism/Type: U.S. toll free

ContactInformation/ContactMechanism/Value: 1-800-596-8132

ContactInformation/ContactMechanism/Type: Email

ContactInformation/ContactMechanism/Value: MODAPSUSO@lists.nasa.gov

ContactInformation/Address/StreetAddresses: MODAPS User Support Team

ContactInformation/Address/StreetAddresses : NASA/GSFC

ContactInformation/Address/StreetAddresses : Mail Code: 619

ContactInformation/Address/City: Greenbelt

ContactInformation/Address/StateProvince: MD

ContactInformation/Address/PostalCode: 20771

ContactInformation/Address/Country: USA

Element Specification

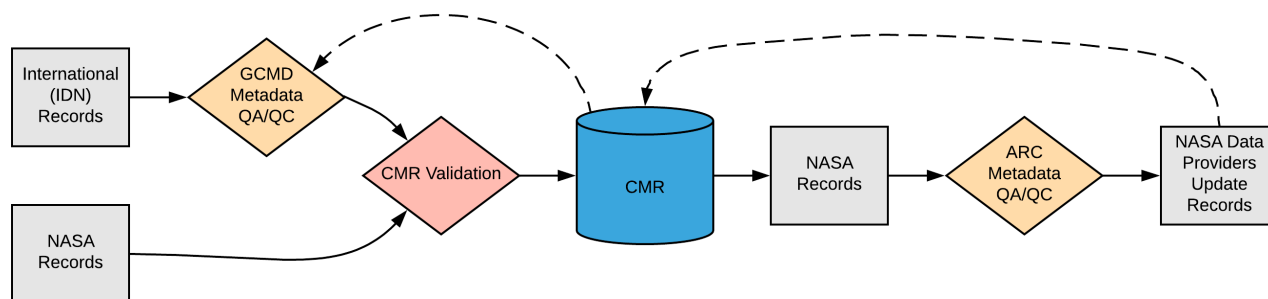
Providing a DataCenter/ContactGroup is optional. An unlimited number of Contact Groups may be listed (Cardinality: 0..*)

Model	Element	Type	Usable Valid Values	Constraints	Required?	Cardinality	Notes
UMM-Common	DataCenters/ContactGroup/Roles	Enumeration	Data Center Contact Technical Contact Science Contact Investigator Metadata Author User Services Science Software Development	n/a	Yes, if applicable	1..*	Location of the enumeration list in the UMM-Common schema: https://git.earthdata.nasa.gov/projects/EMFD/repos/unified-metadata-model/browse/collection/v1.12/umm-cmn-json-schema.json#1440
UMM-Common	DataCenters/ContactGroup/NonDataCenterAffiliation	String	n/a	1 - 1024 characters	No	0..1	
UMM-Common	DataCenters/ContactGroup/GroupName	String	n/a	1 - 255 characters	Yes, if applicable	1	If Contact Group information is provided, a Group Name is required.
UMM-Common	DataCenters/ContactGroup/ContactInformation/ServiceHours	String	n/a	1 - 1024 characters	No	0..1	The time zone should be specified.
UMM-Common	DataCenters/ContactGroup/ContactInformation/ContactInstructions	String	n/a	1 - 2048 characters	No	0..1	Supplemental/ special instructions on how or when to contact the group.

UMM-Common	DataCenters/ContactGroup/ContactInformation/ContactMechanism/Type	Enumeration	Direct Line Email Facebook Fax Mobile Modem Primary TDD/TTY Phone Telephone Twitter U.S. toll free Other	n/a	Yes, if applicable	1	Providing a contact mechanism is optional. If provided, the Type is required and must be selected from the ContactMechanismType enumeration list found in the UMM-Common schema. The actual value (e.g. the phone number or email) should be provided in the Value field (see below). Multiple contact mechanisms can be provided for each group (Cardinality 0..*)
UMM-Common	DataCenters/ContactGroup/ContactInformation/ContactMechanism/Value	String	n/a	1 - 1024 characters	Yes, if applicable	1	Providing a contact mechanism is optional. If provided, a Value is required (e.g. if the contact mechanism type is 'Email' then the actual email would go in this field). Multiple contact mechanisms can be provided for each group (Cardinality 0..*)
UMM-Common	DataCenters/ContactGroup/ContactInformation/Address/StreetAddresses	String	n/a	1 - 1024 characters	No	0..*	Multiple Street Addresses may be provided to indicate multiple lines in a street address
UMM-Common	DataCenters/ContactGroup/ContactInformation/Address/City	String	n/a	1 - 100 characters	No	0..1	
UMM-Common	DataCenters/ContactGroup/ContactInformation/Address/StateProvince	String	n/a	1 - 100 characters	No	0..1	
UMM-Common	DataCenters/ContactGroup/ContactInformation/Address/PostalCode	String	n/a	1 - 20 characters	No	0..1	
UMM-Common	DataCenters/ContactGroup/ContactInformation/Address/Country	String	n/a	1 - 100 characters	No	0..1	
UMM-Common	DataCenters/ContactGroup/ContactInformation/RelatedURLs/Url	String	n/a	1 - 1024 characters	Yes, if applicable	1	Providing a URL for a contact group is completely optional. If information is provided in any of the 'RelatedURLs' metadata fields, then the URL must be provided.
UMM-Common	DataCenters/ContactGroup/ContactInformation/RelatedURLs/UrlContentType	Enumeration	DataContact URL	n/a	Yes, if applicable	1	This field is only required if a URL is provided. URL Content Types are controlled as an enumeration list in the UMM-Common schema. The only valid option for Contact Person Related URLs is "DataContactURL"
UMM-Common	DataCenters/ContactGroup/ContactInformation/RelatedURLs/Type	String	KMS controlled	HOME PAGE	Yes, if applicable	1	This field is only required if a URL is provided. Related URL Types are controlled by GCMD vocabulary (URL Content Types). The only valid keyword option for a Contact Group Related URL is "HOME PAGE"
UMM-Common	DataCenters/ContactGroup/ContactInformation/RelatedURLs/Description	String	n/a	1 - 4000 characters	No	0..1	It is strongly recommended that a description be provided for each URL.

Metadata Validation and QA/QC

All metadata entering the CMR goes through the below process to ensure metadata quality requirements are met. All records undergo CMR validation before entering the system. The process of QA/QC is slightly different for NASA and non-NASA data providers. Non-NASA providers include interagency and international data providers and are referred to as the International Directory Network (IDN).



Please see the expandable sections below for flowchart details.

- Manual Review
 - Identify errors, discrepancies or omissions.
- Automated Review
 - Check that the field length is not greater than 255 characters (Personnel/Contact_Group/Name).
 - Check that the field length is not greater than 100 characters (Personnel/Contact_Group/Address/Street_Address).
 - Check that the field length is not greater than 100 characters (Personnel/Content_Group/Address/City).
 - Check that the field length is not greater than 100 characters (Personnel/Contact_Group/Address/State_Province).
 - Check that the field length is not greater than 100 characters (Personnel/Contact_Group/Address/Country).
 - Check that the field length is not greater than 20 characters (Personnel/Contact_Group/Address/Postal_Code).
 - Check that the field length is not greater than 100 characters (Personnel/Contact_Group/Email).
 - Check that the field has been populated.
 - Check that the field value is not a duplicate.
 - Check that the field value (Phone Type) matches the enumeration value (Direct Line;Primary;Telephone;Fax;Mobile;Modem;TDD /TTY Phone;U.S. toll free;Other).
 - Check that the field value (Personnel Role) matches the enumeration value (DATA CENTER CONTACT).
 - Check for potential broken links.
 - Check that the URL is formatted correctly.
 - Check that the email address is formatted correctly.
 - Check that the phone number is formatted correctly.

<>

ARC Priority Matrix

Priority Categorization	Justification
Red = High Priority Finding	This element is categorized as highest priority when: • The Contact Group Related URL provided is broken. • The URL Content Type does not match the enumeration value "DataContactURL". • The URL Type provided does not match the keyword value "HOME PAGE". • The Contact Group Role provided does not align with the UMM-Common enumeration values (Data Center Contact, Technical Contact, Science Contact, Investigator, Metadata Author, User Services, Science Software Development). • The Contact Mechanism Type does not align with the UMM-Common enumeration values (Direct Line, Email, Facebook, Fax, Mobile, Modem, Primary, TDD/TTY Phone, Telephone, Twitter, U.S. toll free, Other). • The Contact Information provided is incorrect.
Yellow = Medium Priority Finding	This element is categorized as medium priority when: • The Contact Group Related URL 'Description' element is left blank. It is highly recommended that a description be provided for each URL. • The Contact Group Related URL provided in the metadata redirects—it is recommended that the most current link always be provided. • The information provided in the Contact Group elements is better suited for the Data Center, Data Center/Contact Person, Data Center/Contact Group or Contact Person metadata elements.
Blue = Low Priority Finding	This element is categorized as low priority when: • The Contact Group Related URL is provided via "http" when "https" is available.
Green = No Findings/Issues	The element is provided and follows all applicable criteria specified in the best practices section above.

ARC Automated Checks

ARC uses the [pyQuARC library](#) for automated metadata checks. Please see the [pyQuARC GitHub](#) for more information.

Dialect Mappings

DIF 9 (Note: DIF-9 is being phased out and will no longer be supported after 2018)

DIF 10

Providing Organization/Personnel/Contact_Group is optional. An unlimited number of Contact_Groups may be listed (Cardinality: 0..*)

UMM-C Element	DIF 10 Path	Type	Usable Valid Values	Constraints	Required in DIF 10?	Cardinality	Notes
DataCenters/ContactGroup/Roles	Organization/Personnel/Role	Enumeration	DATA CENTER CONTACT	n/a	Yes, if applicable	1..*	'DATA CENTER CONTACT' is the only valid option for this field in DIF 10.
DataCenters/ContactGroup/GroupName	Organization/Personnel/Contact_Group/Name	String	n/a		No	1	If Contact_Group information is provided, a Name is required.
DataCenters/ContactGroup/Uuid	Organization/Personnel/Contact_Group/uuid	String	n/a		No	0..1	
DataCenters/ContactGroup/ContactInformation/ContactMechanism/Type	Organization/Personnel/Contact_Group/Phone/Type	Enumeration	Direct Line Primary Telephone Fax Mobile Modem TDD/TTY Phone U.S. toll free Other	n/a	Yes, if applicable	1	Providing a phone number is optional. Multiple phone numbers can be provided. (Cardinality 0..*) If provided, the Type is required and must be selected from the PhoneType enumeration list found in the DIF10 schema. The actual phone number should be provided in the Number field (see below).
DataCenters/ContactGroup/ContactInformation/ContactMechanism/Value	Organization/Personnel/Contact_Group/Phone/Number	String	n/a		Yes, if applicable	1	Providing a phone number is optional. If provided, the Number must be provided in this element.
DataCenters/ContactGroup/ContactInformation/ContactMechanism/Value	Organization/Personnel/Contact_Group/Email	String			No	0..*	
DataCenters/ContactGroup/ContactInformation/Address/StreetAddresses	Organization/Personnel/Contact_Group/Address/Street_Address	String			No	0..*	Multiple Street Address fields may be provided to indicate multiple lines in a street address
DataCenters/ContactGroup/ContactInformation/Address/City	Organization/Personnel/Contact_Group/Address/City	String			No	0..1	
DataCenters/ContactGroup/ContactInformation/Address/StateProvince	Organization/Personnel/Contact_Group/Address/State_Province	String			No	0..1	
DataCenters/ContactGroup/ContactInformation/Address/PostalCode	Organization/Personnel/Contact_Group/Address/Postal_Code	String			No	0..1	
DataCenters/ContactGroup/ContactInformation/Address/Country	Organization/Personnel/Contact_Group/Address/Country	String			No	0..1	

Example Mapping

DIF 10

```

<Organization>
  <Organization_Type>ARCHIVER</Organization_Type>
  <Organization_Type>DISTRIBUTOR</Organization_Type>
  <Organization_Name>
    <Short_Name>NASA/GSFC/SED/ESD/GCDC/GESDISC<
/Short_Name>
    <Long_Name>Goddard Earth Sciences Data and
Information Services Center, Global Change Data
Center, Earth Sciences Division, Science and
Exploration Directorate, Goddard Space Flight
Center, NASA</Long_Name>
  </Organization_Name>
  <Organization_URL>https://disc.gsfc.nasa.gov
/<Organization_URL>
-----
-----#DataCenter/ContactGroup fields
start here-----
  <Personnel>
    <Role>DATA CENTER CONTACT</Role>
    <Contact_Group>
      <Name>GES DISC HELP DESK SUPPORT GROUP<
/Name>
      <Phone>
        <Number>301-614-5224</Number>
        <Type>Telephone</Type>
      </Phone>
      <Phone>
        <Number>301-614-5268</Number>
        <Type>Fax</Type>
      </Phone>
      <Email>gsfc-help-disc@lists.nasa.gov<
/Email>
      <Address>
        <Street_Address>Goddard Earth Sciences
Data and Information Services Center</Street_Address>
        <Street_Address>Code 610.2<
/Street_Address>
        <Street_Address>NASA Goddard Space
Flight Center</Street_Address>
        <City>Greenbelt</City>
        <State_Province>MD</State_Province>
        <Postal_Code>20771</Postal_Code>
        <Country>USA</Country>
      </Address>
    </Contact_Group>
  </Personnel>
</Organization>

```

UMM

```

"DataCenters":[
{
  "Roles":[
    "ARCHIVER",
    "DISTRIBUTOR"
  ],
  "ShortName": "NASA/GSFC/SED/ESD/GCDC/GESDISC",
  "LongName": "Goddard Earth Sciences Data and
Information Services Center, Global Change Data
Center, Earth Sciences Division, Science and
Exploration Directorate, Goddard Space Flight
Center, NASA",
  -----#DataCenter
/ContactGroup fields start
here-----
  "ContactGroups":[
    {
      "Roles":[
        "Data Center Contact"
      ],
      "ContactInformation":{
        "ContactMechanisms":[
          {
            "Type": "Email",
            "Value": "gsfc-help-disc@lists.nasa.
gov"
          },
          {
            "Type": "Telephone",
            "Value": "301-614-5224"
          },
          {
            "Type": "Fax",
            "Value": "301-614-5268"
          }
        ],
        "Addresses":[
          {
            "StreetAddresses":[
              "Goddard Earth Sciences Data and
Information Services Center",
              "Code 610.2",
              "NASA Goddard Space Flight Center"
            ],
            "City": "Greenbelt",
            "StateProvince": "MD",
            "Country": "USA",
            "PostalCode": "20771"
          }
        ]
      },
      "GroupName": "GES DISC HELP DESK SUPPORT
GROUP"
    }
  ]
}
]

```

ECHO 10

DataCenter/ContactGroup does not map to ECHO 10. Contact information for a group can be provided in the '[Contacts/Contact/Organization](#)' ECHO 10 metadata elements. See the [Data Center wiki page](#) for details on the '[Contacts/Contact/Organization](#)' metadata elements.

UMM-C Element	ECHO 10 Path	Type	Usable Valid Values	Constraints	Required in ECHO 10?	Cardinality	Notes
DataCenters/ContactGroup	N/A	N/A	N/A	N/A	N/A	N/A	DataCenter/ContactGroup does not map to ECHO 10. Contact information for a group can be provided in the ' Contacts/Contact/Organization ' ECHO 10 metadata elements. See the Data Center wiki page for details on the ' Contacts/Contact/Organization ' metadata elements.

ISO 19115-2 MENDS

Providing a DataCenter/ContactGroup is optional. An unlimited number of Contact Groups may be listed (Cardinality: 0..*)

UMM-C Element	ISO 19115-2 MENDS Path	Type	Notes
DataCenters/ContactGroup	<=]gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString	String	Provide Data Center Short Name and Long Name in this field. This tells CMR which Data Center to nest the Contact Group information under. *Should probably specify if there are differences in what gets read to CMR (ISO > UMM) vs what gets written to CMR (UMM > ISO)
DataCenters/ContactGroup/Roles	<=]gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmxCodeLists.xml#CI_RoleCode	Codelist	(for more than 1 role another pointOfContact must be created) Data Center Contact Technical Contact Science Contact Investigator Metadata Author User Services Science Software Development
DataCenters/ContactGroup/NonDataCenterAffiliation	[=>gmd:CI_ResponsibleParty/gmd:positionName/gco:CharacterString = NonDataCenterAffiliation:	String	
DataCenters/ContactGroup/GroupName	[=>gmd:CI_ResponsibleParty/gmd:individualName/gco:CharacterString = GroupName:	String	
DataCenters/ContactGroup/ContactInformation/ServiceHours	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:hoursOfService/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/ContactInstructions	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:contactInstructions/gco:CharacterString	String	
	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:phone/gmd:CI_Telephone/[==> [==>gmd:voice/gco:CharacterString (UMM Types=>ISO: Direct Line, Mobile, Primary, TDD/TTY Phone, Telephone, U.S. toll free, Other) (ISO=>UMM: Telephone) or gmd:facsimile/gco:CharacterString (Fax)		
DataCenters/ContactGroup/ContactInformation/ContactMechanism/Type = Email & DataCenters/ContactGroup/ContactInformation/ContactMechanism/Value	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:electronicMailAddress/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/StreetAddresses	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:deliveryPoint/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/City	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:city/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/StateProvince	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:administrativeArea/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/PostalCode	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:postalCode/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/Country	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:country/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/RelatedUrls/URL	[=>gmd:CI_ResponsibleParty/gmd:onlineResource/gmd:CI_OnlineResource/gmd:linkage/gmd:URL	String	

DataCenters/ContactGroup /ContactInformation /RelatedUrls/Description	[=>gmd:CI_ResponsibleParty/gmd:onlineResource/gmd: CI_OnlineResource/gmd:description	String	
---	---	--------	--

Enumeration/Code List Mapping

ISO MENDS	Translation Direction	UMM
		Data Center Contact
		Technical Contact
		Science Contact
		Investigator
		Metadata Author
		User Services
		Science Software Development

Example Mapping

ISO 19115-2 MENDS

```

    <gmd:contact>
      <gmd:CI_ResponsibleParty>
        <gmd:individualName>
          <gco:CharacterString>ANDREY
SAVTCHENKO</gco:CharacterString>
        </gmd:individualName>
        <gmd:contactInfo>
          <gmd:CI_Contact>
            <gmd:phone>
              <gmd:CI_Telephone>
                <gmd:voice>
                  <gco:
CharacterString>301-614-5705</gco:CharacterString>
                </gmd:voice>
              </gmd:CI_Telephone>
            </gmd:phone>
            <gmd:address>
              <gmd:CI_Address>
                <gmd:
deliveryPoint>
                  <gco:
CharacterString>Distributed Active Archive Center
Global Change Data Center</gco:CharacterString>
                </gmd:
deliveryPoint>
                  <gmd:
deliveryPoint>
                    <gco:
CharacterString>Code 610.2</gco:CharacterString>
                  </gmd:
deliveryPoint>
                    <gmd:
deliveryPoint>
                      <gco:
CharacterString>NASA Goddard Space Flight Center<
/gco:CharacterString>
                    </gmd:
deliveryPoint>
                      <gmd:city>
                        <gco:
CharacterString>Greenbelt</gco:CharacterString>
                      </gmd:city>
                    </gmd:

```

```

administrativeArea>
                                <gco:
CharacterString>MD</gco:CharacterString>
                                </gmd:
administrativeArea>
                                <gmd:postalCode>
                                <gco:
CharacterString>20771</gco:CharacterString>
                                </gmd:postalCode>
                                <gmd:country>
                                <gco:
CharacterString>USA</gco:CharacterString>
                                </gmd:country>
                                <gmd:
electronicMailAddress>
                                <gco:
CharacterString>Andrey.Savtchenko@nasa.gov</gco:
CharacterString>
                                </gmd:
electronicMailAddress>
                                </gmd:CI_Address>
                                </gmd:address>
                                </gmd:CI_Contact>
                                </gmd:contactInfo>
                                <gmd:role>
                                <gmd:CI_RoleCode codeList=""
codeListValue="pointOfContact">pointOfContact</gmd:
CI_RoleCode>
                                </gmd:role>
                                </gmd:CI_ResponsibleParty>
                                </gmd:contact>

```

UMM

```

    "DataCenters": [
      {
        "Roles": [
          "ARCHIVER"
        ],
        "ShortName": "NASA/GSFC/SED
/ESD/GCDC/GESDISC",
        "LongName": "Goddard Earth
Sciences Data and Information Services Center,
Global Change Data Center, Earth Sciences Division,
Science and Exploration Directorate, Goddard Space
Flight Center, NASA",
        "ContactGroups": [
          {
            "Roles": [
              "Data Center
Contact"
            ],
          },
        ],
        "ContactInformation": {
          "ContactMechanisms": [
            {
              "Type":
"Email",
              "Value":
"gsfc-help-disc@lists.nasa.gov"
            },
            {
              "Type":
"Telephone",
              "Value":
"301-614-5224"
            }
          ],
        }
      }
    ]

```

```

        "Type":
"Fax",
        "Value":
"301-614-5268"
    }
  ],
  "Addresses": [
    {
      "StreetAddresses": [
        "Goddard Earth Sciences Data and Information
Services Center",
        "Code 610.2",
        "NASA Goddard Space Flight Center"
      ],
      "City":
"Greenbelt",
      "StateProvince": "MD",
      "Country": "USA",
      "PostalCode": "20771"
    }
  ],
  "GroupName": "GES
DISC HELP DESK SUPPORT GROUP"
},
  "ContactInformation": {
    "RelatedUrls": [
      {
        "URLContentType": "DataCenterURL",
        "Type": "HOME
PAGE",
        "URL":
"https://disc.gsfc.nasa.gov/"
      }
    ]
  }
}
]

```

ISO 19115-2 SMAP

Providing a DataCenter/ContactGroup is optional. An unlimited number of Contact Groups may be listed (Cardinality: 0..*)

UMM-C Element	ISO 19115-2 SMAP Path	Type	Notes
DataCenters/ContactGroup	<=]gmd:CI_ResponsibleParty/gmd:organisationName/gco:CharacterString	String	Provide Data Center Short Name and Long Name in this field. This tells CMR which Data Center to nest the Contact Group information under. *Should probably specify if there are differences in what gets read to CMR (ISO > UMM) vs what gets written to CMR (UMM > ISO)

DataCenters/ContactGroup/Roles	<=]gmd:CI_ResponsibleParty/gmd:role/gmd:CI_RoleCode https://cdn.earthdata.nasa.gov/iso/resources/Codelist/gmx/Codelists.xml#CI_RoleCode	Codelist	(for more than 1 role another pointOfContact must be created) Data Center Contact Technical Contact Science Contact Investigator Metadata Author User Services Science Software Development
DataCenters/ContactGroup/NonDataCenterAffiliation	[=>gmd:CI_ResponsibleParty/gmd:positionName/gco:CharacterString = NonDataCenterAffiliation:	String	
DataCenters/ContactGroup/GroupName	[=>gmd:CI_ResponsibleParty/gmd:individualName/gco:CharacterString = GroupName:	String	
DataCenters/ContactGroup/ContactInformation/ServiceHours	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:hoursOfService/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/ContactInstructions	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:contactInstructions/gco:CharacterString	String	
	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:phone/gmd:CI_Telephone/[==> [==>gmd:voice/gco:CharacterString (UMM Types=>ISO: Direct Line, Mobile, Primary, TDD/TTY Phone, Telephone, U.S. toll free, Other) (ISO=>UMM: Telephone) or gmd:facsimile/gco:CharacterString (Fax)		
DataCenters/ContactGroup/ContactInformation/ContactMechanism/Type = Email & DataCenters/ContactGroup/ContactInformation/ContactMechanism/Value	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:electronicMailAddress/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/StreetAddresses	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:deliveryPoint/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/City	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:city/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/StateProvince	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:administrativeArea/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/PostalCode	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:postalCode/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/Address/Country	[=>gmd:CI_ResponsibleParty/gmd:contactInfo/gmd:CI_Contact/gmd:address/gmd:CI_Address/ gmd:country/gco:CharacterString	String	
DataCenters/ContactGroup/ContactInformation/RelatedUrls/URL	[=>gmd:CI_ResponsibleParty/gmd:onlineResource/gmd:CI_OnlineResource/gmd:linkage/gmd:URL	String	
DataCenters/ContactGroup/ContactInformation/RelatedUrls/Description	[=>gmd:CI_ResponsibleParty/gmd:onlineResource/gmd:CI_OnlineResource/gmd:description	String	

Enumeration/Code List Mapping

ISO SMAP	Translation Direction	UMM
		Data Center Contact
		Technical Contact

		Science Contact
		Investigator
		Metadata Author
		User Services
		Science Software Development

Example Mapping

ISO 19115-2 SMAP

ADD EXAMPLE

UMM

```

>DataCenters":[
  {
    "Roles":[
      "ARCHIVER",
      "DISTRIBUTOR"
    ],
    "ShortName": "NASA/GSFC/SED/ESD/GCDC/GESDISC",
    "LongName": "Goddard Earth Sciences Data and
Information Services Center, Global Change Data
Center, Earth Sciences Division, Science and
Exploration Directorate, Goddard Space Flight
Center, NASA",
    -----#DataCenter
/ContactGroup fields start
here-----
    "ContactGroups":[
      {
        "Roles":[
          "Data Center Contact"
        ],
        "ContactInformation":{
          "ContactMechanisms":[
            {
              "Type": "Email",
              "Value": "gsfc-help-disc@lists.nasa.
gov"
            },
            {
              "Type": "Telephone",
              "Value": "301-614-5224"
            },
            {
              "Type": "Fax",
              "Value": "301-614-5268"
            }
          ],
          "Addresses":[
            {
              "StreetAddresses":[
                "Goddard Earth Sciences Data and
Information Services Center",
                "Code 610.2",
                "NASA Goddard Space Flight Center"
              ],
              "City": "Greenbelt",
              "StateProvince": "MD",
              "Country": "USA",
              "PostalCode": "20771"
            }
          ]
        },
        "GroupName": "GES DISC HELP DESK SUPPORT
GROUP"
      }
    ]
  }
]

```

UMM Migration

None

History

UMM Versioning

Version	Date	What Changed
1.15.5	12/3/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.15.4 to 1.15.5
1.15.4	9/18/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.15.3 to 1.15.4
1.15.3	7/1/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.15.2 to 1.15.3
1.15.2	5/20/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.15.1 to 1.15.2
1.15.1	3/25/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.15.0 to 1.15.1
1.15.0	2/26/2020	No changes were made for Data Centers-Contact Group during the transition from version 1.14.0 to 1.15.0
1.14.0	10/21/2019	No changes were made for Data Centers-Contact Group during the transition from version 1.13.0 to 1.14.0
1.13.0	04/11/2019	No changes were made for Data Centers-Contact Group during the transition from version 1.12.0 to 1.13.0
1.12.0	01/22/2019	No changes were made for Data Centers-Contact Group during the transition from version 1.11.0 to 1.12.0.
1.11.0	11/28/2018	No changes were made for Data Centers-Contact Group during the transition from version 1.10.0 to 1.11.0.
1.10.0	05/02/2018	No changes were made for Data Centers-Contact Group during the transition from version 1.9.0 to 1.10.0.
1.9.0		

ARC Documentation

Version	Date	What Changed	Author
1.0	09/18/18	Recommendations/priority matrix transferred from internal ARC documentation to wiki space	Jeanne' le Roux