|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Exchange: |  **Institutional Controls (IC)**  |  |  |  |
|  | Version: |  **v1.0** |  |  |  |
|  | Date Prepared: **5/17/2013** |  |  |  |
|  |  |  |  |  |  |
| **Compliance with XML Design Rules and Conventions**  |
|  | **XML Tag Naming Conventions** | Yes | No  | N/A |
|  | GD1-1 | All schemas are valid and conform to W3C technical specifications. |   |   |   |
|  | GD3-1 | All element and datatype names are in UpperCamelCase. |   |   |   |
|  | GD3-3 | All attribute names are in lowerCamelCase. |   |   |   |
|  | GD3-6 | All schema construct names are devoid of underscores, periods or dashes. |   |   |   |
|  | GD3-8 | All tag names unique throughout the schema. |   |   |   |
|  | GD3-12 | All lowest-level element tag names follow UN/CEFACT naming standards consisting of Object Class, Property Class, and Representation Term. |   |   |   |
|  | GD3-17 | All element tag names are in singular form. |   |   |   |
|  | GD3-A | All datatype tag names end in "Type" or "DataType". |   |   |   |
|  |  |  |  |  |  |
|  | **Elements and Attributes** | Yes | No  | N/A |
|  | SD3-1 | All elements are declared as global. |   |   |   |
|  | SD3-9 | Attributes, if implemented, are only used to store metadata. |   |   |  [[1]](#footnote-1) |
|  |  |  |  |  |  |
|  | **Namespaces** | Yes | No  | N/A |
|  | SD4-2 | All schema constructs namespace qualified. |   |   |   |
|  | SD4-A | All schemas use the proper Exchange Network namespace naming convention. |   |   |   |
|  | SD4-D | The schema namespace only contains the exchange's major version number. |   |   |   |
|  |  |  |  |  |  |
|  | **Schema Configuration and Documentation** | Yes | No  | N/A |
|  | SD5-R | Schemas have been modularized into default, message, component, and shared schemas. |   |   |   |
|  | GD2-A | The schema package includes an "index.xsd" schema that includes each root schedule for the exchange. |   |   |   |
|  | SD5-A | The schema uses Shared Schema Components where appropriate for the targeted business processes. |   |   |   |
|  | SD5-34 | Each schema file includes the standard schema header documentation. |   |   |   |
|  |  |  |  |  |  |
|  | **Schema Versioning** | Yes | No  | N/A |
|  | SD5-F | If the schema represents a minor version increment from a previous schema, the only changes the addition of new optional elements or constructs. |   |   |   |
|  | SD5-H | If the schema represents a minor version increment from a previous schema, it implements an identical namespace as it's predecessor. |   |   |   |
|  | SD5-K | The schema file names, XSD version attribute, header documentation, and namespace all contain matching version information. |   |   |   |
|  | GD2-C, D, E | Schema file names match the naming rules for message, component, and local shared schemas. |   |   |   |
|  |  |  |  |  |  |
|  | **Information Association and Uniqueness** | Yes | No  | N/A |
|  | SD6-4 | If KEY and KEYREF are used, the constructs have been tested to ensure they are implemented properly. |   |   |   |
|  |  |  |  |  |  |
| **Compliance with Exchange Design Rules and Conventions** |   |   |   |
|  | **General Exchange Design** | Yes | No  | N/A |
|  | XD1-1 | The exchange is prescribed an exchange identifier in the form of a single term or acronym. |   |   |   |
|  | XD1-2 | The exchange identifier used consistently throughout the schema and exchange documentation. |   |   |   |
|  |  |  |  |  |  |
|  | **Exchange Development and Publishing** | Yes | No  | N/A |
|  | XD2-6 | The exchange package includes all required components including XML schema, schema conformance report, DET, FCD and one or more valid instance files. |   |   |   |
|  | XD2-9 | If the package is a new version of an existing schema, a schema change log is included in the package. |   |   |   |
|  | XD2-10 | The exchange package includes a description of use and rejection of SSCs in the exchange schema. |  [[2]](#footnote-2) |   |   |
|  |  |  |  |  |  |
|  | **Exchange Component Versioning** | Yes | No  | N/A |
|  | XD3-1, 2, 3 | If the package is for a new version of an exchange, the appropriate versioning principles are applied. |   |   |   |
|  | XD3-4 | All components of the exchange package share a matching version number. |   |   |   |
|  | XD3-5 | All documents in the exchange follow the file name requirements. |   |   |   |
|  | XD3-6, 7 | If the exchange package contains any draft components, they are labeled as draft in the component name. |   |   |   |
|  | XD3-9 | If applicable, all Query and Solicit data service names unique from previous versions of the exchange. |   |   |   |
|  |  |  |  |  |  |
|  | **Exchange Documentation** | Yes | No  | N/A |
|  | XD4-1 | Is the Flow Configuration Document based on the most recent Network-approved FCD template? |   |   |   |
|  | XD4-5 | Does the FCD document the steps for a new partner to implement and participate in the exchange? |   |   |   |
|  | XD4-6 | Does the FCD indicate which operations and/or services are required or optional for a partner to implement? |   |   |   |
|  | XD4-7 | Does the FCD list the specific meaning of each of the applicable GetStatus responses, if applicable? |   |   |   |
|  |  |  |  |  |  |
|  | **Query and Solicit Services** | Yes | No  | N/A |
|  | XD5-1, 2 | All data service names follow the data service naming guidelines. |   |   |   |
|  | XD5-4 | If any data service accepts XML-formatted parameters, the XML schema is documented and included in the exchange package. |   |   |   |
|  | XD5-7, 8 | The FCD fully documents the parameter names, data types, occurance, wildcard behavior and return schema for each data service. |   |   |   |
|  | XD5-9 | The FCD indicates what constitutes a "row" for any service that is made available as a Query. |   |   |   |
|  |  |  |  |  |  |
|  | **Exchange Network Header** | Yes | No  | N/A |
|  | XD6-1 | The Header is implemented in all Submit operations. |   |   |   |
|  | XD6-6 | The FCD documents allowable values for the Header operation attribute along with a precise description of how each operation affects payload processing. |   |   |   |
|  | XD6-10 | If the Header is used, the FCD describes whether multiple payloads are supported and how they must be structured. |   |   |   |
|  | XD6-13 | If the Header is used, it is the latest Network-approved Header. |   |   |   |

# Shared Schema Component (SSC) Usage in IC v1.0 XML Schema

|  |  |  |
| --- | --- | --- |
| **Schema Path** | **Element** | **SSC Used** |
| **Reuse of SSC Complex Data Types** |
| InstitutionalControlsDocument\ICLocationList\ICLocation\Facility | FacilitySiteIdentity | SC:FacilitySiteIdentity |
| InstitutionalControlsDocument\ICLocationList\ICLocation\Facility | LocationAddress | SC:LocationAddress |
| InstitutionalControlsDocument\AffiliateList\Affiliate | OrganizationIdentity | sc:OrganizationIdentityDataType |
| InstitutionalControlsDocument\AffiliateList\Affiliate | MailingAddress | sc:MailingAddressDataType |
| InstitutionalControlsDocument\AffiliateList\Affiliate | IndividualIdentity | sc:IndividualIdentityDataType |
| InstitutionalControlsDocument\AffiliateList\Affiliate\TelephonicList | Telephonic | sc:TelephonicDataType |
| InstitutionalControlsDocument\AffiliateList\Affiliate\ElectronicAddressList | ElectronicAddress | sc:ElectronicAddressDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | GeographicReferencePoint | sc:GeographicReferencePointDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | HorizontalAccuracyMeasure | sc:HorizontalAccuracyMeasureDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | HorizontalCollectionMethod | sc:HorizontalCollectionMethodDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | VerticalCollectionMethod | sc:VerticalCollectionMethodDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | VerificationMethod | sc:VerificationMethodDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | CoordinateDataSource | SC:CoordinateDataSourceDataType |
| **Reuse of SSC Simple Data Types** |
| InstitutionalControlsDocument\InstrumentList\Instrument\Contaminant | CASRegistryNumber | sc:CASRegistryNumberDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | SourceMapScaleNumber | sc:SourceMapScaleNumberDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | DataCollectionDate | sc:DataCollectionDateDataType |
| InstitutionalControlsDocument\ICLocationList\ICLocation\ICGeographicLocationDescription | LocationCommentsText | sc:LocationCommentsTextDataType |

1. Use of attributes limited to re-used georss schema. [↑](#footnote-ref-1)
2. See the end of this document for a list of Simple and Complex SSC data types used in the IC v1.0 schema. [↑](#footnote-ref-2)