All Fields marked with * are mandatory.

Change Request #:	**284**
Assigned OGC Document #:	**13-037**
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Document Name/Version:	*KML / 2.2.0
OGC Project Document:	*07-147r2

If this is a revision of a previous submission and you have a Change Request Number, then check here:
☐

Enter the CR number here: [   ]

Enter the Revsion Number that you are revising here: [   ]

Title: 🔵	* [KML SWG] Discrepency between kml:north/south element description and ass
Source: 🔵	*Mass Market Geo Working Group (MMWG)
Work item code: 🔵	
Category: 🔵	* [F (Critical correction) ▲▼]

Reason for change: 🔵	* OGC specification has a discrepancy between kml:north/south element description and associated type/default value such that the default value is not in the valid range and violates the valid range for latitude values.
Summary of change: 🔵	* Issue is that north and south fields are optional in the Region/LatLonAtBox and GroundOverlay/LatLonBox and north and south types are of the "kml:angle180Type" type whose default values are +180, -180 respectively, but the spec states that north and south valid values are in the range 0 to Â±90 (Latitude) not Â±180 so the default values are out of the valid range.

```
9.14 kml:AbstractLatLonAltBox

9.14.3.1 kml:north

9.14.3.1.1 Description
Specifies the latitude of the north edge of the bounding box, in
decimal degrees from 0 to Â±90.

9.14.3.1.2 Content
Type: kml:angle180Type *** this should be changed to kml:angle90Type
***
Default Value: 180.0 *** this should be changed to 90.0 ***

9.14.3.2 kml:south

9.14.3.2.1 Description
Specifies the latitude of the south edge of the bounding box, in
decimal degrees from 0 to
Â±90.

9.14.3.2.2 Content
Type: kml:angle180Type *** this should be changed to kml:angle90Type
Default Value: -180.0 *** this should be changed to -90.0 ***

Annex A (ogckml22.xsd)

<element name="latitude" type="kml:angle90Type"
default="0.0"/>

<element name="north" type="kml:angle180Type"
default="180.0"/>
<element name="south" type="kml:angle180Type"
default="-180.0"/>

<complexType name="AbstractLatLonBoxType"
abstract="true">
    <complexContent>
      <extension base="kml:AbstractObjectType">
        <sequence>
          <element ref="kml:north"
minOccurs="0"/>
          <element ref="kml:south"
minOccurs="0"/>
          ...

Reference: http://schemas.opengis.net/kml/2.2.0/ogckml22.xsd


Suggested changes:

north and south should be of type kml:angle90Type not kml:angle180Type
and defaults as 90 and -90 respectively.

Suggested fixes to the schema:
  <element name="north" type="kml:angle90Type"
default="90.0"/>
  <element name="south" type="kml:angle90Type"
default="-90.0"/>
```

| **Consequences if not approved:** 📷 | This is an interoperability issue.

Software implementation based on KML XML Schema will use invalid out-of-range default values for north or south if those elements are not explicitly defined in the KML. Behavior will be indeterminate. |

```
Also, KML validation using KML constraint (kml:north > kml:south)
ATC 8: Region - LatLonAltBox could fail if missing either north or
south and invalid default values are used.

http://service.kmlvalidator.com/ets/ogc-kml/2.2/#Region-LatLonAltBox
```

Clauses affected: ⓗ	*
	
	`9.14.3.1.2`
	`9.14.3.2.2`
	`Annex A`

Additional Documents affected: ⓗ	http://schemas.opengis.net/kml/2.2.0/ogckml22.xsd
Supporting Documentation: ⓗ	
Comments: ⓗ	
Status: ⓗ	Assigned ▲▼
Assigned To: ⓗ	KML SWG ▲▼
Disposition: ⓗ	Referred and Posted ▲▼