Coordinate Systems and EPSG Codes

The CoordSysService uses XML Coordinate Reference System (CRS) to specify the source and target coordinate systems for the start and end transformations. The full XML DTD definition of CRS can be found in the OpenGIS Specification 01-014.

For European Petroleum Survey Group (EPSG) code ,for example Longitude/Latitude(WGS 84), we can present it as the following XML fragment:

```
<CoordinateReferenceSystem>
 <Identifier>
  <code>4326</code>
  <codeSpace>EPSG</codeSpace>
 </Identifier>
</CoordinateReferenceSystem>
```

The customized CRS may be more complex than a well-known one. The current GML is limited to use only well-known CRS. The CoordSys XML currently uses the following in the DTD:

```
srsName CDATA #IMPLIED (Note: sometimes #REQUIRED)
```

The srsName text must contain both the CRS name-space and the name separated by a colon. An example XML containing geometries in WGS 84 would look like the following:

```
srsName="EPSG:4326"
```

For more information about EPSG please visit the following web site http://www.epsg.org/

Widely used EPSG codes

Coord System	EPSG Code
Longitude / Latitude (WGS 72)	4322
Longitude / Latitude (WGS 84)	4326
Longitude / Latitude (NAD 83)	4629
Longitude / Latitude (OSGB 36)	4277

UTM WGS 84 - EPSG code
(Universal Transverse Mercator (WGS 84) - EPSG code Table)

	UTM Zone	EPSG Code
UTM Zone 1	Northern Hemisphere (WGS 84)	32601
UTM Zone 1	Southern Hemisphere (WGS 84)	32701
UTM Zone 2	Northern Hemisphere (WGS 84)	32602
UTM Zone 2	Southern Hemisphere (WGS 84)	32702
UTM Zone 3	Northern Hemisphere (WGS 84)	32603
UTM Zone 3	Southern Hemisphere (WGS 84)	32703
UTM Zone 4	Northern Hemisphere (WGS 84)	32604
UTM Zone 4	Southern Hemisphere (WGS 84)	32704
UTM Zone 5	Northern Hemisphere (WGS 84)	32605
UTM Zone 5	Southern Hemisphere (WGS 84)	32705

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UTM Zone 6     Northern Hemisphere (WGS 84)    32606
UTM Zone 6     Southern Hemisphere (WGS 84)    32706
UTM Zone 7     Northern Hemisphere (WGS 84)    32607
UTM Zone 7     Southern Hemisphere (WGS 84)    32707
UTM Zone 8     Northern Hemisphere (WGS 84)    32608
UTM Zone 8     Southern Hemisphere (WGS 84)    32708
UTM Zone 9     Northern Hemisphere (WGS 84)    32609
UTM Zone 9     Southern Hemisphere (WGS 84)    32709
UTM Zone 10    Northern Hemisphere (WGS 84)    32610
UTM Zone 10    Southern Hemisphere (WGS 84)    32710
UTM Zone 11    Northern Hemisphere (WGS 84)    32611
UTM Zone 11    Southern Hemisphere (WGS 84)    32711
UTM Zone 12    Northern Hemisphere (WGS 84)    32612
UTM Zone 12    Southern Hemisphere (WGS 84)    32712
UTM Zone 13    Northern Hemisphere (WGS 84)    32613
UTM Zone 13    Southern Hemisphere (WGS 84)    32713
UTM Zone 14    Northern Hemisphere (WGS 84)    32614
UTM Zone 14    Southern Hemisphere (WGS 84)    32714
UTM Zone 15    Northern Hemisphere (WGS 84)    32615
UTM Zone 15    Southern Hemisphere (WGS 84)    32715
UTM Zone 16    Northern Hemisphere (WGS 84)    32616
UTM Zone 16    Southern Hemisphere (WGS 84)    32716
UTM Zone 17    Northern Hemisphere (WGS 84)    32617
UTM Zone 17    Southern Hemisphere (WGS 84)    32717
UTM Zone 18    Northern Hemisphere (WGS 84)    32618
UTM Zone 18    Southern Hemisphere (WGS 84)    32718
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UTM Zone 19    Southern Hemisphere (WGS 84)    32719
UTM Zone 20    Northern Hemisphere (WGS 84)    32620
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UTM Zone 25    Southern Hemisphere (WGS 84)    32725
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UTM Zone 33    Southern Hemisphere (WGS 84)    32733
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UTM Zone 42    Northern Hemisphere (WGS 84)    32642
UTM Zone 42    Southern Hemisphere (WGS 84)    32742
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UTM Zone 43    Southern Hemisphere (WGS 84)    32743
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UTM Zone 44    Southern Hemisphere (WGS 84)    32744
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UTM Zone 45    Southern Hemisphere (WGS 84)    32745
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UTM Zone 56    Southern Hemisphere (WGS 84)    32756
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UTM Zone 57    Southern Hemisphere (WGS 84)    32757
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UTM Zone 58    Southern Hemisphere (WGS 84)    32758
UTM Zone 59    Northern Hemisphere (WGS 84)    32659
UTM Zone 59    Southern Hemisphere (WGS 84)    32759
UTM Zone 60    Northern Hemisphere (WGS 84)    32660
UTM Zone 60    Southern Hemisphere (WGS 84)    32760
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