

EPSG v10 data model changes (2020-05-18): relational tables¹

For details listed by table, see [here](#). In summary:

a) The epsg_area table is removed and replaced by an epsg_extent table. The first seven fields will be renamed, with some reordering. The area_polygon_file_ref field is removed. Five new fields will be added. For all fields in the area table other than area_polygon_file_ref there is a 1:1 mapping from the area table to a field in the extent table. A new epsg_areapolygon table will be included in the repository but not in the Access database export.

b) In addition to the extent table, seven new tables are added:

epsg_conventionalRS	epsg_definingOperation
epsg_datumEnsemble	epsg_scope
epsg_datumEnsembleMember	epsg_usage
epsg_datumRealizationMethod	

epsg_definingOperation is a superset of the 19111:2019 heightTransformation association between vertical CRS and coordinateOperation, generalising it to apply to any single CRS that is defined by a coordinate transformation.

c) In the epsg_coordinatereferencesystem, epsg_datum and epsg_coordinateoperation tables, the area_of_use_code and scope fields will be deprecated. They will be changed from mandatory to optional and left unpopulated. These fields will be replaced by the new epsg_usage intersection table.

d) In the epsg_coordinateAxis table, the uom_code field is changed from mandatory to optional.

e) There is a change to one field name in the epsg_coordinateReferenceSystem table.

f) Additional fields are added at the end of the epsg_datum table.

g) There are changes to some field lengths in the following tables:

epsg_coordinateAxisName	epsg_datum
epsg_coordinateSystem	epsg_ellipsoid
epsg_coordinateOperation	epsg_namingsystem
epsg_coordinateOperationMethod	epsg_primeMeridian
epsg_coordinateOperationParameter	epsg_unitOfMeasure

h) There are no changes to the following tables:

epsg_alias	epsg_coordinateOperationPath
epsg_change	epsg_deprecation
epsg_coordinateOperationParamUsage	epsg_supersession
epsg_coordinateOperationParamValue	epsg_versionHistory

¹ In this document Camel case is used to facilitate reading of table names. In implementation, in the SQL relational tables no upper case characters are used.