

The Water Industry (Suppliers' Information) Direction 2019
ANNEX A - GIS SPECIFICATION – updated 24th May 2019 AT (v.1)

For all parameters to be tested plus pesticides see **Annex C**

ANNEX A - GEOGRAPHICAL INFORMATION SPECIFICATION

Before 1 January each year companies should provide zone boundaries in digital format and supply these as an alternative to paper maps. This digital information should consist:

- a) Company appointed water supply area in closed polygon format
- b) Each water supply zone including any cross boundary supply (closed polygon format with associated table of attribute data - these should capture any area of supply but exclude areas of non-supply, see guidance below).
- c) 6 figure NGR for both easting and northings, for each treatment works, service reservoir and Supply point compliance sample point (as specified in Details file below).

The Inspectorate requires companies to provide an additional digital overlay showing any significant areas of non-supply (if any). These boundaries should account for any part of the company appointed area not covered by a designated water supply zone. An attribute table should identify non-supply areas by name and add national grid reference centroid of polygons. If the Company is aware that the non-supply area is actually a private water supply area, this should be named as such in the table, (e.g. Rushmoor Estate private water supply).

Where companies have grouped concessionary supplies (see [DWI Information Letter 2/2006](#)), the attribute table accompanying digital zone boundaries should treat concessionary supplies in the same way as zones comprising of multiple unconnected sites, i.e. supply separate lines, which differ in respect of centroids. For these cases the Site Reference will be the same for each record, whilst Site Name should be qualified with the concessionary supplies' 'local' name in brackets. Population and area information then should refer to the specific record. See example below.

ZoneRef	ZoneName	NGR-Eastings	NGR-Northings	Population	Area
Z1234	Concessions (site 1)	123456	456123	2	0.2
Z1234	Concessions (site 2)	654321	321654	4	0.3
Z1234	Concessions (site 3)	615234	53412	10	1

File format for attribute table for water supply zones

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD SIZE
Company	Three character code for Company	Text	3
ZoneRef	As in Details table – SiteRef	Text	10
ZoneName	As in Details table - SiteName	Text	60
Population	As in Details table	Number	6
GridReference - Eastings	As in Details table	Number	6
GridReference - Northings	As in Details table	Number	6

Source	As in Details table	Text	2
Chloram	As in Details table	Text	2
AlFloc	As in Details table	Text	2
FeFloc	As in Details table	Text	2
SWFlag	As in Details table	Text	2
HypoFlag	As in Details table	Text	2
ConSupply	As in Details table	Text	2
FluorDose	As in Details table	Text	2
PhosDose	As in Details table	Text	2

*'centroid' should be a single point within the polygon. If a zone comprises of multiple unconnected sites, supply separate lines which differ in respect of the centroids, details on population and area would be the aggregate for the group of islands making up that zone.

File format for attribute table for water treatment works, service reservoirs and supply points

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD SIZE
SiteRef	As in Details table	Text	10
SiteName	As in Details table	Text	60
GridReference - Eastings	As in Details table	Number	6
GridReference –Northings	As in Details table	Number	6

* Location should be the sample tap or generalised point within site if no current specific NGR for sampling point.

Formats

DWI has upgraded its ESRI ArcMap GIS software, to version 10.2.2. As previously ESRI Shape (.shp) files are preferred for submission. If not available, boundaries in 'dxf' (drawing exchange format), 'dwg' files from AutoCad and MapInfo '.mif' are also suitable. Point data can be converted to Shapefiles from Microsoft Excel (comma separated variable) files.

Companies should submit data to the Inspectorate for testing prior to the submission date if unsure data formats are satisfactory.

Geocodes for sample point locations and sites should be supplied in two fields of separate "Eastings" and "Northings" referenced to the Ordnance Survey. **100 km letter code not to be used.** i.e. TQ 2975079750 should be 529750 179750. "Eastings" and "Northings" fields as in 'Details' table are format for all submissions. Postcodes may be substituted for zonal samples (Data table).

For Company water supply areas, water supply zones and supply point areas, the closed polygons required should be created by digitising from background mapping at a scale of 1:10,000 for rural areas, or 1:2,500 or better for urban areas. These are preferred specifications, and companies should contact DWI if they experience problems. A table of identifiers shall be provided with the closed polygon data that refer to the "Details table" of the Information Direction returns. (i.e. MS Excel file).

The boundary between adjoining Companies' supply areas (i.e. appointed supply areas) shall be contiguous

i.e. no overlaps or areas of 'no mans' land. The Company licensed water supply area polygon shall be as defined in the 'Letter of Appointment', or as subsequently modified.

Companies are encouraged to liaise with adjoining water companies to agree their common boundaries. Companies are also encouraged to advise the Inspectorate of any localities within their licensed areas in which the company have no consumers, either because they are 'undeveloped areas' or because the area is fed by a 'private supply'. This will be helpful to properly verify that areas of apparent 'no man's land' that are not declared by Companies part of a zone in error.