

FACTSHEET 2 ON GLOBAL MONITORING PLAN DATA WAREHOUSE

TOOLS IN GMP DWH

The Global Monitoring Plan Data Warehouse (GMP DWH) is composed of three layers that hold relevant tools as shown in Figure 1 below:

- Data layer or **DATA REPOSITORY** for data import, online data collection, data standards (code lists) and archiving;
- Core layer for data management, validation, recoding, transformation, and background for data services (GIS, analytical and statistical tools, data processing, workflow);
- Presentation layer or **DATA VISUALIZATION** for presentation tools, and web services.

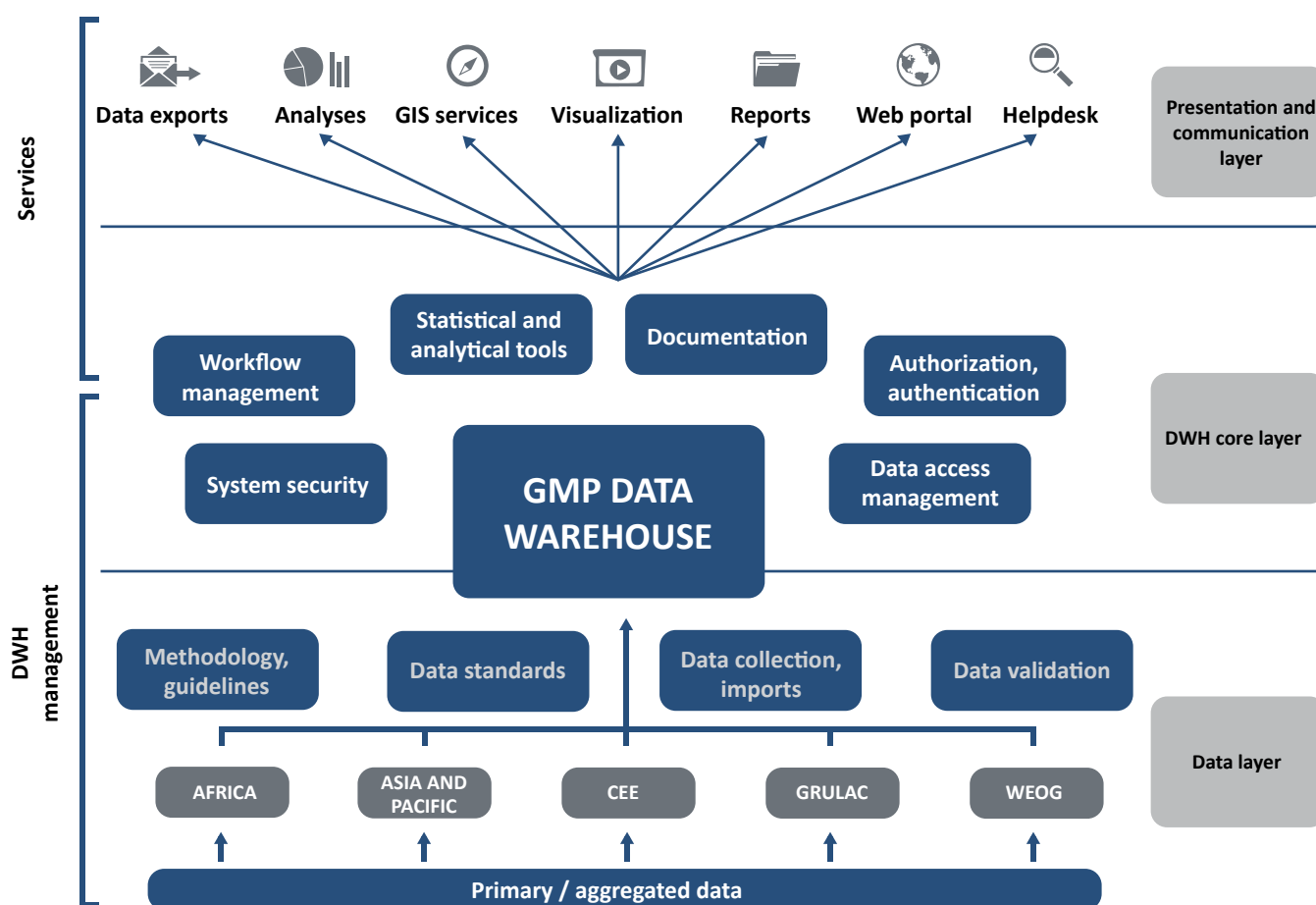


Figure 1- Structure of the GMP DWH

HELP DESK

is available for all GMP DWH users – provides technical assistance, administers user accounts and associated rules and is a contact point for data file transfer via reporting spreadsheets. The phone hotline works on weekdays – Monday to Friday 8am to 4pm CET and additional support outside these hours is provided by e-mail (gregor@iba.muni.cz) according to the international standard ISO/IEC 20000-1:2012 and grants time to response in 24 hours.

GENERAL AND INTERNAL GMP DWH TOOLS

SECURITY TOOL

contains set of authorized users, provides encrypted communication and ensures automatic logout (60 minutes) and regular data backup.

DATA ACCESS MANAGEMENT

defines user accounts (authorized users), their access rights and hierarchy in line with intended system roles. Managed by GMP administrator.

DATA REPOSITORY TOOLS

DATA IMPORT

is communication interface for direct online import of aggregated POPs data into Data Repository. Available to authorized users only. Uses strictly parametric data structure: site – sampling attributes-measurement and uses Code lists.

COMPLETENESS CHECK

identifies data records that do not fulfill criteria for a completed record (all obligatory items in the data set record contain a value). Linked to Validation Tool.

TRACK CHANGES

enables tracking history of changes made in a particular data record. Linked to Data Validation procedure.

CODE LISTS

are available in data reporting spreadsheets (MS Excel) on the www.pops-gmp.org or in the GMP DWH Data Repository. They define set of allowed values for a number of variables to maintain comparability.

VISUALIZATION TOOLS

SPATIAL DISTRIBUTION

displays all GMP DWH sampling sites around the world in a map. Its Data Selection filter allows for a selection of fewer sites for subsequent analyses. Map can be scaled up or down by zooming tool.

DATA AVAILABILITY

shows frequency of individual chemical parameters (congeners, isomers) on sampling sites/countries in Data Availability – Parameters view in chart with circles, or amount of measurements in a sampling site over time in Data Availability – Time in chart with rectangles.

SUMMARY STATISTICS

presents interval of measured concentrations for one compound in a given matrix and site or a number of sites in individual year or in a time interval in a horizontal box-plot chart.

TIME SERIES

offers three views: multiple sites Trend Map, shows the summary development of POP concentrations in the selected area (single compound and selected matrix); Time Series Analysis provides analyses of a time trend on individual site for selected compound and matrix; and Time Series Bar Chart Map shows concentration changes in bar charts for multiple sites in a map.

DATA EXPORTS

exports several sets of summary information related to selected data set for sampling sites, data sources, monitoring programmes, and analytical methods used/employed in the selection. In addition, exports of all data in .CSV format.