D-Analyze Data

1-Data Exploration, Reporting and Visualization

D.1.a – Analysis Environment

Element Creation and maintenance of data processing, analysis and reporting environments (e.g. staging areas, data warehouses, data marts, data lakes). Description				
Benchmark Level 0	Benchmark Level 1	Benchmark Level 2	Benchmark Level 3	Benchmark Level 4
No central data analysis environments have been set up.	Data from different sources is brought together into a central platform for access; with little or no transformation or summarization.	Data are transformed in a limited fashion and made available for analysis; additional data manipulation is required to meet specific analysis needs.	Data are transformed, summarized and made available in a convenient form to meet the most common analysis and reporting needs; data are structured and documented to support more specialized queries.	A "big data" environment is available supporting sophisticated exploration, cleansing, visualization and analysis of large, heterogeneous datasets.
Current: Desired:	Current: Desired:	Current: Desired: Desired:	Current: Desired:	Current: Desired:
☐ Create a data warehouse to make data centrally available for analysis.	☐ Apply basic data transformations supporting data exploration, reporting, and visualization needs.	☐ Apply more complex and/or additional data transformations needed to meet specialized analysis needs.	☐ Provide a "big data" environment with data profiling tools – include functions to generate random sampling of large data sets, provide graphical insight into data distributions and outlier values.	
☐ Identify initial priority datasets supporting asset analysis and reporting needs to make available within a central data warehouse.	☐ Provide standard analysis and reporting views combining data from different sources for asset related analysis.	☐ Develop data marts meeting specific asset related business analysis and reporting needs.	☐ Develop user capability to share data and analysis products through the environment.	
□ Other:	☐ Other:	☐ Other:	☐ Other:	
Assessment Notes: Improvement Notes:				