The **gPROMS Digital Applications Platform** (gDAP) is a robust, integrated software framework for the development and online deployment of complex model-based decision support systems as part of intelligent digital operations.

It takes care of all essential activities for online implementation and execution of models – management of external and internal data exchange, data cleansing and validation, and execution scheduling of the model based computations – within an integrated fail-safe framework.
Integrated data management & computation

The gPROMS Digital Applications Platform (gDAP) takes care of all essential activities for online implementation and execution of high-fidelity models as part of operations decision support systems.

Core software components include:

- **External Data Manager**, managing communication with the external data servers
- **Execution Schedule Manager**, managing the timing of the execution of the various calculations
- **Execution Monitor**, which ensures correct operation and takes corrective action if necessary
- **Data Validation Modules** that apply extensive validation to all data exchanged within the system and with external data servers, and handle any cases of missing or invalid data
- **Computational Modules (CMs)** that perform the requested applications described in the section above – for example steady-state detection, parameter estimation, optimisation, simulation.

Supply

The gPROMS Digital Applications Platform is supplied as the basis of all PSE’s intelligent digital operations applications, including the gPROMS Operational Excellence Solutions.