The WS500 picture shows a geographic world map, a trend display and a web page. On top of the display, the alarm icon indicates if alarms are in the system. Pressing the alarm icon reveals the latest unacknowledged alarms. By using the locate function, navigation is done directly to the picture from where the object can be controlled. Next to the alarm icon is the silence button for audible alarms. Below is found a menu bar and context sensitive direct picture navigation buttons.

Application

WS500 is ABB’s user interface for demanding real-time supervisory control of geographically distributed processes. WS500 is a common user interface for ABB’s SCADA, EMS, GMS and DMS systems.

By support of ABB’s Industrial IT technology, WS500 performs Aspect and Object navigation. This adds more flexibility by making it possible to add object specific user functionality.

Features:
- State of the art Microsoft Windows Look and Feel with Multi Document Interface (MDI) support
- Personal on-line configurable menus, toolbars and colour palettes included in operator settings.
- Unique document concept for combining traditional process displays with web pages and any ActiveX based components as display document.
- Low bandwidth requirement. Unique display subdivision and automatic run-time local caching mechanism enables fast call-up times also over wire or wireless serial modem connections.
- Asian Character Unicode Support.

Functions

The WS500 Operator Workstation combines support for demanding realtime process operation with openness of the Office applications and the Internet environment.

WS 500 supports a document concept that makes it possible to integrate traditional worldmaps and process displays with web pages and general ActiveX types of components as display documents. This makes navigation simple, like display changes despite implementation technique.

WS 500 has a unique component-oriented design that supports customer tailoring of the user interface, without programming. This allows for an easy adding of new functions, menu items and dialogs after commissioning.

WS500 provides for a unified operator environment with utility-wide IT systems, providing easy integration of SCADA, ERP and GIS systems. It adopts the user interface to individuals by the built in customization dialog.
### Technical data

#### Full Graphics components
- World Map display concept combines fast call-up times with high data volume displays
- Zoom, stepwise, continuous and by extent
- Pan, smooth and stepwise
- Declutter, 32 declutter levels
- Named Layers
- DXF file support (import and as background)
- Pixmap support, as backgrounds, as dynamic symbols and as pushbuttons
- Tracing extended Dynamic Network Coloring
- Presentation of historical data and calculation results in single-line diagrams
- Replay of historical data in single-line displays
- Locate of objects in displays from lists or by name
- Historical data replay in process displays
- Operators notes direct in displays
- Tagging extended dynamics including possibilities to show outage and crew information in world maps
- Temporary network device management dialogs
- Dynamic allocation of console numbers (Casual Users)
- Drag and drop display callup
- Double click display element default dialogs

#### Tabular components
The Tabulator function is provided by an integration of Microsoft Excel™. Spreadsheet functions are used to format the display of the data in tabular format, create business graphics including graphs, do calculations, etc.

Multi cell data entry is supported as well as operator authority control.

#### Trend Curve components
The Trend Curve function is based on a commercially available state-of-the-art real-time trend ActiveX package that support showing up to 6 curves in each component, each with its own value axis.

For each curve, it is possible to select:
- Color
- Line type and width
- Point color, point type, point size
- Time offset
- Alarm presentation
- Minimum and maximum values for the value axis

#### Functional features:
- Auto Scale: The minimum and maximum values of the value axis automatically is adjusted to the actual values of the trend curve.
- Single/ Multi Graph: Switch between one trend with several curves and a list of trends with one curve each.
- Zoom and Pan: Zoom into the curve to see details.
- Grid: A grid pattern is included in the diagram.
- Logarithmic Scale: It is possible to select presentation with a logarithmic value scale.
- Inverted Axis: A function for rotating the trend diagram when a single axis is selected so that the time and value axis change place.
- Filled or Unfilled Curve: It is possible to select between filled and unfilled curve presentation.

### Other WS500 highlights:
- Multi-media type of audible alarms
- Support for up to 4 VDUs per WS500
- Flexible operator authority, for on-line reassignment of authority between operators
- Support for large-screen display walls.