maria™

High Performance Map Application

MARIA™ is a high performance map application used to collect, present and filter position dependent information, providing decision support to numerous planning and analysis activities. It can be used as a standalone system or as systems building block.

MARIA™ is used as a platform for several client specific solutions delivered by Teleplan. See www.teleplanglobe.no for more information about MARIA™.

MARIA™ has been acclaimed by military and civilian users for almost a decade. The focus on performance and the ability to provide a wide range of functionality has resulted in a very popular product with a user community that is constantly expanding.
Map Display
MARIA™ handles vector and raster maps including meta data. Vector themes can be customised and displayed at selected scales. MARIA™ uses an internal map format to enable supreme performance, whilst allowing conversion from most 3rd party map formats. MARIA™ is a Multiple Document Interface (MDI) application, which means that any number of map windows can be displayed simultaneously. Examples of functionality in MARIA™ include:
- Map navigation (zoom, pan, etc.)
- Terrain analysis (elevation, surface)
- Greyyscale, dimming and place grid on the map
- GPS interface
- Presentation and management of drawn objects (lines, circles, polygons, routes, air corridors etc.). Some objects are designed for military purposes, e.g. front lines and mine corridors, whilst other objects represent Military Operations Other Than War (MOOTW)
- Unit/Track Management. Tracks are visualized using APP6 A, NTDS or configurable symbology. Advanced filter functionality are implemented for improved readability.
- Optical, radar and radio propagation analysis. Users can calculate and display radio coverage by entering radio parameters, and even create a radio network displaying the status of each communication line. A jamming station can also be added to the network in order to perform communication vulnerability analysis.
- Configurable and user defined toolbars and menus enabling easy navigation and awareness.

3D Map
MARIA™ displays 3D maps based on Digital Terrain Elevation Data (DTED) and USGS Digital Elevation Maps. Functionality includes, but is not limited to:
- Flight mode: fly through the landscape
- Draping vector- and raster maps over the elevation model
- Displaying tracks and objects using standard symbology or 3D models

Unit & Track Management
MARIA™ provides tools to present and manage mobile units (e.g. vehicles, ships and aircraft). These units can be presented in near real-time, utilizing user created and/or standard symbols. The track system has been optimized for high performance allowing updates of several thousand track/units each second. MARIA™ has multiple track lists, which enable easy organizing of track/units and control of visualization for individual lists. All track information may be stored to file for later replay or de-briefing.

Network Server Service (NSS)
Network Server Service (NSS) enables MARIA™ to exchange track data and drawn objects between several MARIA™ clients, and between MARIA™ clients and network services. Users obtain information through the network by subscribing to data made available from other users to the NSS. The TCP/IP protocol is used to enable flexible integration to other software- and hardware systems. The NSS can run anywhere in a network, and therefore several MARIA™ clients can share the same GPS or Link system and send/receive data to/from the same NSS. Some of the sources MARIA™ can receive data from are:
- Radars (NMEA 0183)
- GPS (NMEA 0183)
- Link 14
- OTH Gold

Platform
MARIA™ is available on Intel based PC’s running Microsoft Windows NT 4.0 / 2000 / XP. MARIA™ can run on a single PC with maps and databases installed locally or share resources over a network. A MARIA™ version running on PocketPC is also available.

MARIA™ System Development Kit
The MARIA™ DLL Application Programming Interface (API) is an interface through which system developers can add new functionality to MARIA™. All major functions can be utilized through the API. The new functionality can be used to extend the Graphical User Interface (GUI) and/or interface to other systems. Examples of MARIA™ plugins are:
- MADWIZ (MARIA™ Database WIZard) enables connection to a generic database through ODBC thereby displaying position dependent information, e.g. object data, text documents or graphical pictures.
- NIB module. Uses NATO AdatP-3 formatted messages and user dialogs to create fallout diagrams.
- Numerous raster display modules (e.g. ADRG, CADRG, MrSid, Tiff and Orthophoto)
- SAR module (Search And Rescue)
- Link 11 (Developed by Thales Nederland)

MARIA™ used in other products
- NORCCIS II: Norwegian CCIS
- NEC CCIS: NATO CCIS (Air)
- GEOPOL: Police emergency response and unit tracking
- MDIS, J-HOGS and SARA: NATO Defense Planning tools
- TP-FMS: Frequency Management System and Communication Planning Tool
- Navy Tactical Workstation
- Army C2IS
- GCI-SIM: “Ground Controlled Intercept” Simulator
- AOT-SIM: “Air Operational Tactical” Simulator
- HCO-SIM: “Helicopter Control Officer” Simulator

WHY TELEPLAN GLOBE?
Teleplan has a unique combination of experience:
- 40 years of experience delivering solutions to armed forces worldwide.
- Highly skilled staff with experience in both military operations and in state-of-the-art software development.
- Efficient organization dedicated to Military Command and Control, Electronic Warfare, Training Simulators and Communications Planning activities.
- Proven solutions in daily operational use.