

**NEXEYA DESIGNS, DEVELOPS, REALIZES AND MAINTAINS EMBEDDED SYSTEMS ON BOARD FRIGATES, SUBMARINES, PROJECTION AND PATROL VESSELS.**

**NEXEYA created in 2012 the MT3 / VTS system (Virtual Trajectory System) for the French Navy, as part of a improvement of its Operational Centre tactical plotter systems.**



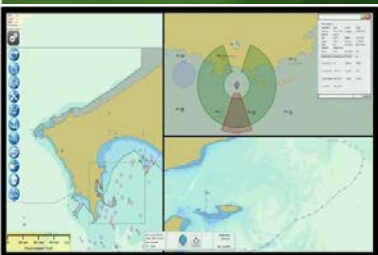
### CONTEXT

At the French Navy request, NEXEYA developed and installed on board ships, escort vessels and surveillance class frigates, a light and automated system, which allows to display in real time air and surface tracking and tactical situation evolutions on ENC cartographic background (SITAC – LYNCEA).

### BENEFITS

- Recover, display and improve locally the tactical situation assessment
- Show the evolution of the tactical situation
- Display of multiple large areas
- Visualization of the future tactical situation
- Navigation and decision help tools
- Anti-collision and intrusion zone monitoring and warnings
- Firing and safety pattern
- Modern touchscreen HMI
- Large panel of cartographic resources (multi-format, coastal, seabed,...)
- Digital archiving for the delayed replay or feedbacks

This tactical situation can displayed in different location within the ship using a remote display control system.



### ARCHITECTURE

The system architecture is built on a digital plotter ensuring functions:

- Receiving data from various local and external tactical situation broadcasted,
- Complete the local tactical situation,
- Real-time tactical situation display,
- Tablet-type touchscreen HMI,
- Deport display capability.

If the board does not integrate the tactical situation of broadcasting equipment, an extraction device can be plugged to the table (radar, AIS, ADS-B).

## FEATURES

- Display and monitoring of tactical tracks (IFF, tactical data links, surveillance radars, navigation and landing), AIS & ADS-B tracks, and non-real tracks with filtering possibility,
- Display and monitoring of ship tracks,
- Tracks classification depending on code APP6,
- Help to the use of weapons, safety zone display anchored on the target,
- Scaling of visualization (maximum 1024 Nq),
- SAR and shipwrecking assistant tools,
- Day or night screen mode,
- Viewing map markers : grid with latitude/longitude, Compass rose, distance circle (adjustable from 0.1 Nq),
- Centring on the carrier ship or a point chosen by the operator,
- Showing roads and history (possible filter),
- Control landing aid tools (aviation route choice),
- Anti-collision detection (Adjustable by operator choice for distance and time before CPA),
- Possibility to perform in navigation in close quarters (NAVRES),
- Display of fixed and mobile areas centred on the carrier ship or on a fixed point chosen by the operator,
- Record and replay for analysis and deferred time,
- Security zone crossing alarms,
- Display on 22" to 84" screen,
- Multi language,
- Fixed or adjustable support.

## CIVIL USES (MT2 release) :



- **Merchant Navy:** roadmap with local real-time situation. Warning system to watch against piracy threats.
- **Cruise:** help to the navigation, location information for passengers. Coastal mapping and seabed.
- **Yachts (luxury pleasure):** roadmap with local real-time situation.
- **Captaincy / Coast guards:** coastal protection and control of maritime flows.
- **Platform:** local real-time situation, prevent the risks of collision.

## BENEFITS

- > Tactical interface
- > Large area monitoring
- > Tactical situation on 48 hours
- > Digital tracking
- > Reduced human Intervention
- > Reduced human error

## SPECIFICATIONS

- > Dimensions (w x h x d in mm):  
1355 x 1094 x 875
- > Weight : 104 kg
- > 115 VAC/ 60 Hz, single phase
- > Norms MIL-STD-810 G and IP65
- > Impact : 20g / 11 ms ½ sinus
- > Temperature :
  - 0 à 50°C in operation
  - -20 to + 70°C in storage
- > Vibration : 10-2000 Hz, 2 Grms
- > Humidity : 95% RH @ 30°C