Emergency Shutdown system
ESD
The main task of the Emergency Shutdown system ESD is to secure the shutdown function and control of specified devices and signaling of alarm in case of gas detection or other situations potentially dangerous for a ship equipped with LNG fuelled main and auxiliary propulsion.

In case of emergency, depending on its cause, the system interacts with a suitable algorithm for each device by:

- **Switch off:**
  - Specified switchboard section eg. ventilation supply section
  - Main engine or auxiliary engine
  - UPS power supplier which supply specified devices

- **Control:**
  - Fuel system shut off valves

- **Indication:**
  - Alarm states on ESD system alarm panel
  - Alarm states to engine room monitoring system
  - ESD system switchboard self-diagnostic signals to engine room monitoring system

The ESD system is a redundant system. In case of single PLC or operator panel failure, the control task is automatically switched to second PLC. The control changeover is driven uninterrupted.

Each measuring input channel has a failure self-diagnosis of measure sensor and measurement line cable.

MPL Techma provides the opportunity to develop a system both for newly built vessels as well as a retro-fits of old systems. We also provide service and maintenance of existing systems.
We cooperate with:

We fulfill the requirements of the leading classification societies:

MPL Techma Ltd
96/98 Al. Zwycięstwa str.
81-451 Gdynia, POLAND
marine@mpltechma.pl
www.mpltechma.pl