Gothenburg, 10 November 2015

Spokesman
C.C. (GN) Marco Fracassi
Italian Ministry of Defence
Navy Directorate
MARINA MILITARE ITALIANA

Information Technologies for Naval Safety purposes
Maritime Scenario

Priority order
1. HUMAN LIFE
2. SHIP’S LIFE
3. CARGO

Damage
- INTERNAL ACCIDENTS
- ACCIDENTAL COLLISIONS
Priority order

1. HUMAN LIFE
2. SHIP'S LIFE
3. CARGO
Damage

- INTERNAL ACCIDENTS
- ACCIDENTAL COLLISIONS
DEFINED PROCEDURES
Military Scenario
INTERNAL DAMAGE
EXTERNAL THREATS
...resulting in the unpredictability of internal scenario
SO, HOW DO WE MANAGE THE DAMAGE?
long training periods were needed to achieve the high coordination level between crew members and hardware instruments required to "win the internal battle"

the critical issues were:

- very few information could be handled
- information update process was complex and slow
Falkland-Malvinas experience suggested to Western Navies the implementation of new methods and procedures to face the damage.
the damage control organization used tools and technology available at that time (papery instruments and hardwired lines for transmission of voice information)
incident board
long training periods were needed to achieve the high coordination level between crew members and hardware instruments required to "win the internal battle"
the critical issues were:

- Information update process was complex and slow
- Very few information could be handled
- High qualified and trained personnel
- High number of people involved

These periods were achieved the high level between users and hardware required to "win the internal battle"
Italian Navy decided to use Information Technologies to improve the damage management procedures. The SISS was born.
In the Italian Navy, the requirements were:

- modularity;
- linkage with SMS and other subsystems involved in Damage Control;
- refined and easy to use HMI common for the whole fleet (one system policy);
- independency from the suppliers.

Many subsystems have been developed to gather useful information not previously collected in order to reduce the number of information manually entered (e.g., People Tracking Systems and Breathing Apparatus pressure telemetry).

The development phase was
release of Battle Damage Control System (SISS TRD)

NAVE DORIA first installation

HORIZON CLASS
The development phase was successfully concluded with the release of Battle Damage Control System (SISS TRD)

NAVE DORIA first installation

DORIA
HORIZON CLASS
DORIA
HORIZON CLASS
As crew management is crucial for the Damage Control operations, all the function related to personnel (People Tracking System, transits control, roll-calls) have been improved.
what's next...
• evolved Decision Support System able to evaluate complex boundary conditions (personnel & plants efficiency);

• continuous improvement of the functions related to personnel;

• remote emergency control center linked with ship's SISS.
CONCLUSIONS

ML2 interesting project:
- "dual use" technology (Keep it up!)
- cooperation between MoD & MoT
- congratulations to Swedish Administration

Thank you for hospitality
Thanks