Developing e-Navigation in a multi organisational environment Challenges and Leadership

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Or

WHO IS AT THE CONTROLS!

Who is CIRM

- Comité International Radio-Maritime
- A technical trade organisation
- Represents Marine Electronics Industry
- Over 90 companies world wide
- Manufacturers, service providers, service companies
- Started in 1928 by the Maritime Radio companies to represent their interests at ITU
- Now represent Industry at IMO, ITU, IHO and other organisations – IALA IMPA etc..

Observations

- I am coming to the end of my career
- I started in 1967 on an aircraft project
- Highly secret "LEDs" used for film marking
- Very complicated project
- Specification kept changing
- Because user needs kept changing
- Cancelled after millions £££ spent..

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What is this

TSR-2

Sir Sydney Camm said of the project:

"All modern aircraft have four dimensions:
 - span, length, height and politics.

TSR-2 simply got the first three right."

Let's hope that the politics don't bring down e-Navigation..

e-Navigation

- This project has the potential to be the best thing for Maritime safety and a fully co-ordinated maritime world
- We must all focus on getting it working
- Try not to be diverted into interesting side roads on the way
- Difficult with so many players..

Key Players - IMO

- UN specialised agency
- They came up with the idea through member states
- Have a very effective correspondence group
- Member states providing good inputs
- Have very little time allocated for working groups
- Have a technical "GAP"..

Key Players - ITU

- UN specialised agency
- Will need to be involved in allocating the spectrum we need for e-Navigation
- Will need to sort out territorial problems and interference with advance satellite systems
- Will we be ready for the next WRC with what we need ?.

Key Players - IHO

- Intergovernmental Organisation
- Providing all the Hydrographic services and standards – key part of e-Navigation
- Provide the key knowledge on S100..

Key Players - IALA

- Currently an NGO in consultative status to IMO
- Many member states see IALA (which they are members of) as filling the IMO technical "GAP"
- Have an e-Navigation Committee
- Sits twice a year
- Provide the IMO CG with good input..

Key Players - CIRM

- NGO representing marine electronics industry
- Working on the on-board integration and bringing communications experience
- Has developed with IEC an ethernet interface standard for on-board networks IEC 61162-450
- Helping develop IEC 61162-460 which will be the important firewall between navigation systems and the rest of the bridge..

Key Players - ICS

- NGO representing the World's Shipowners
- Providing Criticism

Key Players - ICS

- NGO representing the World's Shipowners
- Providing CONSTRUCTIVE Criticism

- Ultimately we have to "sell" the brilliance of e-Navigation to the Shipowners

- What is the brilliance?
- And why don't we know?.

Key Players

- IMPA – bringing pilotage experience
- NI – bringing user requirements and training issues
- ……

So what is e-Nav

- Its turning out to be the International Marine Intranet
- Connected are:
  - Ships
  - VTS/VTM
  - RCCs
  - Customs
  - Service providers – weather – routing
  - Owners
  - …………………

e-Navigation

- We are getting over excited about the "Apps"
- Single window
- VTM systems
- Under keel clearance

- Not concentrating on the infrastructure on the ship and ashore
- Nothing hangs together until we have the backbone..

International Marine Intranet -IMI

- For this we need to:
- Integrate the Nav and Comms on board suitably firewalled
- Find communications that will provide the right bandwidth consistent with the area of operation and data requirements
- Network the VTS systems ashore regionally and internationally
- Identify Communications hubs for Distress and safety and commercial communications..

On Board Integration
(Dr Andy Norris)
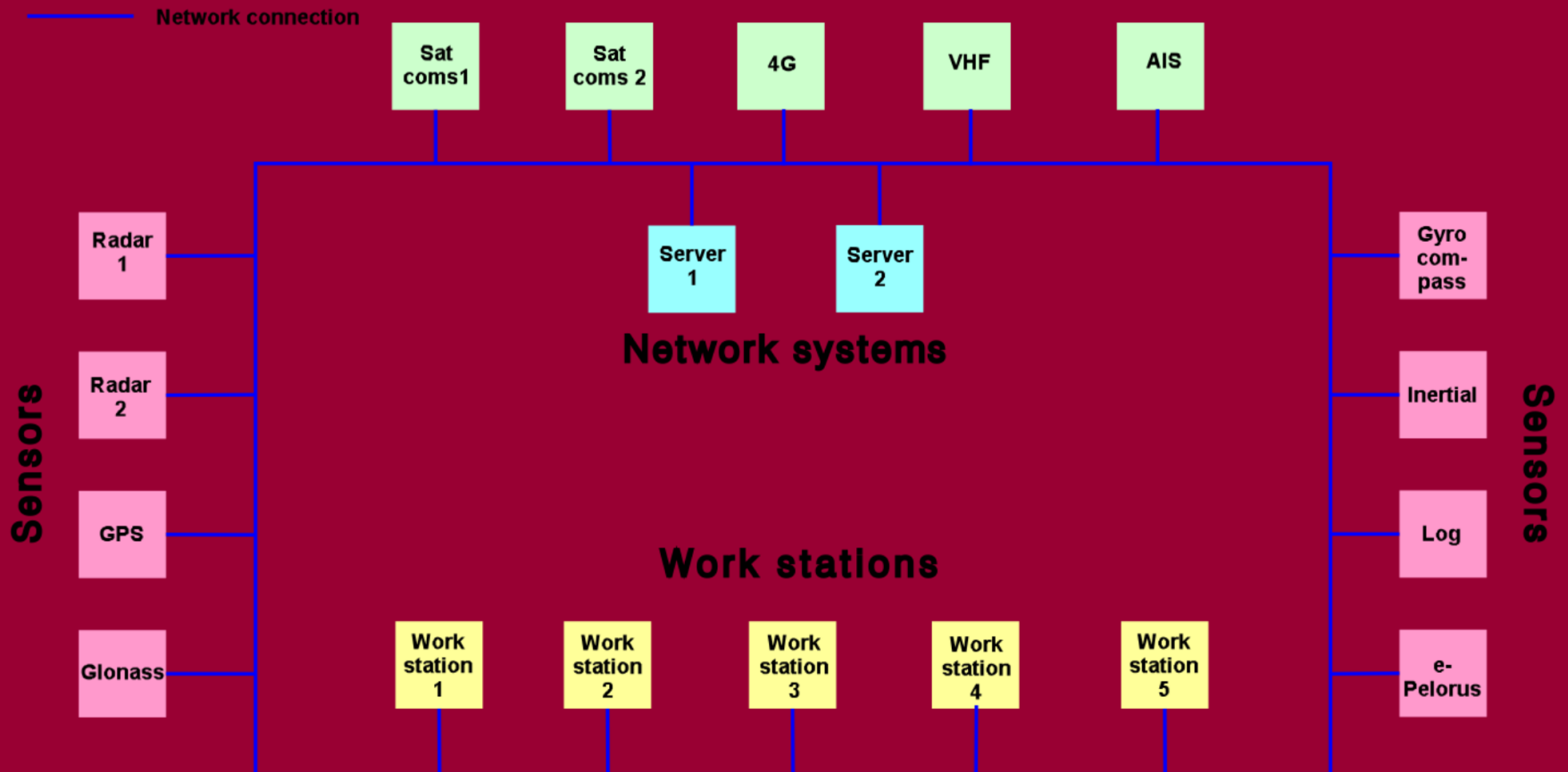
On Board Integration

- CIRM fully supports the IEC 61162-450 Ethernet standards for the on board integration

- And supports the IEC 61162-460 firewall and safety standards

- However existing equipment may have to be modified to maximise the performance of this network

- May not meet the original goal of "using existing equipment but used in a better way"..

Merging of COMSAR and NAV

- IMO intend to merge these two key sub-Committees
- How does this leave our ability to make all the Performance standards changes we might need
- Last week at COMSAR I suggested that a group of experts will be necessary to do this job
- Idea met favourably with the IMO secretariat..

Communication solutions

- Along side – could be plugged in
- Port regions – VHF – Cellular – Wimax
- Deep sea – Satellite
- Is there a role for HF ?
- Does the bandwidth requirement change with distance from shore
- Who will pay for the calls
- Who is dealing with this ..

Co-ordination

- Someone needs to take the lead to make this all work
- We need closer co-operation between the organisations – regular meetings?
- Less helping oneself to the choice bits
- Ensuring the right experts regardless of organisation are doing the right tasks
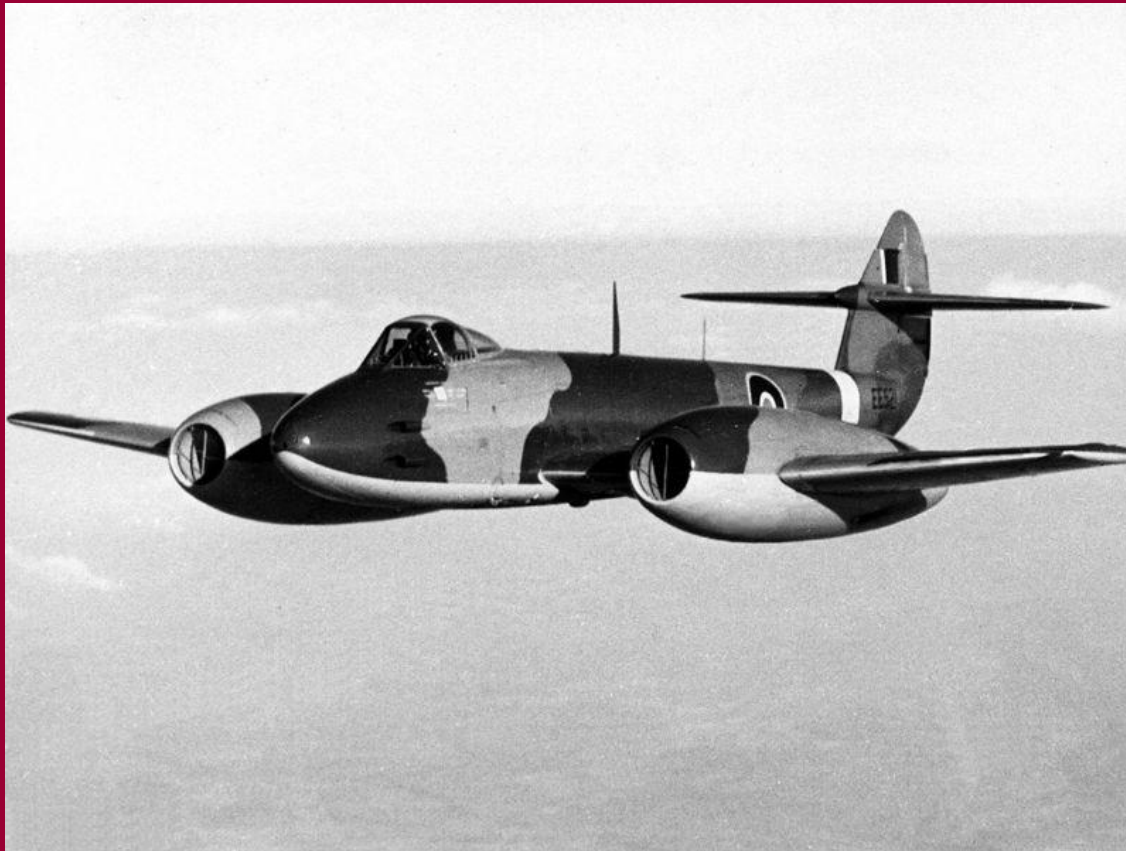- Focus on getting the infrastucture working..

Conclusion

- Project needs bringing back into focus
- IMO needs to take a lead in this
- Correspondence group is the highest authority we have
- They (because there is no-one else) must bring the work down to a few strategic packages
- Set the time scales
- Bring stage one (a working infrastructure) to conclusion..

Any Questions

Thank You

What was it

GLOSTER METEOR