e-Navigation: Human perceptions

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Australia in the 50’s

Change came frequently to local television screens

BUT THE PROPHETS ALL BUT WROTE OFF THE BOX BEFORE WE EVEN TUNED IN

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Residents of Sydney and surrounds need to retune their digital TVs from today to keep up with changes introduced when the era of analog TV ended.

SBS, which holds the honour of having been the first TV station to broadcast in ultra high frequency (UHF), will be the last to leave the UHF spectrum and go completely digital. But the
Tasks identified in the SIP for Australia to be involved in:

Lead on Human Centred Design and other Human Factors aspects

Assist in the area of resilient Position Navigation and Timing (PNT)
Human

• Seafarers
• Manufacturers
• Operators

• Everyone

Perceptions

• More complexity
• More earnings
• More cost

• Next gen will manage
We will contact you when it’s time for
the interface...the design iceberg

Visuals

Interaction

User model, tasks, relationships...
• User in focus
• Less workload/stress
• Seafarer's livelihood
• Harmonization
• Economy +
• Safety +
• Public opinion
Workshop on HCD

• We want:
  – Harmonisation
  – Standardisation

• But...

• Consider...
  – Special users, diversity
  – Workplaces
  – Situations, context of use
  – Ships
  – Time of day
“I want my dog in the background”
Relevant information

It’s about asking the right questions

What do you want?
Seafarers are not designers, programmers etc

What do you need?
Tell me about your job and how I can support it
We will contact you when it’s time for the interface...the design iceberg

Visuals

Interaction

User model, tasks, relationships...
ECDIS...
It took organisational pressure to realise this

• ...you no longer get charts, just permission for ENCs...
• ...this obliges users to understand the effects of their licensing choices on a string of departments and the budget...
• “For this to work, you need closer relationships between the purchasing and technical departments and the operators inside the organization”
Design for information needs

Multi-disciplinary groups => the right questions and answers

An “insider moderator”

End user/s
Human Factors
Interaction/information design
Software programming/engineering
Marketing
Big data coming in and going out

- What is provided now?
- What do we need?
- What can be provided in the future?

- Collect based on needs and an analysis plan
- Make sure ship’s data is sent automatically
- Compare to other data collection exercises
- The buck stops ashore...
Plug and play? (Fred Pot)
Vendor lock-in? (Apple)
OSMOS Human Factors

Needs
• Communication
• Coordination
• Cooperation

Benefits
• Safety
• Efficiency
• Satisfaction
The goals of all human factors/ergonomics experts are the same: to optimize the safety, performance, and comfort of human beings.