

Digitalisation on board:

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Introduction KVNR

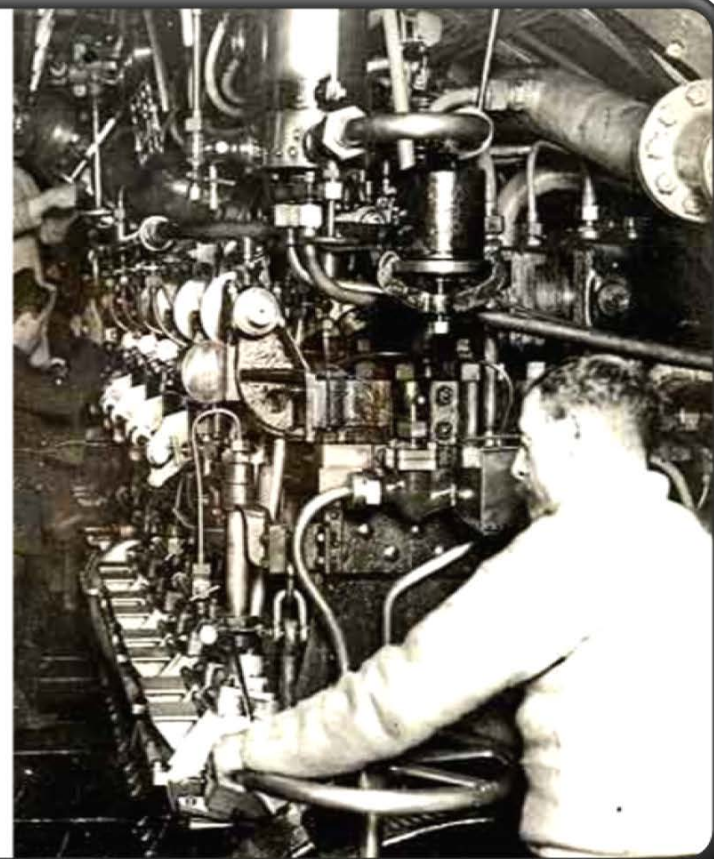
Representing:

- over 360 Dutch shipowners
- 100 associated members
- **787** ships* flying the flag of The Netherlands

* Often operate in short sea/many port calls/small crew



From analog...



..to digital



Developments: Shore support

- No chief engineer on small ships*
- 24h online
- Ongoing data transfer
- Access to systems for information and repair

* < 3.000GT/< 3.000kW

Rules and legislation

- Legislation in general still contains 'paper' requirements
- Navigation – ECDIS
- SOLAS/MARPOL recordbooks still paper-based
- Cyber-security?!
- Maritime education/training lacks proper 'digital' training requirements

Introduction Holland America Group

- Holland America Group is part of Carnival Corp. & Plc (102)
- Consist of 4 brands: Princess Cruise (18) – Seabourn (3) – P&O Australia (5) – Holland America Line (14)
- HAL ships; all Dutch flagged

HOLLAND AMERICA GROUP


PRINCESS CRUISES


Holland America Line®


SEABOURN®


P&O
AUSTRALIA

Holland America Group



Digitalisation of cruise ships

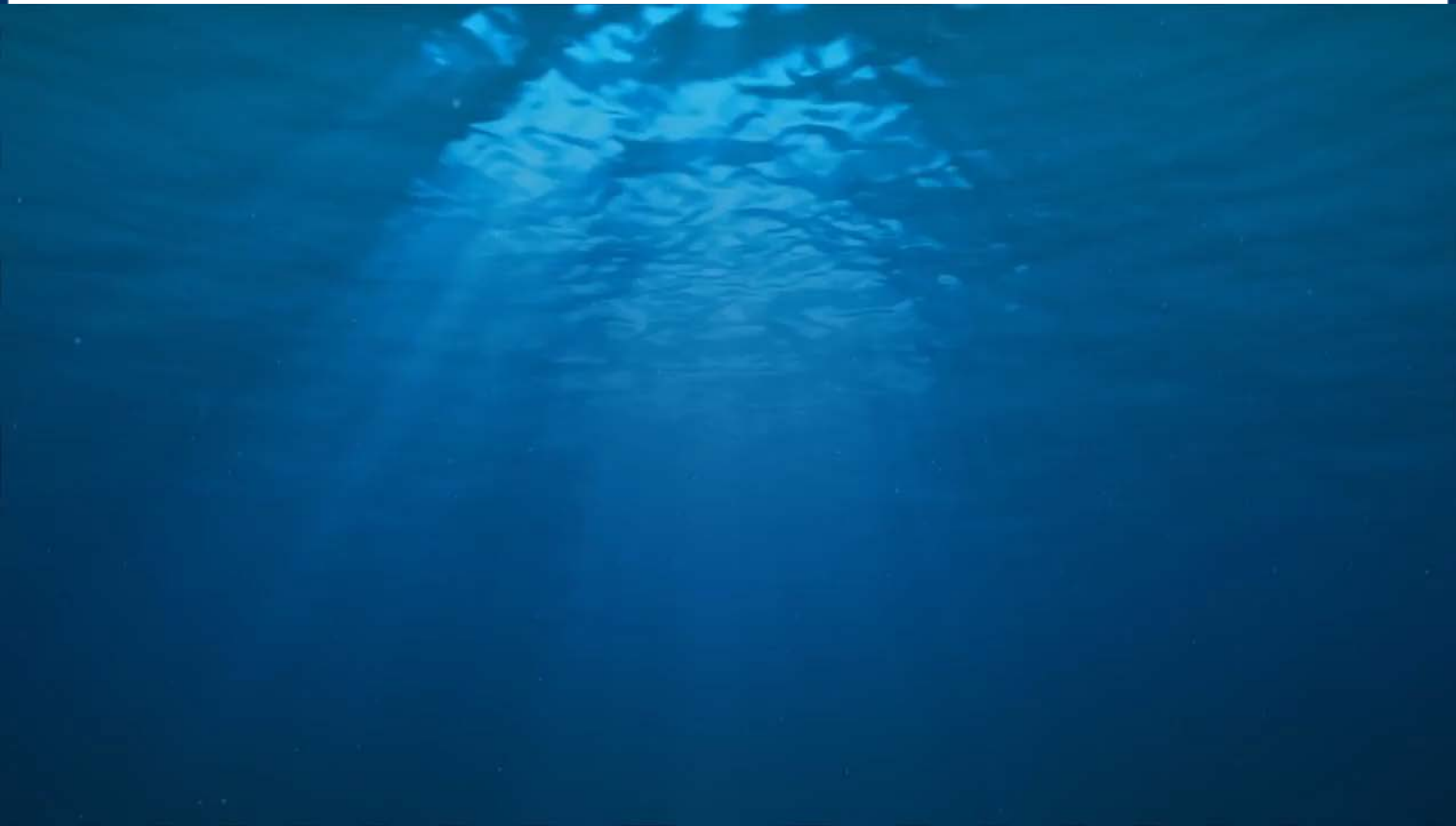
- 'Traditional'; bridge & engine room
- System integration
- Shore support
- Training!
- Guest 'digitalization'

Holland America Group



Digitalisation of cruise ships

- Guest 'digitalization:



Digitalisation on board:

Thank you for your attention!

Wish you all a pleasant/useful day

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