Boarding Bridges enhance passenger comfort and operational logistics at Cruise & Ferry Terminals
“Gangways” provide logistic challenges
“Boarding bridges” provide operational comfort
2007...

22 Seaport Passenger Boarding Bridges installed and 17 SPBBs in project
2007 – Stevedore’s view

Overhead Gangways

- What don’t we like;
  - No Flexibility
  - Not enough space
    - Crowded aprons
    - Restricted movements on Dock
  - Increased Labor hours
  - Increased Equipment
  - Increased cost to line
2007 – Stevedore’s view

Overhanging ship superstructure and Lifeboats
2007 – Consultant’s view

Central Terminal

100-150 pax
Double Decker
Gangway Vehicles

The future?
2007 – Consultant’s view

VERY HIGH CAPACITY BUS...

PORT AUTHORITY OF M.
2007 – Consultant’s view
2017

115 Seaport Passenger Boarding Bridges installed and 18 SPBBs in project
What cruise guests say about SPBBs
Challenge 1 – “Unlimited” Operational Ranges

- Ships are getting bigger and bigger, with doors in higher positions
- At the same time, smaller ships continue (and will continue) to exist
- This places constraints on terminal and berth design
Challenge 1 – “Unlimited” Operational Ranges
Challenge 1 – “Unlimited” Operational Ranges

- Designs must be flexible to cater for the fleet’s variability
- Service cannot be interrupted due to changes in tide
- Any boarding infrastructure must be able to automatically follow the ship along the whole tidal cycle...
Challenge 1 – “Unlimited” Operational Ranges
Challenge 1 – “Unlimited” Operational Ranges

- ...Sometimes even below quay level!
Challenge 1 – “Unlimited” Operational Ranges
Challenge 2 – New Generation Vessels

- Larger ships mean more passengers and larger pax flows
- Doors are not getting any bigger
- More than one access route is required to reduce boarding time
Challenge 2 – New Generation Vessels

- Overhanging lifeboats are forcing every structure on the quay further and further back

- Some cruise ships have overhangs up to 6.7 m!

- This does not include fender compression or vessel tilt
Challenge 2 – New Generation Vessels

More clearance for lifeboats means less space available for all other uses of the quay.
Challenge 3 – Berth availability 24/365

- As port traffic increases and infrastructure trails behind, berths are committed for most of the time.

- Infrastructure improvements are liable to cause some disruption to operations.

- Solutions must be sought to minimize impact.
Challenge 3 – Berth availability 24/365
Challenge 4 – Global Industry, Local Requirements

- Codes and Standards vary wildly from country to country

- Electrical, structural, even safety specifications are very dependent on region, country or even on owner

- Lack of consensus or internationally-accepted standards
...and last but not least
Thank you very much for your attention!