

Onshore Power Supply (OPS)



*Shore-side electricity • Shore-connected electricity supply • Shore power •
• Ship-to-shore • Cold ironing • Alternative Maritime Power (AMP)*



Content of the presentation

- Introduction
- The OPS Project
- Challenges
- Next steps
- How to get involved!



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Introduction



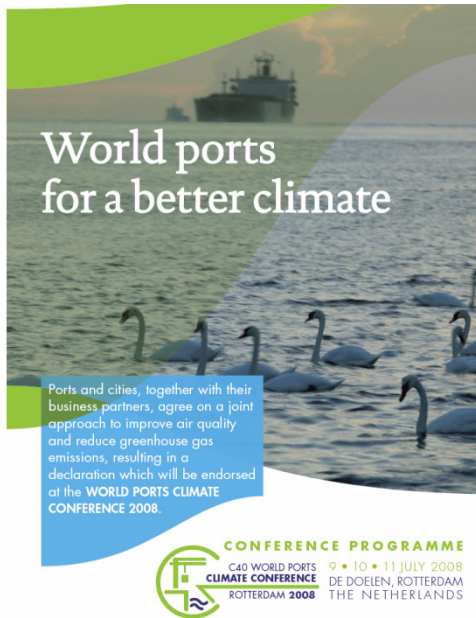
Connecting a Ro/ro-vessel in Port of Göteborg

- OPS replaces onboard generated power from diesel auxiliary engines with electricity generated on-shore (high voltages)
- Port of Göteborg – Stora Enso
First port in the world to offer OPS high voltage for cargo vessels in year 2000
- Significant reduction in local air pollutants (NO_x, SO₂, PM, VOC)
- Additional benefits noise & working conditions
- Use a renewable energy source and reduce greenhouse gases to a minimum
- Container, ro/ro, ferries, cruise, tankers
- The interest for implementing OPS is increasing

Introduction



- [At World Ports Climate Conference in Rotterdam, July 2008](#)
 - A Guidance document – Onshore Power Supply



The content of the Guidance Document:

1. Background
2. Guidance for implementation (Plan, Do, Check, Act)
3. Best practices and case studies
4. Pros and cons
5. Frequently asked questions

www.portgot.se (Environment-World Ports Climate Initiative)

The OPS Project



Overall goal –

- Reduce local air pollutants & greenhouse gas emissions by stimulating as many ports, terminal operators & shipping lines worldwide to implement the technology of OPS
- Accelerate the market & lower the price for the technology



The OPS Project

The process

- Two workshops+ conference, autumn 2008, Hamburg/Göteborg
- Participants

Workshops - Clinton Climate Initiative, Port of Antwerp, Port of Amsterdam, Port of Bremen, Hamburg Port Authority, Port of Le Havre, Stena Line, Stadtwerke Lübeck, ABB, Cavotec, Siemens, Bemac Uzushio Electric, Holland Marine Equipment, Altran ...

Seminar — 60 participants Shipowners, suppliers, ports & experts

- Need for an online toolkit based on the Guidance Document
”aid for decisionmakers” ”if & how”
- Early stage in the project
- Many questions still to be discussed



The OPS Project



Preliminary goals of an online OPS Toolkit

- 1. Help port authorities, terminal operators and ship owners in decision making about Onshore Power Supply.**
 - Is OPS the right solution to reduce local air pollution and greenhouse gas emissions?*
- 2. Help the different stakeholders to do a quick scan cost-benefit analysis, focusing on economical and environmental costs and benefits.**
- 3. Give guidance how to maximize the reduction of GHG by implementing OPS projects.**
- 4. Assist in the implementation process**
 - How are we going to do it?*
 - Based on best-practices, suggestions & examples*

The OPS Project

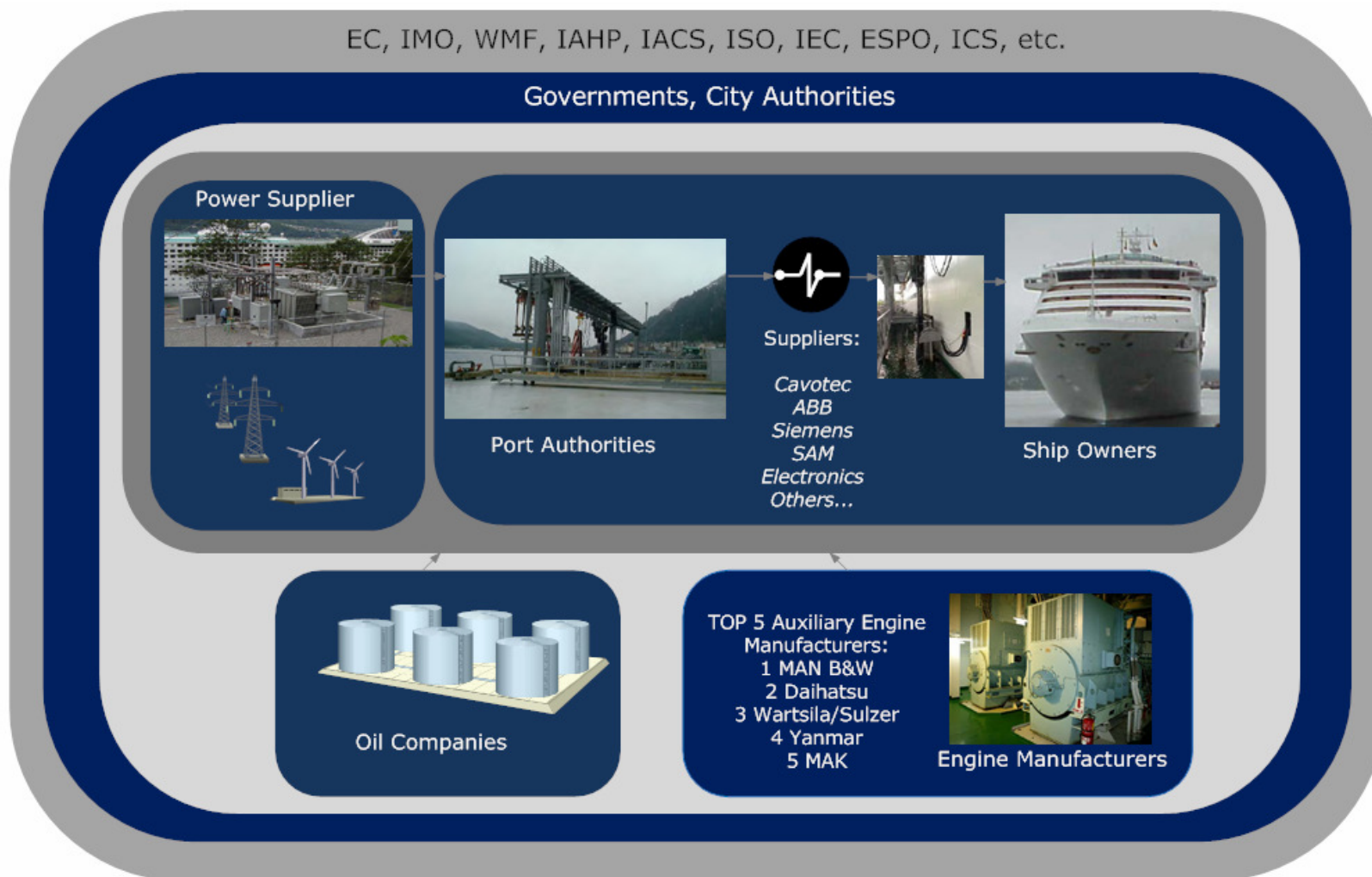


The scope in stage 1:

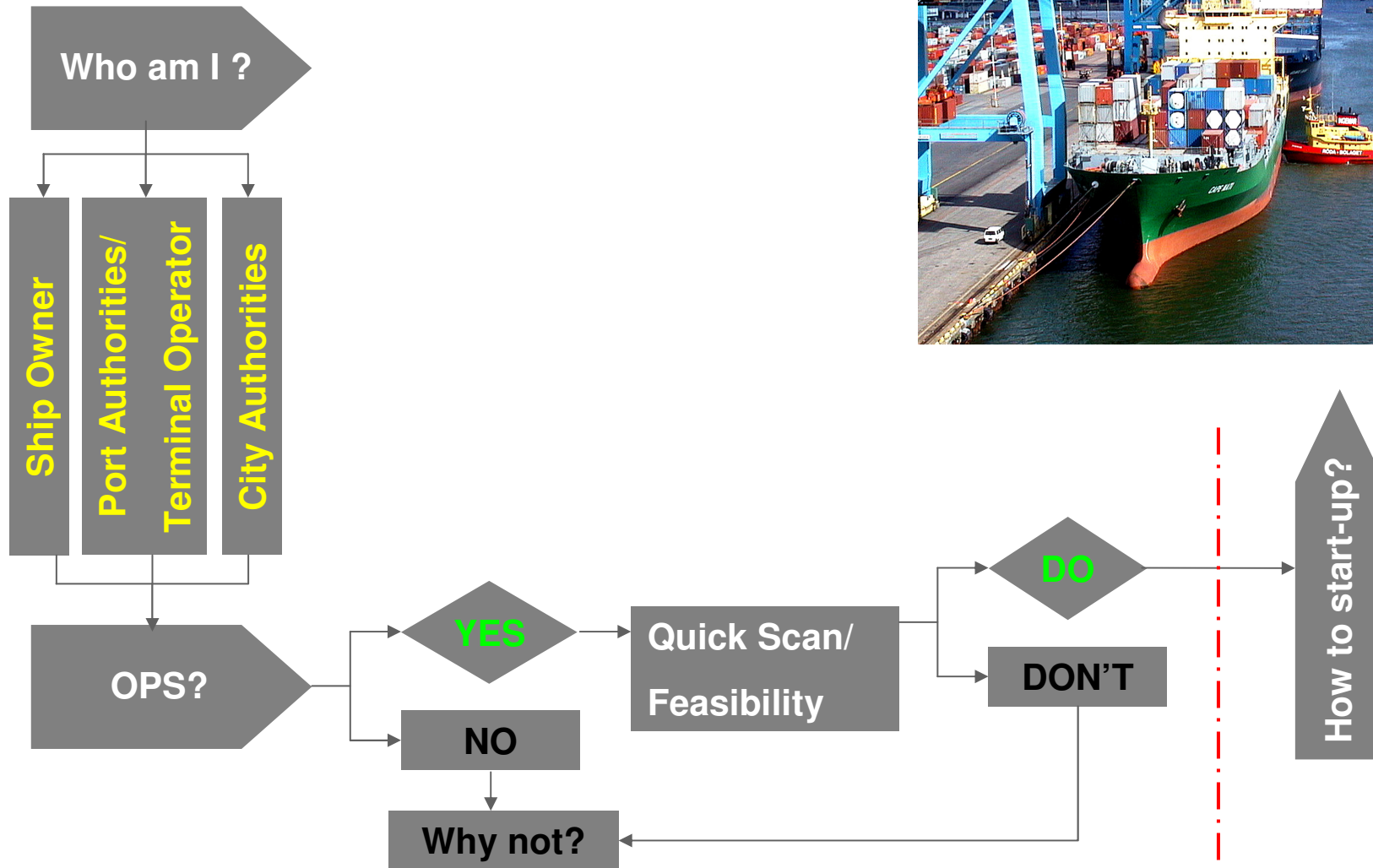
1. Ferry and Ro/ro
2. Cruise
3. Container



Stakeholders



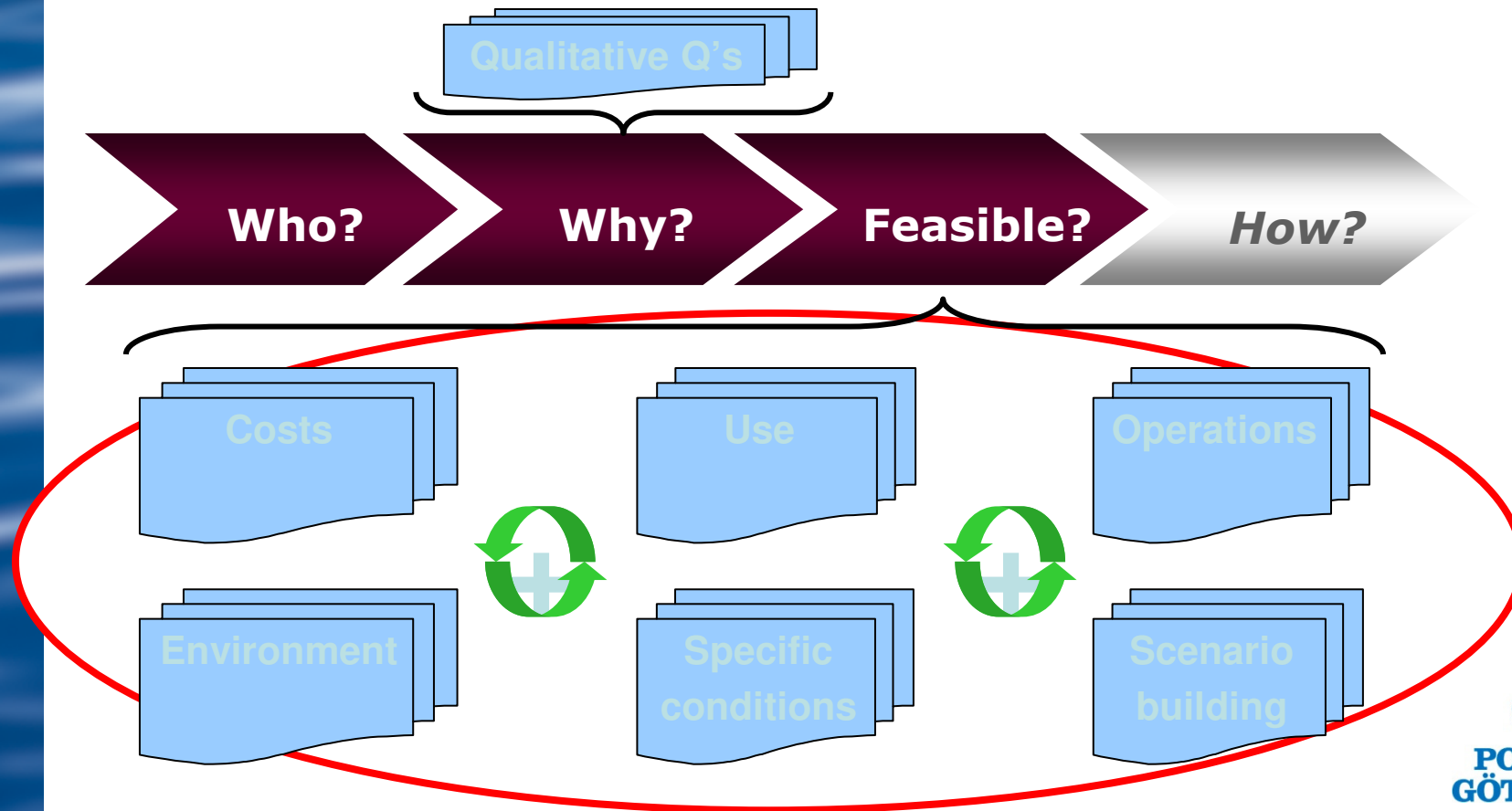
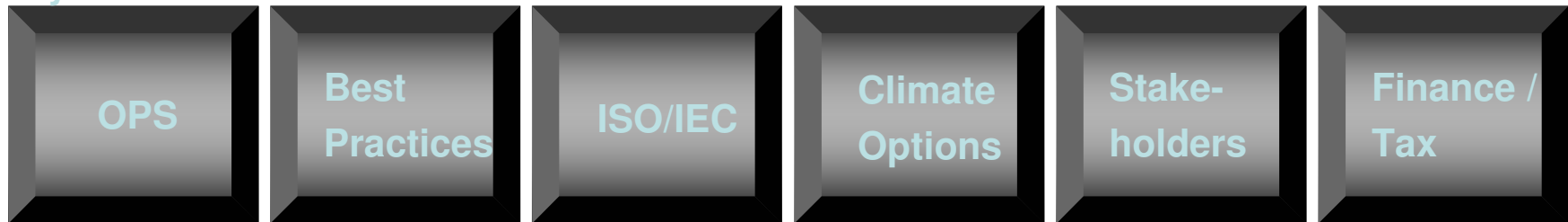
OPS Tool Kit



Tool Kit

OPS Toolkit

library

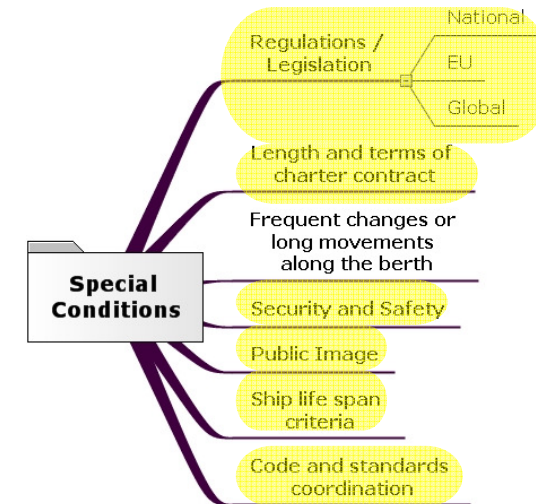
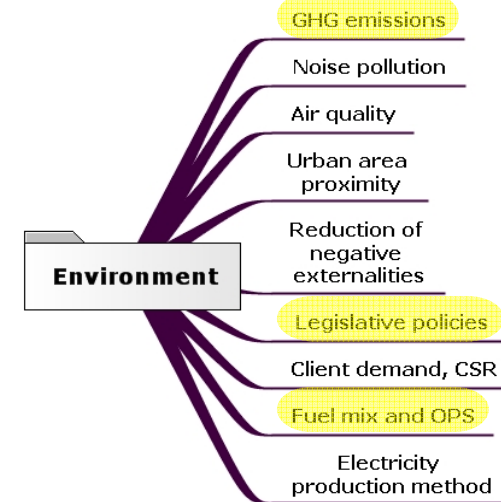
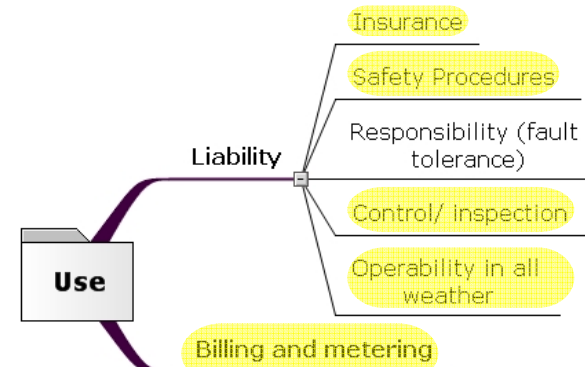
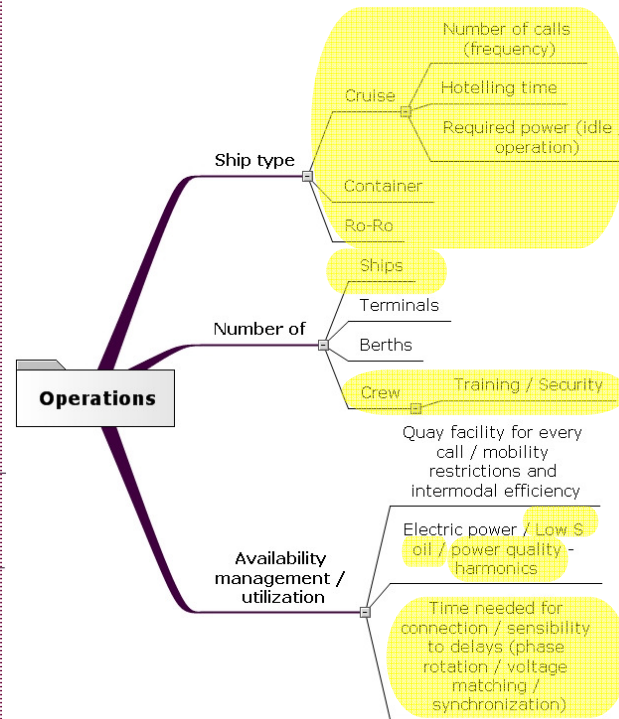
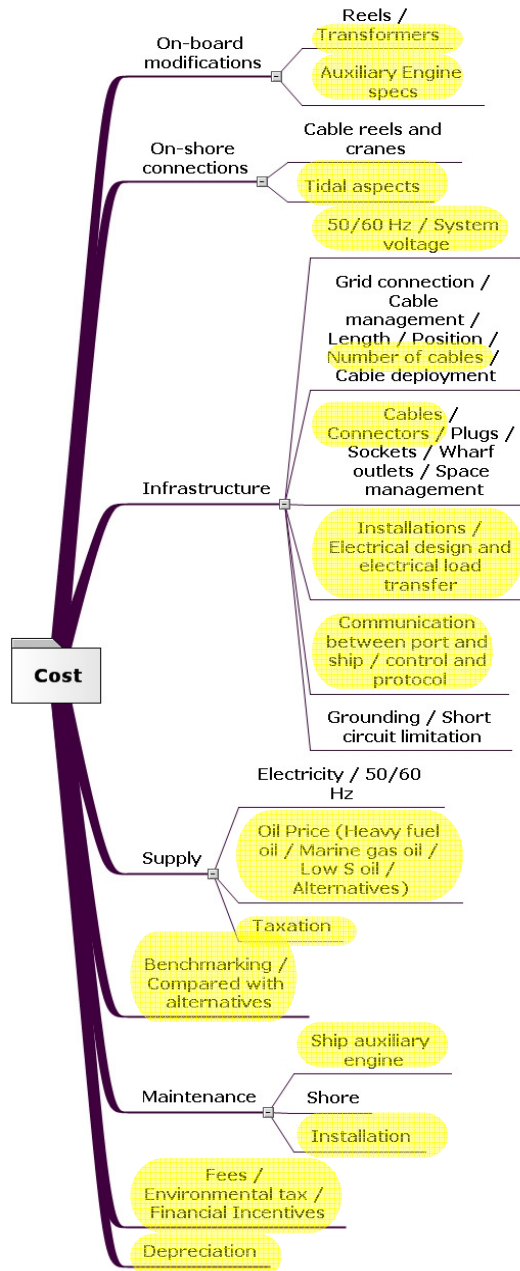


Who am I?

Ship Owner

WORLD PORTS
INITIATIVE

altran

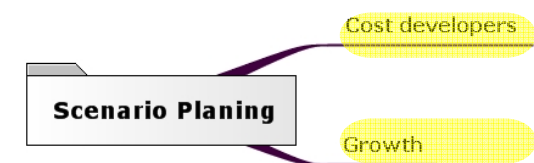
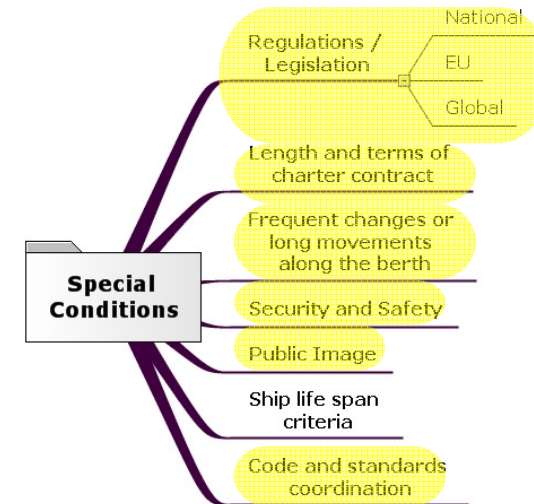
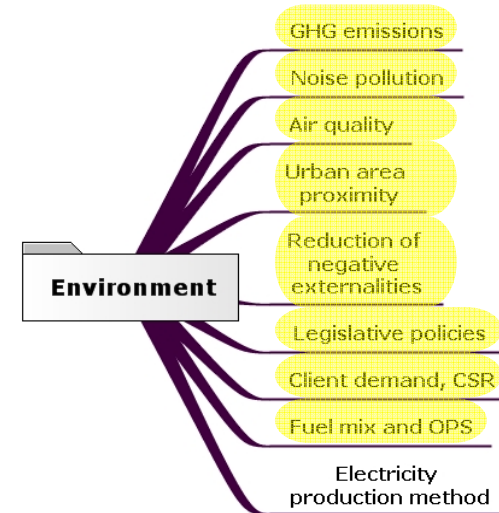
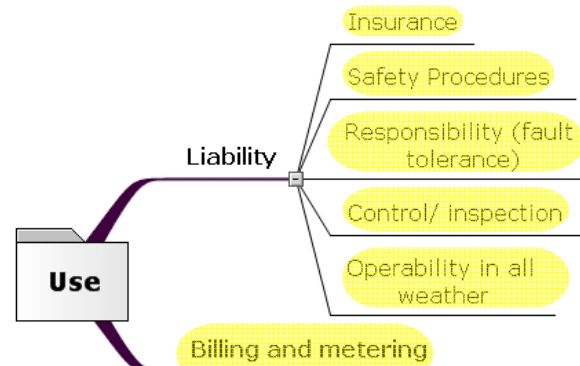
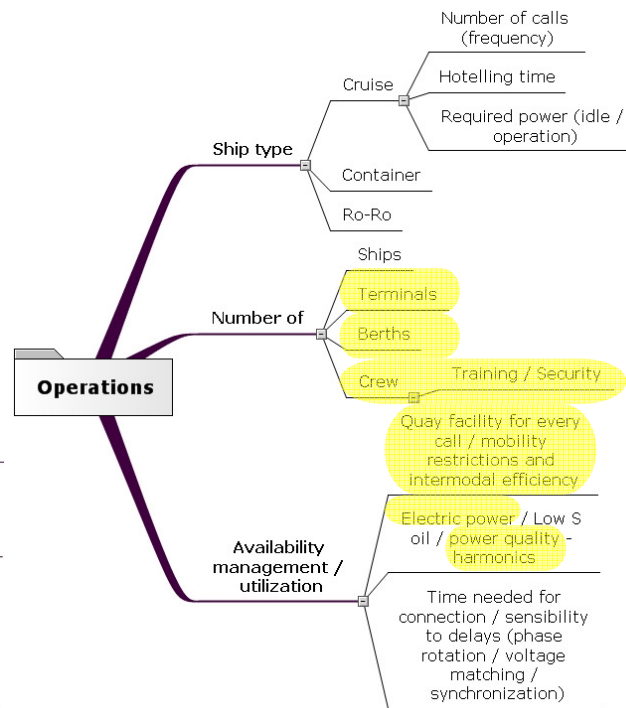
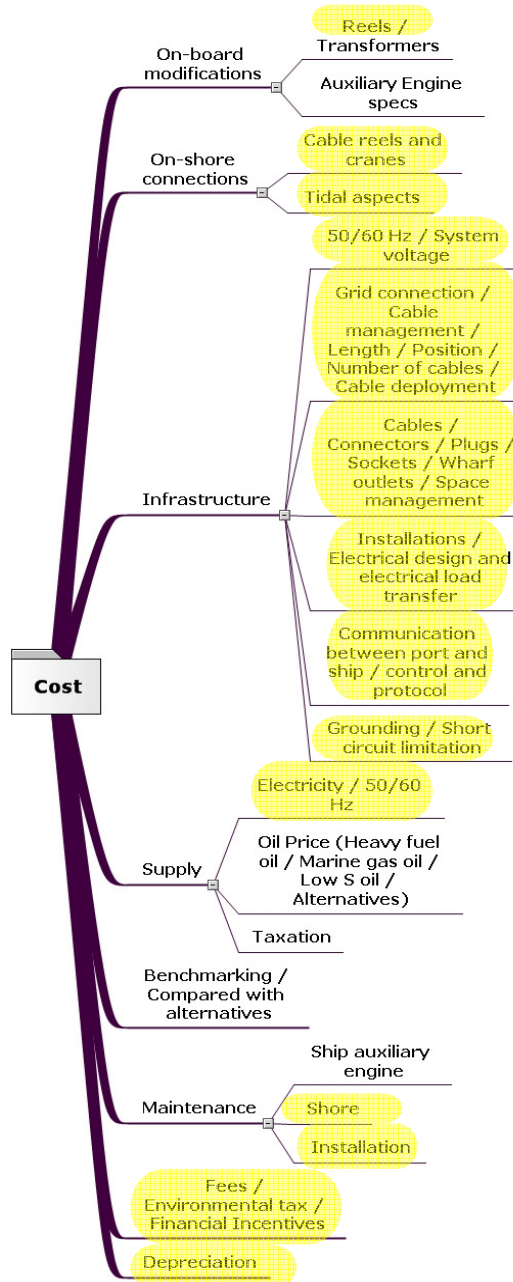


Who am I?

Port Authority

WORLD PORTS
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altran



Challenges



- Get the online Toolkit user friendly
- Get it simple and at the same time reach the goals
- Financing the Toolkit
- Keep it updated/maintain the Toolkit

Next steps



- Share knowledge & experience
- Decide upon the scope of the Toolkit
- Find sponsors for the development of the Toolkit
- Get shipowners involved
- Communicate with/via IAPH, ESPO, Ecoports, PIANC ...
- Preliminary time frame – Online Toolkit 2009

How to get involved?



Different ways:

- Take part of the Guidance document
- Share your own experience
- Keep yourself updated at www.portgot.se
www.iaphworldports.org
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Thank you for your attention!