ARCTIC SHIPBORNE TOURISM

Executive director, Frigg Jørgensen

www.aeco.no
• Membership industry association for Arctic expedition cruise operators and associates
• 33 international members – 21 operators
• 25 vessels (8 – 318 pax) operating in the Arctic

www.aeco.no
AECO’s Objectives

— Ensure that expedition cruises and tourism in the Arctic is carried out with the utmost consideration for the fragile, natural environment, local cultures and cultural remains, as well as the challenging safety hazards at sea and on land.

— Advocate for the industries and members’ interests.
AECO’s core areas are Svalbard, Jan Mayen, Greenland, Canada and the national park “Russian Arctic” (Franz Josef Land and northern Novaya Zemlya)
EXPEDITION CRUISE TRAFFIC

- Vessels 8 – 300 pax
- Arctic – the voyage
- 1 – 2,5 weeks
- 1 – 3 landings per day – also outside communities
- Few limitations to range
- Change passenger

CONVENTIONAL CRUISE TRAFFIC

- Larger vessels
- Arctic part of a longer voyage
- 1 – 3 days in Arctic waters
- 1 call/landing per day – pref. communities
- Limited areas of sailing
- Seldom change of passengers
Statistics for Canada includes

NORDREG Zone
Passenger Ships, 1990 to 2012

Legend
- Ship Points
- Canadian Ports
- NORDREG Zone

Sources: Esri, GECO, NOAA, National Geographic, DeLorme, NAVTEQ, Geonames.org, and other contributors.

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AECO Passenger numbers
Svalbard, Greenland & Jan Mayen
ARCTIC CRUISE OPERATIONS
- PERMITTING DIFFERENCES

**SVALBARD**
- Svalbard Notification travel
- Virgohamn permit
- Post visit reporting

**GREENLAND**
- Greenland Permits for each voyage
- Greenland National park permit
- Community visits x 12
- Post visit reporting

**COSTS**
- 0,-
- Reply 1 – 4 weeks

- $
- Reply 3 – 8 weeks
ARCTIC CRUISE OPERATIONS  
- PERMITTING DIFFERENCES

CANADA

1. Business License (Parks Canada)
2. Business License Annual update x 3 (NWT/Yukon/Nunavut Department of Justice)
3. Guide Permit for each individual staff member (Parks Canada)
4. Firearms Permit x 2 (Parks Canada, Nunavut Parks)
5. Visitor Permit (Parks Canada)
6. Film and photo Permit (Parks Canada)
7. Register for mandatory NORDREG Reports (Canadian Coast Guard)
8. Access Permit to Inuit Owned Land x 3 (Qikiqtani/Kivalliq/Kitimeot Inuit Association)
9. Visitor Permits (Environment Canada’s Canadian Wildlife Service)
10. Tourist Establishment License x 3 Nunavut/NWT/Yukon (Department of Economic Development & Transportation)
11. Certificate of Compliance as an Extra Territorial Corporation (Nunavut Registries)
12. Workers Coverage (possibility) (Workers Safety and Compensation Commission)
13. Visitors Permit (Nunavut Parks).
14. Coasting Trade License (Transport Canada)
15. Clearance of vessels by the Canadian Boarder Service Agency (CBSA)
16. Cruise Inspection (possibility) (Health Canada)
17. Archaeology permit (Department of Culture, Language, Elders & Youth)
18. Nunavut Impact Review Board (NIRB)
19. Wilderness Tourism License (Wilderness Tourism Licensing Act Registrar In Yukon)
20. Canadian Wildlife Service Permit (Environment Canada for Migratory Bird Sanctuaries)
21. Community visits
22. Post Visit Reporting

COSTS: $$$$$ - Replies often take time
**ARCTIC CRUISE TOURISM RISKS**

### Environment
- Oil spill
- Endangering wildlife
- Vegetation; paths, marks
- Cultural remains; wear and tear, steeling
- Signs and markings
- Transport of alien species
- Garbage – pollution

### Social/Cultural
- Strains on small communities
- Disrespect
- Prejudiscm; both ways
- Export of banned substances
- Traditions/activities at risk
- Ignorance local benefits

### Safety
- Remoteness
- Climate/temperatures
- Cold water
- Ice
- Limited charts
- Limited search and rescue facilities
- Communication limitations
- Weather- and ice distribution forecasts – limitations

[www.aeco.no](http://www.aeco.no)
Examples:
• Guidelines
• Clean up Svalbard
• Cruise database
• Vessel tracking
• Crowd sourcing – in process
• Training/conferences
• Cruise vessel environment impact assessment
• Biosecurity measures
AECO’S GUIDELINES

Operational guidelines
AECO’s comprehensive guidelines for cruise operators

Visitors guidelines
AECO’s guidelines for visitors to the Arctic
NEW - animation film

Wildlife guidelines
Measures to prevent disturbance of wildlife

Biosecurity guidelines
Measures to prevent introduction of alien species

Site specific guidelines
20 different site specific guidelines in Svalbard

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CLEAN UP SVALBARD

- Sea transported garbage
- Cruise industry initiative
- Co-operation with the Governor of Svalbard
- Expanded to local involvement
- 10 years – hundred of tons garbage
AECO (IAATO) vessel tracking

www.aeco.no
AECO (IAATO) vessel tracking

www.aeco.no
AECO’s cruise database (IAATO)
Crowd sourcing depth soundings
Crowd sourcing depth soundings
Examples:
- Safety risk assessment
- Site impact assessment tool
- Site guidelines Canada
- Site guidelines Franz Josef Land
- Ice information communication
- Space based solutions
- Sustainable destination Svalbard
- Science industry platform
- Arctic Council – several initiatives
Dynamic Voyage Risk Assessment Tool

- Traditional Risk Assessment ↓ Voyage Risk Assessment Tool
  Static system ↓ Dynamic system

- Dynamic Voyage Risk Assessment system mirror the reality at any given time and it’s easy to understand, for everyone.

- Still traditional risk assessment should be considered for different specific aspects of Polar Water operations such as maneuvering in ice covered waters, anchoring, shore landings, diving, kayaking, etc. However, all these risk assessments are a static documentation.
Voyage Risk Assessment Tool

Factors

1. Regions
2. Time of the season
3. Landing Sites, ratings
4. Tide, Neap and Spring
5. Current expected
6. Distances to SAR facilities, to other ships
7. Ice cover and type of ice
8. Wind speed
9. Sea Conditions
10. Visibility
11. Air temperature
12. Miscellaneous factors – internal/vessel issues

Developed by Capt. Leif Skog
8. WIND SPEED

<table>
<thead>
<tr>
<th>Wind Speed, Beaufort Scale</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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</tr>
<tr>
<td>1</td>
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<tr>
<td>11</td>
<td>2000</td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing wind speed and Beaufort scale](image-url)
## Voyage Risk Assessment Tool

The following ranges for scoring are used to determine the level of risk:

<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>RISK SCORE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW RISK</td>
<td>0-1000</td>
<td>No additional mitigation measures necessary more than normal. Ship should follow standing orders and routine procedures from the SMS.</td>
</tr>
<tr>
<td>MEDIUM RISK</td>
<td>1000-2000</td>
<td>Additional measures should be considered in order to lower the risk score as much as possible.</td>
</tr>
<tr>
<td>HIGH RISK</td>
<td>&gt;2000</td>
<td>Unacceptable risk. The ship should avoid the area or activity or depart the area if the score should increase from Medium to High after arrival.</td>
</tr>
</tbody>
</table>
Outlooks Arctic cruise tourism

**Worldwide:**
- Continuous growth in cruising
- Building larger vessels

**Arctic**
- Polar Code
- Decrease in existing small vessel fleet
- Not as profitable to build new small vessels
- High attention – regulations processes

**Svalbard**
- HFO prohibitions
- 40 – 60% decline short term

**Greenland**
- New regulations
- Unpredictability reflected in declining numbers

**Canada**
- Bureaucracy
- Costs

**Russia**
- Unpredictability
- Costs – distances
- New opportunities
Outlooks

Svalbard – passengers

Greenland - passengers

Nunavut – passengers

"Russian Arctic" - cruises
Considerate, environmentally friendly and safe Arctic cruise tourism