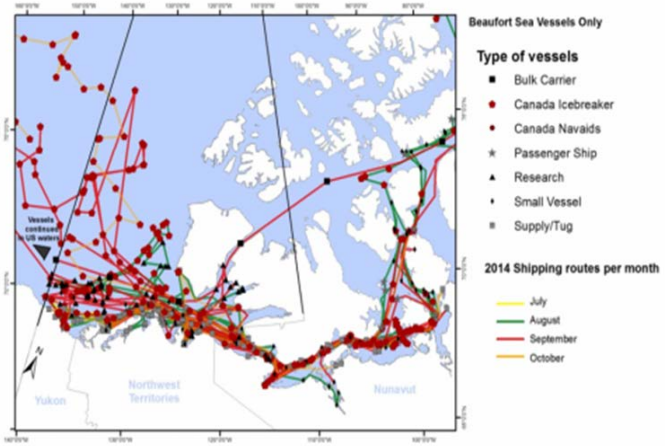
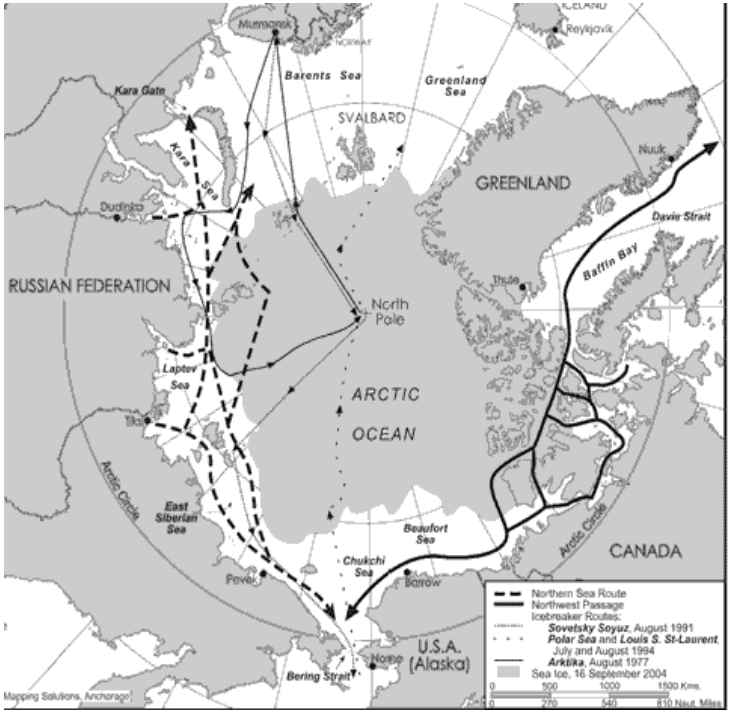
Non-Traditional Arctic Security Challenges

Mark Rosen, CNA

Shipping Opportunities

- Most transits are now destination shipping but the potential for some int'l transshipping in the near future.
- Tourism shipping – steady rise especially from North Sea.
- Routes:
  - Bering Sea/Strait (fisheries)
  - Northwest Passage (NWP)
  - Northern Sea Route (NSR)
  - Arctic Ocean ("over the top")(unlikely)
- Norway P&I and Hull insurers are issuing NSR policies
- In 2014*, there were 11,066 ships detected in the Arctic, of those, 1,960 were cargo ships and 524 were tankers
  - *latest composite data available.





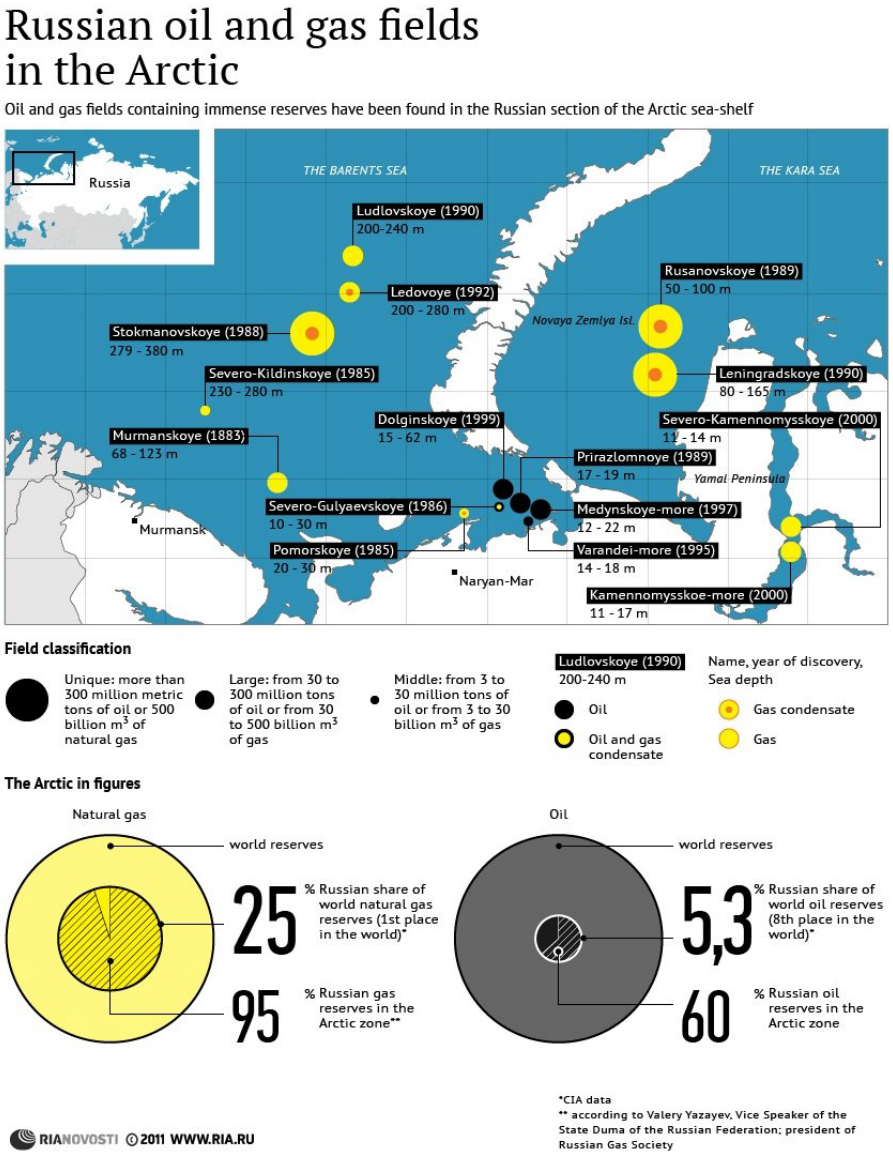
Resource Opportunities

- Oil and Gas:
  - Russia –
    - Shtokman Project (~$50B) offshore in Barents Sea
    - Kara Sea (Rosneft) Nat'l Gas.
    - Yamal Peninsula (5 major fields). Large amounts of assoc. infrastructure
  - Norway
    - Snøhvit gas field
    - Johan Castberg (Formerly Skrugard) and Havis Oil & Gas Fields
  - U.S.
    - Leasing in the Chukchi Sea
  - Greenland
    - Exploration plans for Greenland Sea and Baffin Bay in 2020

- Mining:
  - 25+ Active mines in Russian Arctic; Red Dog Mine in Alaska;
  - New mining activity in Canadian NW territories, Baffin Island and in Greenland.
  - Demand signals strong. Gov'ts not standing in the way.

Oil and Gas –Demand (Lloyds)

- The demand signal for oil is long term given high exploration and production costs…
  - Rosneft holds a few contracts for Kara Sea drilling
  - NO/RU 20/20 Project solid
- **The outlook for Arctic natural gas is different** … Arctic gas from Yamal will likely transit the NSR to Asia to compensate for declining gas production elsewhere in Europe and Russia. (Lloyds/Chatham House 2012)
  - New fleet of LNG ice-cable tankers now under construction. Russian owned
- Demand signal for new offshore LNG or oil is still not strong enough to overcome cost differential.



REGULATION OF SHIPPING AND RESOURCE EXTRACTION

International Law – Shipping

- LOS – with few exceptions, regulation of activities aboard vessels belongs to Flag State except when an international standard applies.
- IMO Polar Code mandatory for new ships. Will take time for rule set to be applied to existing ships
- Serious risk without additional infrastructure and improved liability/insurance requirements
- No prevailing international rules or organization to address the gaps.
- A major pollution incident could likely result in political moratorium on future drilling or tanker traffic.
- If risks of an incident grew too high, states could use laws/force to keep out outsiders who need the resources.
- Five/Six states could negotiate agreements to address this risk but they have to have the political freedom and will to do so.

Resource Extraction Regulation

- International Rules:
  - UNGA: Each country has permanent sovereignty over resources/right to develop.
  - Each country regulates as it sees fit.
  - UNCLOS 207 punts matter to coastal states to enact regulations to prevent pollution of the marine environment.
    - Maybe a source of future UNCLOS litigation?
      - See: Ireland v. UK (The MOX PLANT CASE) , Mixed ITLOS Arbitral Panel Case Annex VII- Case laid under UNCLOS Arts 192, 194 (and other grounds)
        - Case was diverted in 2008 to the EU's –ECJ ...but "The UNCLOS tribunal had no doubts about its jurisdiction, as regards the substantive contention of the case."

- Laws in other countries are mixed: some robust, some not
  - Even if law exists, who calls the shots - provincial gov't, the federal government, or a tribal (indigenous) organization.
  - Not all laws are created equal – amount of bond for clean up is subject to domestic agency determination
  - Will need to examine actual cases to ensure symmetry between law and practice.

- CONCERN: in some countries the short term desire for inbound capital & jobs may override the need to ensure that projects are solvent from end-to-end.

International Law - Offshore Oil and Gas

- LOS Convention gives coastal states the exclusive right to authorize and regulate drilling and oil exploration in the EEZ and on the continental shelf (Articles 56, 60 and 81
  - Canada or the Arctic Council (absent consent) can't regulate the drilling activities taking place in the US or Russian EEZ.
- States have a duty to protect the marine environment in relation to pollution from oil rigs and the operation of maintenance of offshore installations (Arts 194 and 208).
  - The OSPAR Convention- OPOL agreement and a new Arctic Council Agreement address some problems - marginally (part of Barents Sea).
- Duty to monitor and cooperate ≠ Duty to Pay Damages
- Some regional organizations, e.g., EU have legislated some improved operating practices but these rules don't apply in much of the Arctic and the OSPAR process is unfriendly to development
  - Even the OSPAR Convention does not provide for emergency response planning or for clean-up and liability rules once an accident has happened.
- In Europe, Ship Classification Authorities are heavily involved in rig operations (standards and inspections). No system like that in the Arctic yet.

CNA

The Arctic Council

- Established via a '96 Ottawa "Declaration to "oversee, coordinate" and promote programs
  - The Council has been charged with developing programs to promote sustainable development implemented by the individual states.
  - Contrast: The EU - both a political body and a regulatory body in which rules have direct application in countries + legal personality.

- Absent new binding instruments, Arctic Council has no regulatory power over the activities in Arctic waters.
  - The recently signed SAR agreement, - though negotiated under the auspices of the Arctic Council - was not in fact a product of the council itself but of its eight permanent members.
  - The oil spill response agreement is positive but no teeth or resources

- Most industry experts believe that the Arctic Council is still too weak to address the inevitable challenges posed by recent increased activity in the Arctic.
  - The 2008 Ilulissat Declaration by the 5 primary states reaffirms that the LOS Convention is a sufficient model

- China's most recent 2018 Arctic Policy makes clear that China wants a vote in how resources are managed.

Opinion: a new legal regime would not go well for the 5 littoral states. Need to work with what we have!!!!!!

FOREIGN DIRECT INVESTMENT

FDI Regulation in the Arctic Countries

- US CFIUS Law quite strict and getting more so.

- Canada
  - Investment Canada Act
    - Requires that large acquisitions be of "net benefit" to Canada.
    - Notification is required but less than 10% of acquisitions are reviewed
    - Review triggered on amount depending on WTO membership
  - Some restrictions by economic sector
  - SOE restrictions (tar sands)
- Greenland (Subject to Danish Law)
  - No mandatory screening but supervised for tax reasons
  - National treatment basis
  - Mergers and acquisitions require notification if turnover exceeds DKK 550 million (approx. USD 8.6 million)
- Iceland
  - Uses OECD and EU Standards for FDI
  - 1996 Act on Investment by Non-residents in Business Enterprises
    - Grants national treatment to non EEA residents
    - Limits foreign ownership in fishing, energy and aviation sectors
- Norway
  - National treatment except in natural resources, fishing, and maritime transportation
  - Regulation is sector by sector
  - Some screening, which are processed by relevant ministries
- Russia
  - FDI laws are volatile and frequently amended
  - Strategic Sectors Law of 2008 restricts investment in national defense and state security, requiring approval
  - 1991 Investment code and 1999 Law on Foreign Investment ensure national treatment

CNA

Investment in the Arctic

- 2012 Lloyd's of London Ltd estimates that overall investment in the Arctic could exceed $100 billon before the end of this decade. Current estimates for Chinese investment alone ~$90 bn and growing.
  - Non-renewable natural resource development
  - Infrastructure construction
  - Future PRC military bases?

- Guggenheim partners estimate that the Arctic needs $1 trillion in infrastructure investments to be profitable for business activities (statement to ThinkProgress)

China's Strategic Intent

- Marc Lanteigne, Iceland Inst of Int'l Affairs (2014)
  - China's attention two fold: (a) source of raw materials/energy and (b) trade route - although China has backed away from past incendiary rhetoric about "common heritage of mankind."
- 2014 Strategic Assessment by the Defense Policy Research Center of the Academy of Military Sciences for the PLA notes that the Arctic could be a "new Middle East" and provide a "new lifeline" for China.
- Arctic region has the advantage of being politically, economically and strategically stable and Beijing is one of the few governments with both the financial resources and the potential labor force to engage in Far North joint ventures.
- China's 2018 Arctic Policy confirms that China sees itself as an "near-Arctic state" and "Arctic Stakeholder" with the right to participate in regional decisions based on:
  - Responsibilities as a Permrep of the UNSC to ensure "security" is maintained
  - Accession to the 1925 Spitzbergen Treaty – giving it a right to mine and conduct research in the Svalbard.
  - Its close proximity to the shipping passages.

Summary Stats – PRC Investments in Arctic States (3/2018)

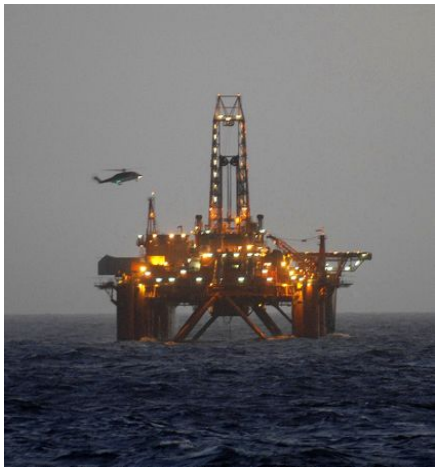
	Population	GDP	GDP per capita	# of Transactions	Average Transaction Size (Million USD)	Total Value (Billion USD)	% of GDP
Canada	35,362,905	$1.53 trillion	$46,400	107	$442.1	$47.3	2.44%
Greenland	57,728	$1.06 billion	$37,600	6	$33.4	$2.00	11.6%
Iceland	335,878	$20.05 billion	$49,200	5	$30.8	$1.2	5.7%
Norway	5,265,158	$370.60 billion	$69,400	17	$147.9	$2.5	0.9%
Russia	142,355,415	$1.28 trillion	$26,900	281	$691.7	$194.4	2.8%
USA	323,995,528	$18.62 trillion	$57,600	557	$340.6	$189.7	1.2%
Total	-	-	-	**884**	**$508.66**	**$449.66**	-

** Investments> 60 deg North about $90B.

CNA

Some Larger Chinese FDI Projects

- Canada: CNOOC acquired Nexen, Sinopec has invested in various projects
- Greenland: Knavefjeld and Isua projects (signed deals only)
- Iceland: CNOOC and Eykon Drilling in Jan Mayen and Dreki Areas
- Norway: Major Arctic road and telecom project
- Russia: Chinese companies (CNPC and Sinopec) have invested nearly $10 bn in Arctic oil and gas development.
  - Yamal Peninsula a major gas play



SPECIFIC ARCTIC IMPACTS AND CONCERNS

Operational Maritime Risks

- Transit Risks
  - Vessel source pollution due to normal operations or accident
  - Vessel stranding ice or uncharted rock – need rescue
  - Whale strikes
  - Prop or hull damage - stranding
- Tourism
  - Vessel pollution or stranding
  - ice or uncharted rock – oil loss
  - Passenger evacuation
  - Not all life rafts suitable
  - Consensus - highest risk
- Oil and Gas Extraction Risks
  - Blowout or transfer loss (rig operations)
  - Tanker incident
  - Cleanup issues

Newer Risk(s). Trends?

- The 2011 Transit of the "Suezmax" tanker Tikhonov via the NSR (under escort by the Russian Icebreaker Yamal)
  - Transit took only 7.5 days
- 2016: Cosco 5 "transit" voyages; incl: container.
- 2017 – Russian LNG carrier went from Norway to S. K. in 19 days via NSR without escort. CYPRUS Flag
  - Demonstration of capability of Yamal to export.
  - Trip was 30% quicker than convention routing via Suez
  - Obviously cheaper w/o ice breaker

CNA

General Risk: Insufficiently Prepared Ships and Crews & The Polar Code

- No mandatory IMO rule or LOS principle which requires special "hardening" or crew training.
- Polar Code is the Current Approach
  - Imposes "add on" requirements above SOLAS, STCW, & MARPOL…significant financial implications for ship owners
  - Ships entering "Polar Waters".
    - Will impose training, lifesaving & navigational safety equipment stds
    - Mandatory voyage planning. Permits?
    - Applicability to ships <500 tons?
  - Norway insurers/Classification Authorities criticize the Code as much too broad/aspirational – complicating implementation.
  - Does not current establish mandatory SOLAS Ch V routeing measure through most of the Arctic - including speed limits - to prevent cetations strikes or mandatory escort by "icebreaker" during the ice season. But MSR likely.
  - No ban on all ship discharges (above and beyond current MARPOL limits or prohibition of heavy fuels/heavy fuel oils by ships in the Arctic. (in works)

- Minimum Liability Insurance not addressed!
- Code is work in progress. Implementation ongoing.
- Applies 60 deg. North with some exceptions.

Risk: Rigs

- No IMO Instrument or the LOS addresses environmental to areas beyond national jurisdiction, including High Seas

  the fact there are no rules makes this easier to fix!
- OSPAR Convention & Supporting OPOL agreements provides some limited assistance in the North Atlantic "approaches" to the Arctic.
- State laws have varying requirements for rig licensing, including crew training, financial responsibility, inspections, etc.
  - Varying practices in terms of whether Rigs must meet a "Polar Class" material & other industry standards.
    - Canada National Energy Board (NEB), Requirements for Offshore Drilling in the Canadian Arctic, 2011 a good start.
    - Norwegian Classification Authorities have experience here
- State laws not complementary on the payment of claims in the event of a blowout & mandatory funds available for claims.
- Little or no local response capacity.

CNA

Specific Risk: Limited Liability of Shipowners vis-à-vis Response and Cleanup Costs

- U.S. under traditional Admiralty Rule, **owner liable up to the value of the hull** (after the accident) **plus the pending freight.**
  - Codified more or less in federal statute dating back to 1851., 46 USC 183 and 186. Applies only to "vessels"
  - Some exceptions to the limit rules for seaman wages, wreck removal, and oil pollution claims associated with the loss of Bunker Fuels (OPA '90 limits would apply).
- Other Countries. Under the IMO, Convention on Limitation of Liability for Maritime Claims. (SEE CHART in Stanford Report) $32M Max for regular vessels; $37.5 M for Pax vessels (reduced if a salvor)
- Exceptions for "force majeure" in both schemes…
- P&I clubs provide backup indemnity to owners for Hull and "other than Hull" risks (use of tier system w/risk allocated between individual clubs and club cooperative).
  - P&I backstop of up to $1 billion for pollution claims probably ok here…
  - Wreck removal costs a question for the experts (most P&I cover as a separate item)…(currently $2B but talk of scaling back after Costa Concordia)
  - Membership in one of the 13 clubs mandated by law (EU)/practice in most industrialized countries but 10% of world shipping not part of a club.

CNA

Analysis of Current Risk Trajectories

MARITIME Activities

- **NO Legal agreements to address liability for** offshore accidents oil rigs.
- **Regulatory authority of coastal states are limited** vis-int'l shipping
  - Outside of IMO context or Art 234 construct, direct regulation of "foreign flag shipping" by coastal state would be an excessive claim
    - Have seen interesting legal arguments that states bordering the Arctic could classify the Arctic as a semi-enclosed sea (Art 123) and enact measures to protect marine environment.
  - NSR and NW Passage test these jurisdictional limits.
- The IMO Polar Code could be unifying….but some years out. Should help to improve overall safety of Arctic Shipping.
- **Limits on liability in IMO instruments insufficient** given potential costs of a cleanup (e.g., hazmat) and response costs.
  - Force Majeur defenses make no sense in Arctic environment
  - $1 Billion in P&I coverage for damages other than oil pollution damage would likely not be available.
  - **Infrastructure** to assure safe navigation **needed now**. Small response capability or staging infrastructure

LAND BASED ACTIVITIES

- Remoteness can lead to delayed discovery of an incident… Powerful currents and prevalent bad weather mean that pollution can spread quickly and widely
- No reciprocal development standards. Questionable capacity to regulate. Incentives may favor current employment (jobs) over long term site security.

INVESTMENT

- No regional standards. States very different in how they regulate FDI. Some states a black box – Russia. Some states actively courting capital – Greenland.

CNA

Thoughts on FDI Trends

- U.S. sanctions against Russia has increased Sino-Russian collaboration- especially in the oil and gas sphere
- Russia would rather not source capital from China
- Recent press reports that China is courting Canadian officials to develop ports and potentially the NW Passage
- China is exploiting the lack of US economic presence i.e., Jan 2018 joint venture between PRC and Finland to establish a "data silk road" to lay undersea cables which hug most of the Russian Arctic coastline.
- China has invested in icebreakers – has one, building a second

CNA

FDI AND INCREASED SHIPPING RISKS - FUTURE POLICY CONSIDERATIONS

Areas for Policy Development – FDI

- Are regional development standards (working alone or in tandem with FDI standards) a good idea? Should a superfund be established? Bonding Requirements?
  - If yes, how to monitor?
  - Who to broker? Multilateral or Arctic Council?

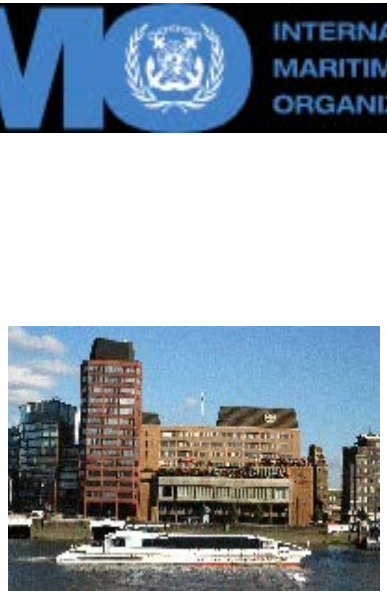
- What About an FDI code to "level the playing field" a good idea.
  - If yes, how is it done. What is the correct balance.
  - Can it be done within existing legal frameworks.
  - Should the Arctic Council develop it and then "front to the other states for adoption."

CNA

An Arctic Development Bank

- A major factor in China's FDI success has been their export credit agencies including China's EXIMBANK, China Development Bank, and its OPIC equivalent (SINOSURE).
  - These entities can underwrite Chinese exports and foreign infrastructure acquisitions much more efficiently that US EXIM (for example). Greater liquidity, fewer strings, lower compliance costs, lower rates (mostly), and little real default risk to borrower.
  - China also brokered formation the 57 member Asian Infrastructure Investment Bank (Beijing Based) to be alternative source of capital.
- Would establishment of an Arctic Development Bank help to provide Arctic states an alternative to "Chinese" capital.
  - U.S., Canada, and Norway are sufficiently well placed financially to do this. Would need an international agreement to establish the lending facility.
- The Private Sector is trying: The Arctic Investment Protocol includes VC and a few big companies (STATOIL)

Mitigating the Transit and Operational Risks



- Push for Port State Control Agreement among 7 littoral states to require provisional adherence to the 2008 Guidelines and the "final" version of the Polar Code. (Augment as necessary).
- Resolve internecine issues with status of Northern Sea Route and NW Passage
  - Arctic Council should broker meeting(s) to lead to the IMO submission of the NSR as an IMO approved Roueting Measure.
    - Arctic Council could then cite 234 as a legal justification for issuing interim guidance pending formal IMO approval of the Routeing measure.
    - Consider supporting of Russian model of requiring mandatory pilotage and voyage plans and levy fees which recoup those costs.
- Arctic Council could model the Straits of Malacca Cooperative Mechanism which works on a totally voluntary basis

Mitigating Tanker Spill Liability Risks

- IMO Route: Polar Code should have an annex which addresses mandatory insurance limits for any tankers which go in the Polar Region
  - This regulation should trump the existing IMO and OPA-90 limits and provide much higher "basic" owner insurance limits - at least $2B.
  - "Mini Arctic Marpol" for Tankers and Chemical Carriers.
- Commercial Route – Arctic Council should meet with P&I club(s) to either form a new P&I club or ID a specific club to provide suitable underwriting for Arctic tanker traffic to address excess liability.
  - Arctic council could make deal with P&I clubs/hull insurers - promise gov't assistance in exchange for higher limits & caps on liability ($2B) and financial assistance in funding oil spill response capabilities
  - Codified as an international agreement
- Port State Control. Failing above, Arctic Council could establish a rule for Arctic Tanker Shipping which Arctic States adopt & enforce via port state control inspections.
  - A backward way to regulate the issue but LOS compliant.

CNA

Bridging the Gaps in Rig Operator Liability

- OPOL/OSPAR Approach: Arctic Council should broker agreement to have uniform liability requirements incorporated into rig licensing among "big 5" and adoption of a code of best practices (ISO 19906 (2010)) OPOL like agreement & OSPAR agreement.
  - Legally binding in domestic courts. Trump current domestic laws. Strict Liability but liability limits unbreakable
  - Could heavily rely upon the OICMF or Classification Societies to Inspect …NOT OSPAR model.
- Mega P&I Club Approach: Arctic Council stimulate formation of an P&I club for Arctic Rig Operators with realistic limits on liability e.g., $5-$10B..
  - P&I club uses premium dollars to pay a share of infrastructure costs related to reducing their cleanup risk(s).
  - P&I club could condition insurance on rig standards compliance & OICMF inspection – via its marine inspection and survey arm.
- Both models need unbreakable limits on liability

Final - Take Aways

- Security in the Arctic is broader than just the military dimension
- The Arctic is still relatively pristine from a shipping and FDI perspective but things are changing
- There are inadequate cross-border mechanisms in place to deal with an accident/incident. Most ships have some insurance but limits inadequate; the process of dealing with incidents from rigs or mines is a serious problem.
- China, and other states, are likely to continue to look at the Arctic as the "final frontier" and will make FDI investments in a variety of countries. This behavior is economically rational; not evil.
  - Not all FDI is good; track record of some Chinese FDI is quite bad and could be destabilizing or leave coastal states "holding the bag" to clean up from industrial accidents
  - China has shown it has $$$ to spend and is doing it quickly.
  - Providing alternative sources of capital (with associated strings) will enable local countries to develop their own resources using of combination of cheap money and the best technologies and labor practices. Other models can't compete with cheap Chinese capital.
- IMO needs to step up to deal with under insurance problem and, potentially, establishing a preferred route through the Arctic.
- Issues for IC: Need for more tracking analysis of Chinese political and economic influence in the Arctic. China does not appear to be content to only be a passive investor!

CNA