

# Hugvísindasvið

# **The Long March North**

Iceland and China's Arctic Strategies:

A Synthesis

Ritgerð til BA -prófs í Austur-Asíu fræðum

Páll Þór Sigurjónsson

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Kt.: 150986-2309

Leiðbeinandi: Magnús Björnsson

#### Abstract

The importance of the High North to Iceland has increased in the last decade. With Arctic sea ice melting at an ever increasing rate the possibility of hydrocarbon extraction and opening shipping lanes has become very real and a debate has already begun over how best to manage the opportunities that will bring to the shores of Iceland. But the transforming Arctic also poses a real danger for the nation. With escalating human activities the risk of environmental disasters and oil spills in the region is increasing, with potentially calamitous repercussions on Icelandic biodiversity and ecological equilibrium. These are not the only changes Iceland needs to adapt to. Distant powers have stepped onto the Arctic stage vying for influence in a region that hitherto had been of no concern to them. This has already begun altering the geopolitical realities of the Arctic. Of those distant powers China is by far the biggest. With its ever spreading global influence and economic clout China has now set out on the long march north where it hopes to significantly influence the geopolitical landscape.

Iceland's future potential in the Arctic is intrinsically tied into the uncertainties of resource extraction and Arctic shipping, but these changes could also endanger Icelandic fisheries in ways that are still unknown. These two utterly disparate counties will, albeit disproportionally, influence each other in their respective pursuit of perceived interests, which will either strengthen or inhibit their capabilities in the region. This paper will attempt to shed some light on their differing perspectives in the realms of Arctic shipping, resource extraction and fishing, as well as analyse where their interests coincide and where they diverge, before ultimately assessing if the future will behold closer cooperation or increased confrontation.

## Úrdráttur

Mikilvægi Norðurslóðanna fyrir Ísland hefur aukist hröðum síðasta áratuginn. Með sífellt vaxandi bráðnun hafíss við Norðurskautið aukast möguleikar á jarðefnanýtingu og opnun siglningaleiða. Umræða um hvaða möguleika þetta ber í skauti sér og hvernig best sé að stíga niður til jarðar í þeim efnum hefur þegar hafist. En þessar gífurlegu umbreytingar fela líka í sér miklar hættur fyrir landið. Með auknum umsvifum manna á Norðurslóðum eykst áhættan á umhverfisóhöppum og olíulekum með stórkostlegum afleiðingum á fjölbreytni lífríkissins og stöðuleika vistkerfisins við strendur Íslands. Þetta eru ekki einu breytingarnar sem Ísland verður að aðlagast að. Fjarlæg stórveldi hafa ruðið sér til rúms á Norðurslóðasviðinu og keppast nú um áhrif á svæði sem til þessa skipti litlu fyrir hagsmuni þeirra. Þetta er nú þegar að breyta geopólitískum veruleikum norðurslóðanna. Af þessum fjarlægu þjóðum er Kína þeirra stærst. Með sífellt auknum hnattrænum áhrifum þess og efnahagslegum mætti hafur Kína nú hafið gönguna löngu í norður þar sem Kína vonast til að hafa umtalsverð áhrif á pólitískt landslag svæðisins.

Hugsanlegir möguleikar Íslands á Norðurslóðum eru í eðli sínu nátengdir þeirri óvissu sem jarðefnanýting og heimsskautasiglingar ber með sér, en þessar umbreytingar kunna einnig að stefna fiskimiðum Íslands í hættur sem enn eru á huldu. Þessi tvö gjörólíku lönd munu hafa áhrif á hvort annað með umsvifum sínum á svæðinu, sem munu annað hvort grafa undan eða styrkja völd/stöðu þeirra á Norðurslóðunum. Þessi ritgerð mun reyna að varpa ljósi á mismunandi sjónarhorn þeirra tveggja á sviði heimsskautasiglinga, jarðefnanýtinga og fiskveiða, sem og að greina hvar hagmunir þeirra munu leiða þau saman og hvar hugsanlegir hagsmunaárekstrar geta orðið. Að lokum er veður metið hvort aukin samskipti þeirra munu leiða til nánara sambands eða aukinna árekstra.

#### List of Abbreviations

CCP	China Communist Party
CNARC	China-Nordic Arcitc Research Center
CNOOC	China National Offshor Oil Coorporation
Cosco	China Ocean Shipping (Group) Compan
DWF	Distant Water Fishing
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
RFMO	Regional Fishery Management Organization
DAV	Double Acting Vessel
IPCC	International Panel on Climate Change
IUU	Illegal, Unreported and Unregulated (fishing)
LNG	Liquefied Natural Gas
NAFO	Northwest Atlantic Fisheries Organization
NEAFC	Nort East Atlantic Fisheries Commission
NEA	National Energy Agency
NPD	Norway Petroleum Directorate
NSR	Northern Sea Route
NWP	North West Passage
OPPR	Oil Pollution Preparedness and Response
PRIC	Polar Research Institute of China
SAR	Search And Rescue
SIIS	Shanghai Institute for International Studies
TSR	Transpolar Sea Route

UNCLOS United Nations Convention on the Law of the Sea

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#### Introduction

Ten years ago few could have predicted how profoundly we are changing the Arctic and how in turn the Arctic is changing us. To most people the Arctic was locked in ice and few people went there, Interest in the region was limited to a score of scientists and anthropologists. Today however the Arctic has become a trans-disciplinary scientific hotspot, ships are transiting the Arctic on a regular basis and the once obscure Arctic Council is becoming a leading high governmental trans-regional forum. Meanwhile in Iceland many politicians assert that the country's greatest potential in this century lies in the Arctic and no overview of Icelandic current affairs is complete without mentioning the region. Indeed the people themselves have begun defining themselves collectively as an "Arctic Nation". It is strange to think that merely ten years ago an Arctic report done by then Prime Minister Davíð Oddsson contained a chapter titled "What is the Arctic?". Við ystu sjónarrönd. But how are we causing this profound change in the Arctic?

Human induced Global Warming has become irrefutable. IPCC puts it at 95-100% confidence level<sup>2</sup>. In no other place on the planet is this as unequivocal as in the Arctic. The Arctic is undergoing the greatest transformation it has for many millennia. In fact the last time the Arctic was significantly warmer was 125.000 years ago<sup>3</sup>.

Since 1980 the Arctic has experienced twice the average global temperature rise<sup>4</sup>. The 5 year period between 2005 and 2010 has had a higher surface air temperature than any other 5 year per period since around 1880, when measurements began<sup>5</sup> and the 10 warmest years have all happened since 1998. Since modern satellite monitoring of sea ice extent began, in 1979<sup>6</sup> the average reduction of sea ice extent has been 3.5-4.1% per decade<sup>7</sup>, with the largest decadal decrease in September, at the annual sea ice extent minimum, and the smallest decrease has been at the annual maximum in March, 9.4<sup>8</sup> and 2.6% respectively. This negative trend is expected to continue and perhaps even increase.

The most thorough literary review of climate change to date is the IPCC 5. The IPCC 5 report used a suite of models to predict the scale of sea ice extent into the 21<sup>st</sup> century and concluded that sea ice extent will continue to decline and some models find it likely that the Arctic could be ice free before the middle of the century <sup>10</sup>. The previous 2007 IPCC 4 paper severely underestimated the rate of this change and all their models had been much more conservative than observations have indicated, in fact as of 2007 the observed reduction was about 30 years ahead of the ensemble mean model forecast <sup>11</sup>. As for surface air temperature in the central

<sup>&</sup>lt;sup>1</sup> Utanríkisráðuneytið, 2004

<sup>&</sup>lt;sup>2</sup> IPCC, 2007, p. 15

<sup>&</sup>lt;sup>3</sup> IPCC, 2007, p. 9

<sup>&</sup>lt;sup>4</sup> Arctic Monitoring and Assessment Programme (AMAP), 2011, p. 8

<sup>&</sup>lt;sup>5</sup> Ibid p. 8

<sup>&</sup>lt;sup>6</sup> United Nations Environment Programme (UNEP), 2007, p. 68

<sup>&</sup>lt;sup>7</sup> IPCC, 2013

<sup>&</sup>lt;sup>8</sup> National Snow & Ice Data Center (NSIDC), 2012

<sup>&</sup>lt;sup>9</sup> National Snow & Ice Data Center (NSIDC), 2012

<sup>&</sup>lt;sup>10</sup> IPCC, 2013

<sup>&</sup>lt;sup>11</sup> Stroeve, Holland, Malanik, Serreze, Kay, & Barrett, 2011; Wang & Overland, A sea ice free summer Arctic within 30 years?, 2009, p. 2.

Arctic autumn (October - November) between 2005 and 2008 were as high as IPCC was predicting for  $2070^{12}$ .

The large discrepancy between observed and predicted trends speaks to the complexity of the ice-ocean-atmosphere system in the Arctic. The effect of some processes has been underestimated, are not fully understood or their effect is increasing, namely the increase in albedo feedback and disruption and intermingling of sea currents<sup>13</sup>. There are several processes happening which seem to have a circular causal relationship, a feedback effect. Some of which have an amplifying effect (positive feedback) and others have an inhibiting effect (negative feedback).

The albedo feedback loop starts by the forcing of greenhouse gases which lead to higher Arctic temperature which decreases sea ice extent during the melt season, consequently that diminished sea ice extent increases the surface area of the sea. That dark surface area absorbs much more of the sun's radiation. This energy is released during autumn through heat which affects surface temperatures. The rising temperature in return delays ice from forming in winter which further escalates the summer melt reducing the sea ice extent even more which increases the sea surface area<sup>14</sup>.

Studies done after the 2007 IPCC assessment have tried to account for the difference in recent observed and predicted trends but Given the complex interplay in the ice-ocean-atmosphere system in the Arctic estimates on when we will see an ice-free Arctic in September varies considerably but most of them predict an ice free Arctic sometime between 2020-2065 15. Overland and Wang opines that it's more likely that the Arctic will be largely ice free in the first half of the century "with a possibility of major loss within a decade or two". 16.

Whatever the timeframe, the impending melt of the Arctic sea will have a profound environmental, ecological, social, economic, political and security implications, with challenges and opportunities all over the globe but amplified in the Arctic.

In the context of the rapidly changing Arctic new geopolitical realities are emerging. Nations around the Arctic Circle are assessing how best to adapt to this evolving environment and new players have also stepped onto the stage vying for influence. The once obscure Arctic Council is fast become a high governmental trans-regional forum having recently accepted five Asian countries into its midst. Hitherto inaccessible oil, gas, rare earths and other minerals have now become exploitable and players from near and far have started "jockeying for position". Sailing north into the Pacific is now not only possible but might be becoming a viable cargo route drawing these three continents closer together.

Concurrently Sino-Icelandic relations have increased considerably in recent years. Chinese Premier Wen Jiabao visited Iceland in 2012<sup>17</sup>, the countries recently signed a bilateral Free Trade Agreement<sup>18</sup> and extensive cooperation in geothermal energy has begun<sup>19</sup> to name a few.

<sup>&</sup>lt;sup>12</sup> Wang & Overland, A sea ice free summer Arctic within 30 years?, 2009

<sup>&</sup>lt;sup>13</sup> Stroeve, Holland, Malanik, Serreze, Kay, & Barrett, 2011

<sup>&</sup>lt;sup>14</sup> Ibid. p. 3; Arctic Monitoring and Assessment Programme (AMAP), 2011

<sup>&</sup>lt;sup>15</sup> Arctic Monitoring and Assessment Programme (AMAP), 2011, p. 48; IPCC, 2013, p. 42; Wang & Overland, 2012); Overland & Wang, 2013; Massonnet, et al., 2012; Holland, Bitz, & Tremblay, 2006 <sup>16</sup> (Overland & Wang, 2013)

<sup>&</sup>lt;sup>17</sup> Mbl, Funda á Bessastöðum, 2012

<sup>&</sup>lt;sup>18</sup> Mbl, Fríverslunarsamningur Íslands og Kína undirritaður, 2013

Why has this partnership increased so rapidly and where does the Arctic fit in? In this paper both the Icelandic and Chinese Arctic strategy will be analysed and the probability of cooperation or confrontation will be evaluated. More specifically, as the Arctic ice melts and new corridors open up how will China and Iceland influence each other's perceived interests? This paper will look at if this increased interaction can lead to closer cooperation or are the nations on a road to increased confrontation? Its focus will be on the three aspects of their respective strategies the author considers will become their core interests in the region, and the main cause of interaction between these two disparate countries in years to come. Namely, shipping, resource extraction and fishing. The paper will systematically go over the future potential of each aspect generally and their specific importance for both countries, eventually evaluating where their Arctic strategies align and where they might diverge.

<sup>&</sup>lt;sup>19</sup> Mbl, *Með 80 hitaveitur í Kína*, 2013

## **Shipping**

The Arctic comprises of three routes. The Northern Sea Route (NSR); North West Passage (NWP) and the Transpolar Sea Route (TSR). The Northern Sea Route (NSR) is a seaway connecting Europe and Asia. It goes from Murmansk on Kota peninsula alongside the Siberian coast and through the Bering Strait into the West Pacific Ocean<sup>20</sup>. The TSR on the other hand crosses straight through the Arctic Sea and into the Bering Strait, avoiding Russia's territorial waters<sup>21</sup>.

With receding sea ice and warmer temperatures the Arctic has started opening up for ship traffic during short periods in summer, the shipping season is expected to get longer with time and become near ice-free during late summer (September) sometime in this century.

This inevitability will link Asia in the east with Europe and North America in the west thus drastically shortening the distance between these markets, compared with the traditional sea lane via the Suez Canal and Strait of Malacca. From Yokinawa to Rotterdam, for instance, the distance is reduced by 40%<sup>22</sup>. and from Shanghai to Hamburg its reduced by 25% and saves 10-12 days off the trip potentially leading to potential cost savings<sup>23</sup>.

#### Oil and LNG

Oil being extracted in Norway, Canada, Russia and the U.S. accounts for about 28% of world production and 46% of gas output<sup>24</sup>. Additionally, according to the US Geological Survey about 13% of all remaining global oil reserves and 30% of LNG lie in the arctic, 84% of which are within the Exclusive Economic Zones of their respective countries<sup>25</sup>.

More access to these resources increases the need to transport them to markets. The increase in transport is already noticeable. Between 2012 and 2013 the total cargo transported on the NSR went up 54%. The ships traversing the NSR went from 4 in 2010, 34 in 2011, 46 in 2012 and in 2013 there were 71 vessels carrying over 1.3 tons of cargo<sup>26</sup> which is still dwarfed by the 17.000 vessels carrying almost 740 million tons that went through the Suez canal the same year<sup>27</sup>. Most of the oil and LNG is being shipped to the energy hungry countries of Asia and that market will be the main destination for these resources. 2012 saw the first transit of LNG via the Arctic when the 1A ice-classed vessel Ob River transported 66.000 tonnes (135.000 m²) of LNG from Snohvid gas plant in Northern Norway to Tobata in Japan. It took the vessel just under a month to traverse the arctic arriving in Japan early December, saving an estimated 20 days and \$3 million excluding icebreaker assistance<sup>28</sup>

<sup>25</sup> See e.g. Arctic Council, 2009 and Stephenson, forthcoming.

<sup>&</sup>lt;sup>20</sup> Staalesen, *Northern Sea Route without Murmansk*, Barents Observer, 2012.

<sup>&</sup>lt;sup>21</sup> Utanríkisráðunevtið. 2009. p. 46.

<sup>&</sup>lt;sup>22</sup> Liu & Kronbak, 2009.

<sup>&</sup>lt;sup>23</sup> Verny & Grigentin, 2009.

<sup>&</sup>lt;sup>24</sup> BP, 2013.

<sup>&</sup>lt;sup>26</sup> For further statistics see Northern Sea Route Information Office, *NSR Transits 2013*, 2013 at http://arctic-lio.com/nsr\_transits.

<sup>&</sup>lt;sup>27</sup> For Suez Canal statistice see: Suez Canal, *Brief Yearly Statistics*, 2013 at http://www.suezcanal.gov.eg/TRstat.aspx?reportId=4.

<sup>&</sup>lt;sup>28</sup> Trade Winds News, *Ob River reaches Japan*, 2012 and McGrath, *Gas tanker Ob River attempts first winter Arctic crossing*, BBC, 2012.

The NSR is becoming viable for destination shipping of natural resources but many of these transits been made for testing the technical practicality of the NSR and the route is still in a trial period<sup>29</sup>.

There are also major obstacles standing in the way of the NSR developing into a busy seaway. When transiting companies incur heavy Russian fees such as pilotage services and icebreaker assistance average \$200.000<sup>30</sup>, insurance premiums are also extremely expensive, and there's a danger of moving ice floes.

In September 2013 when a 6400 dwt tanker full of diesel got hit by an ice floe it took half a month to be rescued highlighting the many dangers these waters present<sup>31</sup>. The environmental implications of a catastrophe are huge and the ability for arctic nations to react to emergencies is severely lacking, managing an oil spill there is extremely hard with sea ice, low visibility, rough seas, high winds and sub-zero temperatures<sup>32</sup>, additionally no current methods are able to adequately deal with oil spills onto, or within, sea ice<sup>33</sup>. The cost of drilling for oil and gas in the arctic Cost of drilling offshore wells in the Chukchi Sea (ca \$60m) are 850% higher than in Gulf of Mexico (ca \$7m)<sup>34</sup>.

Despite these dangers and cost, natural resources will continue to drive traffic through the NSR with huge projects such as the the Yamal project, owned by Russia's Novatec (60%), France's Start (20%) and China's CNPC (20%). It will have an annual capacity of 16.5 million m³ and might double Russia's LNG productions³5. Massive infrastructure has been built around this project such as pipelines, railroads, an international airport and a harbor³6. Projects such this will constitute the majority of cargo movement in the Arctic and stimulate infrastructure projects and other types of cargo shipments. To increase the attractiveness Russia is planning to open 10 Search and Rescues (SAR) bases along the NSR, established a NSR administration and have revoked the requirement of ice breaker assistance³7 but much else is needed for it to become in any meaningful way connected to the world shipping routes.

#### Cargo shipping

A lot of the debate around the future of the Arctic has centered around cargo ships transiting the area, many envisioning large heavy traffic of large containers plowing through these once ice locked waters, utilizing considerable shorter distances, time saving and much less oil consumption. The reality remains different. Natural resources as well as cargo ships, have been the majority of traffic and in fact to date, not a single container ship has ventured through the Bering Strait. The reasons of this lack are manifold: schedule unreliability; condition variability; lack of infrastructure, service hubs and en-route markets; high insurance premiums, oblique

<sup>&</sup>lt;sup>29</sup> See e.g. Stensvold, *Ingen kø gjennom Nordøstpassasjen*, TU, 2011 and Mckie, *China's voyage of discovery to cross the less frozen north*, The Guardian, 2013.

<sup>&</sup>lt;sup>30</sup> Lloyd's, 2012, p. 29.

<sup>&</sup>lt;sup>31</sup> Northern Sea Route Information Office, *The tanker "Nordvik" left the NSR water area*, 2013.

<sup>&</sup>lt;sup>32</sup> PEW Environment Group, 2010, p. 3.

<sup>&</sup>lt;sup>33</sup> Ibid. p. 8.

<sup>&</sup>lt;sup>34</sup> Stephenson, forthcoming, p. 3.

<sup>&</sup>lt;sup>35</sup> Staalesen, Yamal LNG ahead of schedule, Barents Observer, 2012.

<sup>&</sup>lt;sup>36</sup> Novatek, NOVATEK, CNPC and Chinese banks conclude memorandum on project financing for Yamal LNG, 2013.

<sup>&</sup>lt;sup>37</sup> Staalesen, *Opening the Northern Sea Route administration*, Barents Observer, 2013 and Pettersen, *Arctic emergency center opens in Murmansk in 2013*, Barents Observer, 2012.

Russian fees for ice breaker assistance and accessibility, and navigational safety and mapping to name just a few<sup>38</sup>.

In the absence of on the ground experience with container shipping, feasibility studies and industry commentary will be looked into to gauge what expectations shipping companies and specialists have for these transit routes, particularly the NSR.

Many feasibility studies have been done looking at the feasibility of the NSR. They all have different methodology in assessing the future viability of the NSR and consequently have differing conclusions.

Verny and Grigentin looked at a hypothetical route between Shanghai and Hamburg where they points out that costs for shipping through NSR is roughly twice as expensive as the Suez route, roughly 93% of that estimated cost are the ice strengthened ship and oil prices. However they concludes that the potential income of setting up a regular line outweighs the costs due to climate change and future full capacity of the Suez Canal the NSR is a viable "second tier" alternative to the Suez Canal<sup>39</sup>.

Den Norske Veritas (DNV) estimated that a 5000TEU double-acting vessel (DAV)<sup>40</sup> would only become competitive for year-round shipping by 2050 if bunker prices went up to \$900/tonne. For year-round shipping using a 6500 TEU PC4 ice-classed vessel will be competitive to Tokyo and Hong Kong by 2030 and 2050, respectively, in the most optimistic estimates (i.e. high bunker prices and long summer season)<sup>41</sup>.

Aker Arctic Technology the owner of the DAV technology made a prefeasibility study, on behalf of Institute of North in Alaska, using an existing 750 TEU and a hypothesized 5000 TEU vessels between Aleutian Islands and Iceland. They concluded that the 5000 TEU vessel is profitable, however only marginally so<sup>42</sup>.

Schøyen and Bråthen looked at a couple of cases of tramp shipping <sup>43</sup> of raw materials between Asia and North Europe with a focus on fuel savings and CO2 emissions. They conclude that the NSR is possibly already profitable during summertime, however only slightly. Tramp shipping is also likely to be more feasible than container shipping in the Arctic as it is performed on a contract to contract basis and is not bound by the same strict time restrictions and schedule as container shipping <sup>44</sup>. While others have opined that it will become profitable as soon as icebreaking fees are considerably reduced <sup>45</sup>.

However good the theoretical feasibility studies may be, the future of Trans-Arctic container transportation ultimately hinges on is the perceived benefits shipping companies will see by utilizing the NSR. There are indeed some companies that see a niche market in destination

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<sup>&</sup>lt;sup>38</sup> Arctic Council, 2009, p. 97.

<sup>&</sup>lt;sup>39</sup> Verny & Grigentin, 2009.

<sup>&</sup>lt;sup>40</sup> DAVs have a conventional design on the bow but a bulbous aft. Therefore they work like conventional ships sailed forward but have ice-strengthened capability when sailed backwards. Interestingly this design is promoted by the Icelandic government and China's next Icebreaker will be built using this technology.

<sup>&</sup>lt;sup>41</sup> DNV, 2010.

<sup>&</sup>lt;sup>42</sup> Aker Arctic, 2006.

<sup>&</sup>lt;sup>43</sup> i.e. shipping that does not have a fixed schedule.

<sup>44</sup> Schøyen & Bråthen, 2011.

<sup>&</sup>lt;sup>45</sup> Liu & Kronbak, 2009.

shipping such as resupplying oil and LNG fields as well as bulk shipping <sup>46</sup> but most shipping companies are much less excited about the possibility of container shipping through the Arctic <sup>47</sup>.

Senior Vice President of Maersk, who has 15% market share in the container shipping industry, has doubts that the route will open up for container traffic in the next 15-20 years because of the need of ice-breaker assistance and the short navigation season<sup>48</sup>. Other point of view include the transit from Europe to East Asia does not offer any alternative markets like the traditional route does where there are transshipment opportunities such as in Arabia for East Africa and the Malacca Straits for Oceania, the insurance, lack of support facilities and port infrastructure, as well as capable ships<sup>49</sup>.

Frederic Lasserre and Sebastien Pelletier in fact did a survey of almost 100 shipping companies asking the heads and CEOs if they were considering developing operations in the Arctic. Out of those roughly 17% were considering it, and none in the container shipping. Further 10% answered maybe and only 3 of those (out of 38) belonged were container shippers<sup>50</sup>.

Traffic along the NSR will doubtlessly increase in the future but in the near term it will be led by shipping of oil and LNG out of the Arctic as well as niche markets that are not bound by strict schedules such as destination shipping of natural resources and metals and resupplies to oil and LNG plants, the Yamal project alone can be expected to contribute a large part of the overall eastbound traffic on the NSR. In the near term it is extremely unlikely that commercial shipping, especially container shipping which is the vast majority of traffic between Europe and Asia, will start going regularly through the Arctic.

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<sup>&</sup>lt;sup>46</sup> See e.g. Stensvold, 2011 (see footnote 28).

<sup>&</sup>lt;sup>47</sup> Lasserre & Pelletier, 2011.

<sup>&</sup>lt;sup>48</sup> Milne, Arctic shipping routes still a long-term proposition, says Maersk, Financial Times 2013)

<sup>&</sup>lt;sup>49</sup> Saul, *Icebergs, insurance hamper top of the world shipping route*, Reuters, 2013.

<sup>&</sup>lt;sup>50</sup> Lasserre & Pelletier, 2011.

## **Icelandic Arctic Strategy**

The Arctic has very much become a focal point of Iceland's foreign policy, due to its obvious interests in the region. Iceland's interests were first articulated in the 2005 report "Fyrir Stafni Haf: Tækifæri Tengd Siglingum á Norðurslóðum" where Iceland's geographical importance in light of future Arctic shipping was emphasized, and the possibility of building a transhipment hub for cargo going between Asia on one hand and Europe and North America on the other was promoted In 2007 an international conference on the future of Arctic shipping and the possibility of a transhipment hub in Iceland was held in Akureyri, attended by participants from all Arctic Council member states as well as 5 delegates from China In China In Iceland China Iceland China

In the ensuing years the scope of Iceland's Arctic strategy was broadened, and a more refined approach adopted. Perhaps in part due to the realization that the Arctic did not provide limitless opportunities but also posed some imminent dangers to Iceland's interests.

A 2009 report "Iceland in the High North" was published by the MFA. The report's key focus was on: international cooperation; security through international cooperation; resource development and environmental protection; transportation; people and culture; and science and monitoring 55. 2 years later the Icelandic Parliament (Alþingi) approved a full-fledged Arctic strategy.

The "Resolution on Arctic Policy" is divided into 12 principles, with International cooperation an overarching theme. The strategy emphasizes: the promotion and strengthening of "the Arctic Council as the most important forum for cooperation"; "Securing Iceland's position as a coastal State" and "promoting the Arctic not as a limited, narrow geographical definition but rather be viewed as an extensive area"; "building on agreements", such as United Nations Convention on the Law of the Sea (UNCLOS) to resolve differences, and strengthening cooperation with other nations; work against any kind of militarization,; promote a sustainable utilization of resources and support the rights of indigenous people. Furthermore Iceland should be promoted as a venue for any assembly regarding Arctic issues as well as its educational or research bodies dealing with the Arctic 56.

The increasing importance of the Arctic to Iceland's interests has made the area one of the pillars of its overarching foreign strategy. Iceland in the High North starts by stating that "Iceland is the only country located entirely within the Arctic region and its prosperity relies heavily on sustainable utilization of the region's natural resources"<sup>57</sup>. The insistence on being recognized as a littoral state is essential for Iceland as it would prevent its exclusion from the "Littoral five" meetings and has the technical bearing on fishery agreements<sup>58</sup>. It was a response, and an act of defiance, to the five littoral states' two ministerial meetings in 2008 and 2010, which Iceland highly criticized both publicly and privately<sup>59</sup>. The Resolution itself states that no

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<sup>&</sup>lt;sup>51</sup> Utanríkisráðuneytið, 2005; Translated version was issued 2006 entitled "North Meets North: Navigation and the Future of the Arctic".

<sup>&</sup>lt;sup>52</sup> Utanríkisráðuneytið, 2006.

<sup>&</sup>lt;sup>53</sup> Akureyri Conference Report, 2007.

<sup>&</sup>lt;sup>54</sup> Ísland á Norðurslóðum.

<sup>55</sup> Utanríkisráðuneytið, 2009, p. 8; Translation by Bailes & Heininen, 2012, p. 74.

<sup>&</sup>lt;sup>56</sup> Alþingi, 2011.

<sup>&</sup>lt;sup>57</sup> Utanríkisráðuneytið, 2009, p. 8.

<sup>&</sup>lt;sup>58</sup> Bailes & Heininen, 2012, bls. 76.

<sup>&</sup>lt;sup>59</sup> Skarphéðinsson, 2012.

member state should be excluded from any Arctic Council meeting as this would "undermine the Arctic Council". It goes further and asserts that should this continue into a formal platform it would dissolve the solidarity between the Arctic Eight and considerably weaken the Arctic Council. It is clear that any and all attempts to exclude Iceland from participation in Arctic Council meetings will be met with fierce resistance from Iceland. Iceland feels that "Icelanders, more than other nations, relies on the fragile recourses of the Arctic" citing fishing, tourism and energy production as examples <sup>60</sup>. Moreover, due to its EEZ lying within the Arctic Circle and its adjacency to the East Greenland Sea, a part of the Arctic Ocean, it claims it should be considered as "a coastal State within the Arctic" <sup>61</sup>. As of yet no other Arctic States has supported Iceland's claim as an Arctic littoral state <sup>62</sup>.

Iceland is also very willing to engage in any other regional framework encompassing the Arctic, this can be seen in Barents-Euro Arctic Council, Council of Baltic Sea States, the EU North Dimension and the West-Cooperation<sup>63</sup> but the Arctic Council remains the supreme forum for discussion.

#### **The Arctic Council**

Iceland, like all other Arctic States, puts the Arctic Council in the forefront of international cooperation and decision making on Arctic matters. From its humble beginning in 1996 as a high level intergovernmental forum for discussing environmental protection and sustainable development the Arctic Council has become a much more important venue for intergovernmental engagement than first envisioned<sup>64</sup>. Today it is no longer a closed group of Arctic States snuggly discussing regional matters with the international community idly looking by, but a forum where the greatest geopolitical powerhouses, such as the EU and China, and even equatorial countries like Singapore are knocking on the door. The melting Arctic will likely be an important factor in shaping the future of these differing regions hence the Arctic Council has become the dominant forum on Arctic issues. Its powers are however limited, it does not for instance have any enforcement powers or jurisdiction over its member states and therefore its declarations are policy recommendations<sup>65</sup>. Where the Council lacks in jurisdiction it has to rely on other legal frameworks such as UNCLOS and IMO, yet quite significantly, under the auspices of the Council, its members have signed two legally binding agreements: The Aeronautical and Maritime Search and Rescue (SAR) agreement of 2011 and the 2013 agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (OPPR<sup>66</sup>).

Naturally Iceland puts great emphasis on strengthening the Arctic Council's leadership role, within it Iceland is on (almost) equal footing with member states. It is also in Iceland's interest to work within multilateral forums where it can influence decisions and more effectively safeguard its interests. This is especially true with regards to the Arctic Council where Iceland wields a disproportionally more power than is usual for a state of its size. It is therefore vital for Iceland to use the Arctic Council as a platform for cooperation to safeguard its interests.

<sup>62</sup> Bailes & Heininen, 2012.

<sup>&</sup>lt;sup>60</sup> Alþingi, 2011, p. 6.

<sup>&</sup>lt;sup>61</sup> Ibid.

<sup>&</sup>lt;sup>63</sup> Skarphéðinsson, 2012.

<sup>64</sup> Willis, 2013.

<sup>&</sup>lt;sup>65</sup> Keil, *Moving Mosaic: The Arctic Governance Debate*, The Arctic Institute, 2013.

<sup>&</sup>lt;sup>66</sup> Utanríkisráðuneytið, *The Arctic States sign an agreement on Marine Oil Pollution Preparedness and Response*, 2013.

The AC has transformed since its formulation and its importance has been significantly enhanced. In the 2013 Kiruna meeting the Arctic Council granted 6 new nations a permanent observer status in the Council – India, Singapore, Italy, Japan, South-Korea and China – underscoring its global significance and further strengthening its legitimacy in Arctic affairs <sup>67</sup>.

Iceland has been very active within the Council. During its chairmanship 2002-2004 the Council successfully published two important papers, the Arctic Marine Shipping Assessment (AMSA) and the Arctic Human Development Report<sup>68</sup>. It also fought to have the recently established permanent secretariat placed in Iceland, eventually losing out to Norway<sup>69</sup>. However the first director of the secretariat is Icelandic<sup>70</sup>. Iceland has furthermore been very active in holding events, such as conferences and workshops in Iceland, a bid to assert its legitimacy as a major Arctic stakeholder but also mirroring the importance the government puts on the High North.

#### **Shipping**

The North meets North report and the ensuing Akureyri conference both discussed the future of Arctic shipping and the position of Iceland as a possible hub for transhipments. It was a workshop which focused on the opportunities rather than the obstacles. Since then, this proposition hub has been reiterated by politicians, stakeholders and government, as well as discussions on how best to develop that idea<sup>71</sup>.

Iceland in the High North addresses many issues regarding the Arctic including a brief discussion on the NSR. It concludes that it's unlikely that the NSR will ever be a main shipping lane because of depth restrictions therefore excluding transits of large (container) vessels. The TPS on the other hand does not suffer those depth restrictions<sup>72</sup>. Thus, Iceland promotes the utilization of large DAVs via the Transpolar Sea Route. The TPS is also shorter and is largely in international waters therefore avoiding Russian regulations and fees<sup>73</sup>. This would put Iceland right in the middle of the seaway connecting the Atlantic and Pacific Oceans, making Iceland a very attractive place for a transhipment hub.

Local players have also begun developing ways to use the high north to their benefit. There are, for instance, two Icelandic municipalities that have reached an agreement with Bremenports to investigate the feasibility of setting up a transhipment hub in Finnafjordur on the northeast coast of Iceland<sup>74</sup>. Iceland also has the largest transportation network of any country encompassing all Arctic nations. Eimskip, Iceland's largest shipping company, has for instance extended their network to include all Arctic nations, except Finland, and are branching out into destination shipping for natural resource. Icelandic airlines have also frequent flights to all destinations in the Arctic<sup>75</sup>.

The feasibility of the TSR has not been studied as extensively as the NSR and is still highly uncertain. There is evidence of it becoming viable, such as the rapid thinning of ice sheets and

<sup>70</sup> Auðlindaráðuneytið, 2012.

<sup>&</sup>lt;sup>67</sup> Myers, Arctic Council Adds 6 Nations as Observer States, Including China, NY Times, 2013.

<sup>&</sup>lt;sup>68</sup> Bailes & Heininen, 2012, p. 72.

<sup>&</sup>lt;sup>69</sup> Ibid., p. 78.

<sup>&</sup>lt;sup>71</sup> Akureyri Conference Report, 2007.

<sup>&</sup>lt;sup>72</sup> Utanríkisráðuneytið, 2009, p. 46.

<sup>&</sup>lt;sup>73</sup> Ibid.

<sup>&</sup>lt;sup>74</sup> RÚV, Rannsaka möguleika á höfn í Finnafirði, 2013.

<sup>&</sup>lt;sup>75</sup> Hávarðsson, *Fríverslunarsamningur nauðsynlegur*, 2013.

massive reduction of pressure ridges in the Central Arctic which are big factors In determining the its accessibility. When that might happen is still unknown<sup>76</sup> but Iceland will have its eyes peeled for any development on the TSR.

The 2009 report does recognize a few obstacles in the way of utilizing the TPS such as the Suez and Panama Canals being "intrinsically woven into the world's shipping routes" and have been heavily invested in. There is also a lack of safety and pollution preventative measures that would need to be addressed, partly to appease insurance companies but more importantly so that the fragility of the local ecosystems will be not jeopardized. Surveillance monitoring and communication grids would need investments as well as emergence of infrastructure. To add to this, the large, 15-20.000 TEU, double-acting containers Iceland promotes would have to be designed with investment costs that no private company is likely to be able to bear<sup>77</sup>. As of now the biggest double acting containers are merely 700 TEU<sup>78</sup> while the biggest tankers are around 106.000 dwt<sup>79</sup>.

Iceland in the High North concludes by admitting that TSR will most likely not open up for major ship transit in the near future, unless states that would benefit from developing the TSR would cooperate in technology and infrastructure developments. That would have unknown costs but would likely not exceed the expenses put into the development of the Suez and Panama Canals<sup>80</sup>.

There are many opportunities available for export orientated companies in Iceland but the development of a transhipment hub is highly dependent on a number of external and somewhat incontrollable factors. It is highly uncertain if, or when, Iceland could establish a transhipment hub the way the government envisions but there is still a distinct possibility, albeit distant, that everything might line up and those possibilities only increase with outreach. Attempts are being made to arouse stakeholders' interest and lure in investment but that it will bear any fruit is currently unlikely.

#### Resources

In Iceland's Arctic strategy the area of natural resource exploitation and environmental protection are very interconnected which can best be seen in the prominent role it took in facilitating the SAR Agreement<sup>81</sup>. However, this stated interconnectedness is yet to be tested fully in regards to implementation.

The possibility of oil and gas fields being found in the Dragon Area northeast of Iceland has fuelled domestic interest in hydrocarbon but little is known about the geology of the area. The sea around the area is very deep in places and conditions are not ideal rendering operations very expensive. However, geologically similar areas in the vicinity of the Dreki Area are known to have hydrocarbon accumulations<sup>82</sup>.

Two research and operation permits have been awarded in specific regions in the Dragon Area. One to Kolvetni ehf and Valium Petroleum and the other to Íslenskt Kolvetni (IK) and Faroe

<sup>77</sup> Utanríkisráðuneytið, 2009, p. 46.

<sup>&</sup>lt;sup>76</sup> Humpert & Raspotnik, 2012

<sup>&</sup>lt;sup>78</sup> Aker Arctic, Aker Yards strengthens its position as the preferred arctic shipbuilder, 2006

<sup>&</sup>lt;sup>79</sup> Neste Oil, Super ice class tanker Mastera was delivered to Fortum in Japan, 2003

<sup>&</sup>lt;sup>80</sup> Utanríkisráðuneytið, 2009, p. 48.

<sup>&</sup>lt;sup>81</sup> Bailes & Heininen, 2012.

<sup>&</sup>lt;sup>82</sup> Askja Energy, China and Norway Team Up on Iceland's Continental Shelf, 2013

Petroleum (FP). Valiant and FP are rather small oil companies, but both have financially sound shareholders 83;84 as well as experience in the geographic area. Following this the Norwegian state owned Petoro also decided to utilize its right of 25% share in these projects, a consequence of the 1981 agreement between Iceland and Norway defining the border between Iceland and Jan Mayen and granting a reciprocal right of 25% of any hydrocarbons found in limited areas on their respective EEZ<sup>85</sup>. Both Icelandic politicians and oil companies welcomed the Norwegian interest in these projects, to them underscoring the credibility of the area as well as profiting from their vast experience in offshore oil drilling and its investment capital 86.

In June 2013 Eykon Energy teamed up with China National Offshore Oil Company (CNOOC) and together they have applied for a permit which will be formally granted January 22<sup>nd 87</sup>. CNOOC has a vast portfolio of offshore production both inside China and around the globe. If the National Energy Authority (NEA) accepts their application they will become by far the biggest operator in the Dragon Area.

These developments are positive, and adding to this the Norwegian Petroleum Directorate (NPD) estimates that the Jan Mayen ridge might have between 90 million and 460 million m<sup>3</sup> of undiscovered oil<sup>88</sup> but the uncertainty is still great and there's always a distinct possibility that nothing will be found.

If oil is discovered in commercial quantities, when production would start is uncertain. In 2001 the Faroese government, for instance, gave out seven permits to 12 companies with operators such as Statoil, BP, Shell and ExxonMobil<sup>89</sup>, but as of yet nothing has been discovered. This is not cause for much concern in the oil industry but it does paint a picture of the patience and large capital that is needed.

Interestingly, Iceland might start profiting from Arctic oil *before* its production starts in the Dragon Area. East-Greenland is believed to have vast amounts of off-shore oil reserves and Norway might start oil exploration on their part of the Jan Mayen ridge by 2017<sup>90</sup>. Official's in Iceland have pointed out that Iceland would be an ideal location as a service hub for oil and gas extraction both outside the east coast of Greenland and in the Dragon area, coinciding with Iceland's Arctic Strategy, because of the superior infrastructure in Iceland compared to in Greenland. It is likely that hub could be established given the known deposits of minerals and rare earth elements in Greenla.d as well as the expectation of finding oil outside its coast. It is however too early to make an educated guess on the probability of discovering hydrocarbons in the Dragon Area

<sup>&</sup>lt;sup>83</sup> Sigurjónsson, *Olíubjóð 2035?*, 2013 and Sigurjónsson, *Hvað gerir Orkustofnun?*, 2012

<sup>&</sup>lt;sup>84</sup> FP is largely owned by the Korean National Oil Corporation through it's subsidiary Dana Petroleum. While Valiant is part of the Canadian Ithaca Energy, an oil and gas operator specializing in the North Sea.

<sup>&</sup>lt;sup>85</sup> Richardson, Andersen, & Evensen, 1981

<sup>&</sup>lt;sup>86</sup> RÚV, *Norðmenn taka þátt í olíuleit*, 2013

<sup>&</sup>lt;sup>87</sup> Mbl, Fá leyfi til olíuleitar í næstu viku, 2014

<sup>&</sup>lt;sup>88</sup> Oljedirektoratet, Nye ressurstall for Barentshavet sørøst og norsk havområde ved Jan Mayent, 2013; and Mbl, Olíuforði Norðmanna eykst um 15%, 2013.

<sup>&</sup>lt;sup>89</sup> See. e.g. Statoil, *Statoil and ExxonMobil together on the Faroes*, 2011 and Offshore Energy, *Sub-basalt well on the Faroe Islands*, 2006.

<sup>&</sup>lt;sup>90</sup> RÚV, Norðmenn fresta olíuleit við Jan Mayen, 2013.

#### **Fishing**

By the middle of this century the Arctic might be ice free in summers and with it the icy layer that has provided fish with protection for millennia. This will give fishing vessels access to new grounds as well as likely cause unknown changes in fish migration. This can already be seen with mackerel, and other southerly fish stocks, migrating into Icelandic waters<sup>91</sup>.

The importance of fishing to the Icelandic economy cannot be understated. In 2011 27.1%<sup>92</sup> of Iceland's GDP came from the fishing industry, and fish is one of Iceland most valuable commodities.

The effects sea temperature rise and decreasing sea ice will have on straddling fish stocks is not well understood but presumably some may migrate northward<sup>93</sup>. A few, like the mackerel, may enter Icelandic waters with uncertain effect on the ecosystem, while Icelandic stocks might migrate into international waters or other territorial waters<sup>94</sup>. Publicly the emphasis has been on how Iceland will benefit from access to new fish stocks in Icelandic fishing grounds and the exploitation of hitherto inaccessible fishing areas<sup>95</sup>. However, the Director General of the Icelandic Marine Research Institute <sup>96</sup> pointed out, diplomatic disagreements regarding straddling fish stocks might increase in the ensuing years<sup>97</sup>. To prevent disputes such as the Mackerel row from becoming a common occurrence, fish migration needs to be better understood and discussed both domestically and within the Arctic arena

Alþingi's Parliamentary Resolution highlights the importance of Iceland's full involvement in cooperation on Arctic fish management also emphasizing UNCLOS as the legal basis for resolving disputes 98. Iceland is furthermore a part of many Regional Fisheries Management Organizations (RFMOs) including the Northwest Atlantic Fisheries Organization (NAFO) and the North-East Atlantic Fisheries Commission (NEAFC) which cover parts of the Atlantic and Arctic Oceans, However large parts of the central Arctic Oceans remain wholly unregulated 99.

To address this, the "littoral five" met in Washington D.C. in April 2013 to discuss the possibility of establishing an RFMO. The meeting failed to create a framework to establish such an organization but development of interim measures were suggested, including considering commercial fishing in the in the area as Illegal, unregulated and unreported (IUU) fishing until such a time as one or more regional or sub regional organizations have been established <sup>100</sup>.

The benefits of establishing a RFMO is twofold. Most importantly it is imperative to increase understanding of the migration and situation of stocks for the responsible management of them is deepened. It's also crucial to have a framework in place before exploitation starts to prevent

<sup>91</sup> Utanríkisráðuneytið, 2009 og Guðmundsson, 2005.

<sup>&</sup>lt;sup>92</sup> Sjávarklasinn, 2012.

<sup>&</sup>lt;sup>93</sup> Byers, 2012 and Utanríkisráðuneytið, 2009.

<sup>&</sup>lt;sup>34</sup> Ibid. p. 34

<sup>&</sup>lt;sup>95</sup> Vísir, Fiskimið falin undir ísnum, 2012); Norðurslóðarnet Íslnads, Foreign Minister Össurs Skarphéðinssonar: Speech 6. febrúar 2013, 2013

<sup>&</sup>lt;sup>96</sup> Hafrannsóknarstofnun Íslands

<sup>&</sup>lt;sup>97</sup> Fiskifréttir, Víðáttumikil fiskimið opnast við bráðnun íssins, 2012

<sup>&</sup>lt;sup>98</sup> Alþingi, 2011

<sup>&</sup>lt;sup>99</sup> Byers, 2012

<sup>100</sup> Chilingarov, 2013

overfishing. Additionally, establishing a RFMO is arguably simpler while non-Arctic, and indeed Arctic, stakeholders a vested interest in the fisheries <sup>101</sup>.

The Straddling Fish Stock Agreement gives counties the mandate to set up organization to allocate quotas on straddling fish outside the 200 nautical mile zone, such as NAFO and NEAFC<sup>102</sup> but they need to work on a non-discriminatory basis and allow any stakeholder to join as long as the party accepts the provisions of the agreement. If an RFMO or some kind of treaty would be established<sup>103</sup> it would be crucial to involve non-Arctic states and organization as it would receive more widespread recognition and enhance its legitimacy. That would make regulating IUU fishing easier and would contribute to the sustainable management of Atlantic and Arctic fish stocks.

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<sup>&</sup>lt;sup>101</sup> Byers, 2012

<sup>&</sup>lt;sup>102</sup> Ibid. p. 6; UNCLOS, 1981

<sup>103</sup> Ibid.

## China's Arctic Strategy

China is a growing superpower and has become an influential player in the international theatre. As such China's every move is scrutinized in international political circles, institutes and the media, with the aim of understanding their intentions. China's ambition in the Arctic is no exception but is often misunderstood and misrepresented by commentators<sup>104</sup>. Yet, there have been a few excellent analyses of China and the Arctic by both Chinese and non-Chinese scholars<sup>105</sup>.

China does not have any official Arctic strategy and one will likely not be adopted in the near future <sup>106</sup> making their strategy difficult to analyse. The inherent opaqueness of Chinese policy making adds yet another layer of ambiguity. Within China it is common for policies to first be discussed in academic circles as well as by political commentators, retired military officers and representatives of possible interest groups before any internal debate in Beijing is undertaken, which ultimately leads to an (uncontested) official policy <sup>107</sup>. China is currently in that first stage and players within China are having a robust debate over what steps China should be taking in the Arctic, all vying to influence policymakers.

China has been involved in the Arctic for many years, but up until 2007 China's interest was solely in the natural sciences <sup>108</sup>. The root of China's increased interest in the Arctic can be traced back to August 2007 when Russia planted its flag in the seabed under the Arctic <sup>109</sup>.

Despite news articles to the contrary, China has shied away from any firm stance in the Arctic, fearing repercussions that could undermine its position in the region. This is especially true for recent publications from scholars and officials who have, since 2011, softened the tone of their rhetoric regarding the Arctic. But what are the main interests China perceives in the Arctic? According to Linda Jacobsen they are: "[F]irst, to strengthen [China's] capacity to respond appropriately to the effects that climate change in the Arctic will have on food production and extreme weather in China; second, to secure access, at reasonable cost, to Arctic shipping routes; and third, to strengthen China's ability as a non-Arctic state to access Arctic resources and fishing waters", all of which are intrinsically connected to China's economic growth 110.

It is wide consensus within Chinese scholarly circles that climate change in the Arctic is influencing extreme weather patterns within China, including floods, drought, and extreme weather events<sup>111</sup>. This in return influences agriculture within China, which threatens its food security<sup>112</sup>, and therefore understanding the adverse effect of global warming in the region is imperative for Chinese interests.

Commentators within China are quick to emphasize the global consequences the Arctic rather than the regional, pointing to climatological implications for China vis-à-vis the melting Arctic, as well as the economic opportunities new shipping lanes could provide to its biggest markets,

<sup>&</sup>lt;sup>104</sup> See e.g. Roger W. Robinson, 2013; Wright, 2011 or Seidler, *The Resource Race: China Dips Toes in Arctic Waters*, Spiegel Online 2013.

<sup>&</sup>lt;sup>105</sup> Most notably: Jakobson & Peng, 2012.

<sup>&</sup>lt;sup>106</sup> Jakobson & Peng, 2012

<sup>107</sup> Ibid., p. 22; Norton, How the Chinese Bureaucracy Decides, The Diplomat, 2013

<sup>&</sup>lt;sup>108</sup> Alexeeva & Lasserre, 2012

<sup>&</sup>lt;sup>109</sup> 刘惠荣 [Liu Huirong], 2011

<sup>&</sup>lt;sup>110</sup> Jakobson & Peng, 2012, p. v.

<sup>111</sup> See e.g. 杨剑 [Yang Jian], 2012; and 魏立新 [Wei Linxing] & 张海影 [Zhang Haiying], 2005.

<sup>&</sup>lt;sup>112</sup> 唐国强 [Tang Guogiang], 2013

Europe and N-America. In a broader sense China is a rising power whose global significance is increasing and it's a matter of national pride to be recognized as such. Furthermore they have the right for more powerful a voice in matter concerning their interests vis-à-vis their increased might.

As players in China strive for influence the developing strategy a few interesting terms have sprung up in the Chinese lexicon. Scholars have begun to move away from referring to China as a non-Arctic State (非北极国家) opting for "a near Arctic State" (近北极国家)<sup>113</sup>. Terms, such as this, can be expected to become commonplace as the formulation process continues <sup>114</sup> but for now China officially refrains from dealing with any sensitive topics preferring both bilateral and multilateral cooperation on a scientific platform.

#### **Scientific Research**

China has one of the world's most sophisticated Arctic and Antarctic research capabilities. Funds for bipolar research has risen year-on-year since the 1980s and continues to grow 115. In 2003 the Polar Institute of China (PRIC) opened the Arctic Yellow River Research Station (黄河 站) in Svalbard 116. PRIC also runs the world's largest nonnuclear icebreaker *Xuelong* (雪龙), who famously made China's first Arctic transit in 2012. Eventually docking in Reykjavik before heading back, this time using the TSR and cutting straight though the North Pole 117. Recently, China announced it is building a new icebreaker, built by Aker Arctic using their DAW technology. That will allow China to simultaneously conduct research at both poles.

However, most of the emphasis is on Antarctic research <sup>118</sup>. The Yellow River Station in Spitsbergen for instance frails in comparison to the three research stations operational in the Antarctic and the two new ones expected by 2015<sup>119</sup>. Moreover, despite the increase in funds for polar research the main beneficiary will continue to be Antarctic research. Arctic research only receives a fifth of the overall Arctic/Antarctic funds which in return is merely 0.1% of the overall budget for scientific research. Furthermore the overall funding for Arctic research is still not high compared to other nation, currently on par with South Korea but it is expected to have caught up with other major players by 2015, at least in Antarctic capabilities <sup>120</sup>.

Chinese scientific research in the Arctic will increase due to: Arctic warming affecting their weather and threating food security. Increased presence in the Arctic also legitimizes their claim as a stakeholder; which helps safeguard their interests when it comes to new shipping lanes and resources; and lastly scientific research is an area where China can comfortably cooperate with Arctic States without sensitive issues coming up. This is especially true with Nordic Countries as China enjoys a particularly good relationship with all Nordic States (presently with the exception of Norway).

<sup>&</sup>lt;sup>113</sup> 孙凯[Sun Kai] & 郭培清[Guo Peiqing], 2012

<sup>&</sup>lt;sup>114</sup> Jakobson & Peng, 2012

<sup>&</sup>lt;sup>115</sup> Brady, 2012

<sup>&</sup>lt;sup>116</sup> Polar Research Institute of China (PRIC), 2013

<sup>&</sup>lt;sup>117</sup> Pettersen, The Snow Dragon bound for North Pole, 2012

<sup>&</sup>lt;sup>118</sup> Brady, 2012

<sup>&</sup>lt;sup>119</sup> Xinhua, *China to build two more Antarctic research stations by 2015*, 2013

<sup>&</sup>lt;sup>120</sup> Brady, 2012 p. 12.

#### **Cooperation and diplomacy**

In the context of its overarching foreign policy the High North remains a low priority. Visits by high officials to Nordic Countries such as the May 2012 visit of Premier Wen Jiabao to Iceland and Sweden, a first visit by a Chinese Premier to the Iceland 121, along with Hu Jintao's visit to Denmark the following month 122 have been seen as a sign of the growing interest China has in the Arctic 123. This is partly true and Wen Jiabao's visit to Iceland was historical and productive but is in part a manifestation of China's growing presence globally~. Arctic issues were not the only, nor the most important, items discussed in that trip. At that time the countries were deep in negotiation over the Free Trade Agreement (FTA) and a cooperation agreement on geothermal energy was reached 124, coinciding with the respective countries foreign policies, i.e. on one hand China's drive to develop FTAs with players around the world 125 and the diversification of China's energy sector and promotion of renewable energy and on the other Iceland benefits from increased trade with China and the promotion of renewable energy.

This being said, Arctic issues were certainly discussed and a framework agreement on Arctic cooperation was signed as well as a Memorandum of Understanding on cooperation in the fields of marine and Polar Science and Technology<sup>126</sup>.

China gets the brunt of the media attention surrounding Asian countries' "pivot" into the Arctic, but Japan and Singapore have both appointed Arctic ambassadors<sup>127</sup>, and former Prime Minister of Korea Lee Myung-bak visited Norway and Greenland in September 2012. Recently all these nations got an observer status in the Arctic Council underlining all of East Asia's interest in the region.

#### **The Arctic Council**

In May 2013 the future of the Arctic Council changed when it added 6 more states to its 5 observer states. Of those, five – India, Singapore, South Korea, Japan, and China – are Asian, crystalizing the increased trans regional importance.

When China became a permanent observer it accepted a score of criteria put forth by the Arctic Council, these include inter alia<sup>128</sup>,

- Recognizing Arctic States' sovereignty and jurisdiction,
- Recognize that extensive legal framework apply in the Arctic, notably UNCLOS and it provides a solid foundation for responsible management of the Ocean
- Accept and support the objectives of the Arctic Council
- Have demonstrated a political and financial ability to contribute to the Arctic Council
- Financial contributions from observers may not exceed the financing from Arctic States

<sup>&</sup>lt;sup>121</sup> FM PRC, Premier Wen Jiabao Visits Iceland, Sweden and Poland and Attends Hannover Messe 2012 in Germany, 2012

<sup>&</sup>lt;sup>122</sup> MFA of China, *President Hu Jintao Meets with Danish Parliament Speaker Lykketoft*, 2012)

<sup>&</sup>lt;sup>123</sup> See e.g. Euractiv, *In Denmark, Hu Jintao sets eyes on Greenland's minerals*, 2012 or Ford, *China cozies up to Iceland in race for Arctic resources*, CSMonitor, 2013)

Forsætisráðuneytið, Agreements and declarations signed following a meeting between Prime Minister Jóhanna Sigurðardóttir and Premier Wen Jiabao in Reykjavík today, 2012)

<sup>125</sup> For a detailed list please see: http://fta.mofcom.gov.cn/topic/engcc.shtml

Forsætisráðuneytið, Agreements and declarations signed following a meeting between Prime Minister Jóhanna Sigurðardóttir and Premier Wen Jiabao in Reykjavík today, 2012)

Pettersen, Japan appoints Arctic ambassador, Barents Observer, 2013; Teo, S'pore has interest in the Arctic region, The Straights Times, 2013

<sup>&</sup>lt;sup>128</sup> Arctic Council, *Observers*, 2011)

Many scholars displayed dissatisfaction over these criteria claiming their responsibilities increased disproportionally to their rights <sup>129</sup>. Chen et al. have opined that this is the Arctic Council member states' way of keeping China and other non-Arctic players from decision making in the region and solidifying their "monopoly" on trans regional Arctic issues <sup>130</sup>. Zhang Xia further decried it would undermine the Arctic Councils authority in the region <sup>131</sup>. Now though, that China has a permanent observer status, it can engage with working groups, propose projects and state their views" However is does not get voting right. With the permanent observer status they will ramp up their research programs and possibility to bring its investment and labor force to improve infrastructure and natural resource development <sup>133</sup>.

Chinese policymakers recognize the Arctic Council as the most important intergovernmental forum in the region <sup>134</sup> but not necessarily the only one <sup>135</sup>. Across the board, with scholars and policymakers, there is a consensus that China should have a voice in Arctic decisions and governance due to the global implication of climate change which according to the vice-president of SIIS, Yang Jian (杨剑) "need to be handled in a considered way through global governance and multilateral participation. Global issues are a challenge to humankind … and cannot be solved by a single country or region" <sup>137</sup>. The opening waterways will also directly affect China's shipping and commerce with obvious economic implications <sup>138</sup>.

There has also been a widespread belief that the governance system in the Arctic is too soft and somewhat defected<sup>139</sup>. Many Chinese scholars believe China should play a role in terms of "redressing defects in the current Arctic governance system" <sup>140</sup> and "seeking to make constructive contributions in creating governance mechanisms in the Arctic" According to Liu Huirong, a law and political professor at the Ocean University of China, the legal basis that best safeguards Chinese interest in the Arctic can be split into three factions: by (i) relying on the Antarctic treaty and Spitsbergen treaty to make a similar treaty for the Arctic or to (ii) make a new treaty for the region given the special circumstances in the Arctic but the most widespread opinion is that it's best to (iii) rely on preexisting institutional frameworks on maritime law (such as UNCLOS) to resolve any differences <sup>142</sup>.

<sup>&</sup>lt;sup>129</sup> 南方都市报 [The Southern Daily], 冰岛牵线,中国开发北极 [Iceland mediates, China develops the Arctic], 2012; 东方早报 [Oriental Daily News], 2013

<sup>&</sup>lt;sup>130</sup> 陈玉刚 [Chen Yugang], 陶平国 [Tao Pingguo], & 秦倩 [Qin Qian], 2011, p. 23

<sup>&</sup>lt;sup>131</sup> 钱亚平 [Qian Yaping], 中国离北极有多远 [How far is China from the Arctic], Liaowang Dongfang Zhoukan, 2011.

<sup>&</sup>lt;sup>132</sup> Willis, 2013

<sup>&</sup>lt;sup>133</sup> Zhao Shengnan, *Bigger role considered in the Arctic*, China Daily, 2013

<sup>&</sup>lt;sup>134</sup> See e.g. 唐国强 [Tang Guoqiang], 2013

<sup>&</sup>lt;sup>135</sup> 钱亚平 [Qian Yaping], *中国离北极有多远 [How far is China from the Arctic]*, Liaowang Dongfang Zhoukan, 2011.

<sup>&</sup>lt;sup>136</sup> His writings are the most authoritative nonofficial opinions in mainstream media.

<sup>&</sup>lt;sup>137</sup> 杨剑 [Yang Jian], China has a key role in safeguarding the Arctic, China Daily, 2012

<sup>&</sup>lt;sup>138</sup> 唐国强 [Tang Guoqiang], 2013; 杨剑 [Yang Jian], 北极事务离不开中国,寻求观察员地位 [China is inseperable from Arctic affairs, and it is seeking observer status], Huanqiu Shibao, 2012 and Liu Zhenmin, China's View on Arctic Cooperation, MFA of China, 2010

<sup>&</sup>lt;sup>139</sup> See e.g. 孙凯[Sun Kai] & 郭培清[Guo Peiging], 2012

<sup>140</sup> Cheng Baozhi, 2011

<sup>&</sup>lt;sup>141</sup> 孙凯[Sun Kai] & 郭培清[Guo Peiqing], 2012, p. 11

<sup>&</sup>lt;sup>142</sup> 刘惠荣 [Liu Huirong], 2011

Under article 87 of UNCLOS China has equal right to explore international waters and fishing grounds and is also a signatory to the Spitsbergen Treaty which delimits Norway's sovereignty over Svalbard and gives signatories equal access to its land, water and resources <sup>143</sup>. It is clear that China, like other Asian countries, views the Arctic in global terms and do not need the Arctic Council to obtain their interest in the Arctic and it is in the Arctic Council's interest to admit these new "stakeholders" thus turning the Council into a more global forum for high intergovernmental decision making on Arctic affairs, lest it compromise its legitimacy in Arctic governance <sup>144</sup>. This is not something that the Arctic Council is perfectly suited for owing to the fact that it began as a "soft law" to tackle regional environmental issues. But the Arctic Council has broadened and adapted to the changes in the Arctic and its scope is extending. For instance, under its guidance two legally binding agreements have been made between the countries showcasing its ability to adapt to the its increased importance <sup>145</sup>.

One must not forget that China's position in the Arctic Council is weak, they have no right to vote nor do they wield any direct influence within the Council. With time China hopes that the power that observers have becomes greater and they might try to influence decisions on issues directly relating to their interests. An alliance of East Asian countries – China, Japan and Korea – for example might become a powerful bloc but due to historical mutual suspicion and grievances it is next to impossible to imagine that becoming a reality, at least in the near or midterm future.

There is still some distrust towards China's Arctic interest within the Council. Russia was for a long time expected to stand in the way of China's admittance into the Council, Canada might become vary of increased Chinese involvement in actual decision making in the region (they are also in general not very inclusive of other States in the Arctic), friction between the U.S. and China might also spread into the north and indigenous people are suspicious of outside influence, perhaps justifiably afraid that outsiders do not have their interests at heart.

Now that China has an observer status it is to be expected that China will increase its research in the Arctic and continue its trajectory of seeking opportunities on bilateral and multilateral cooperation and build upon those relationships. If China becomes too assertive within the Council and the region in general there might be backlash from any one of these players, observer status for instance only lasts as long as consensus exists 146, so for now China will most likely lie low and go through unofficial channels to exert its influence.

#### **Shipping**

China is the second largest economy in the world with its second largest import and largest exporter. In 2012 China imports and exports were around \$3.66 trillion globally 147. It is clear that the possible economic opportunities for China that melting sea ice might bring about are

<sup>&</sup>lt;sup>143</sup> Russia and Iceland insist that citizens of signatory countries could engage in commercial fishing and oil and gas resource development activities in the islands' exclusive economic zone and the continental shelf. Norway, however, insists that equal economic activities are limited to the land and territorial waters of the islands. Recently the United Kingdom and Spain have officially supported the position of Russia and Iceland Arctic issues and Chana stance.

<sup>&</sup>lt;sup>144</sup> Manicom & Lackenbauer, 2013; 钱亚平 [Qian Yaping], 中国离北极有多远 [How far is China from the Arctic], Liaowang Dongfang Zhoukan , 2011.

<sup>&</sup>lt;sup>145</sup> Willis, 2013

<sup>&</sup>lt;sup>146</sup> Keil, *Moving Mosaic*, The Arctic Institute, 2013.

<sup>&</sup>lt;sup>147</sup> Ministry of Commerce People's Republic of China, *Brief Statistics on China's Import & Export in December 2012*, 2013

considerable. If traversable it would shorten routes between ports north of Shanghai and any port in Western Europe, the North Sea and the Baltic Sea by 25-55% and save the possibly save the industry between \$53.3 and 127.4 billion<sup>148</sup>. It is clear that the perceived economic potential and optimism shown by Chinese scholars is much greater than their western counterparts.

For instance Zhang Xia, head of the PRIC's Polar Strategic Research Division and Deputy Chief of CNARC, believes that container shipping has greater economic potential for China than oil and LNG and he predicts that by 2030 China might ship 17.4 million TEUs annually through the Arctic, which is 85% of all shipments in 2011<sup>149</sup>. Chinese scholars and media have been quite vocal on the opportunities facing Chinese shipping in the Arctic, often referring to it "the golden waterway (金色航线). Interestingly, according to the director of PRIC, Yang Huigen, Chinese scholars are not restricting themselves to the NSR but are pursuing all transarctic routes, including the TSR.<sup>150</sup>.

Some Arctic related developments have commenced. For instance, a Dalian based logistics companies has leased 4 harbours in Rajin in northeast North Korea for 20-50 years and China has constructed railroad tracks connecting the harbour and Jilin Province in northeast China, thus giving China access to Sea of Japan for the first time since 1938<sup>151</sup>. This gives China a readily available access to the Arctic which China will benefit from <sup>152</sup>. However this is a part of a much bigger China-DPRK economic ties and closer access to Arctic waters is more likely an additional benefit <sup>153</sup>.

In 2012 China's only icebreaker, *Xuelong*, made global headlines when it traversed the NSR from Shanghai to Reykjavík. Many commentators saw this voyage as a clear sign of Chinese posturing in the arctic 154 despite being one of 46 ships to do so that summer. Xuelong also successfully navigated the TSR on the way back, which is both shorter and not subject to Russian rules. Since the voyage *Xuelong* has become widely referred to in scholarly circles, Zhang Xia claimed that *Xuelong* proved the technical feasibility of the TSR arguing that there was evidence showing that the TSR might even become navigable before the NWP 155. Yang Huigen, director general of PRIC and the expedition leader of China's fifth official Arctic expedition, was quoted saying that Xuelong's voyage had left Chinese shipping companies "greatly encouraged" 156. The summer of 2013 the 19.000-tonne Yong Sheng became the first Chinese cargo vessel on the NSR, misreported as a container ship by many news outlets 157. The COSCO owned vessel shipped steel and heavy equipment modules from Dalian to Rotterdam, cutting around 2 weeks off the journey 158. Before Yong Sheng's transit Yang Huigen had

<sup>149</sup> 张侠 [Zhang Xia], 寿建敏 [Shou Jianmin], & 周豪杰 [Zhou Haojie], 2013.

<sup>&</sup>lt;sup>148</sup> Sun Kai, 2013

<sup>&</sup>lt;sup>150</sup> Menon, *Oslo summit asks: is melting Arctic sea ice a boon or a bane?*, The Hindu, 2013.

<sup>&</sup>lt;sup>151</sup> Jakobson & Peng, 2012, p. 8.

<sup>&</sup>lt;sup>152</sup> Menon, Oslo summit asks: is melting Arctic sea ice a boon or a bane?, The Hindu, 2013.

<sup>&</sup>lt;sup>153</sup> Jakobson & Peng, 2012.

<sup>&</sup>lt;sup>154</sup> See e.g. Ford, *China cozies up to Iceland in race for Arctic resources*, CSMonitor, 2013.

<sup>&</sup>lt;sup>155</sup>张侠 [Zhang Xia], 寿建敏 [Shou Jianmin], & 周豪杰 [Zhou Haojie], 2013, p. 171.

<sup>&</sup>lt;sup>156</sup> Doyle, *China plans first commercial trip through Arctic shortcut in 2013*, Reuters, 2013.

e.g. Staalesen, First container ship on Northern Sea Route, Barents Observer 2013; Whitehead, Chinese cargo ship reaches Europe through Arctic shortcut, CCTV, 2013.

<sup>&</sup>lt;sup>158</sup> Mckie, China's voyage of discovery to cross the less frozen north, Guardian, 2013.

asserted that by 5-15% of Chinese trade could go through the Arctic by 2020, if 10% of China's exports would be routed through the Arctic it would be worth \$683 million <sup>159</sup>.

Impressive as this sounds there is a severe lack of interest from shipping companies. According to Huang et al. only Cosco and one other private company have expressed an interest in the Arctic, citing many of the same reasons as their European and American counterparts. Cosco even questioned the profitability of the route, while the other company is interested in destination shipping. This report moreover suggested that given Cosco recent dismal financial losses it might have acted on instruction instead of market stimulus <sup>160</sup>.

China on the whole remains optimistic on Arctic shipping, and they have little to lose but much to gain from developing shipping lines through the region. As stated 90% of their exports plough the seas on their way to markets and serious costs saving can be attained via the Arctic. Thus, China can be expected to continue researching and developing these alternative routes but with minimal input from the private sector.

#### Resources

Securing recourses for its energy hungry markets is of utmost importance for the Chinese government and has for instance, been part of its economic security since 2003<sup>161</sup>. Currently China is the world's largest energy consumer<sup>162</sup>, by 2030 it is expected that China will import over half its oil and with current trends that figure might go up to 80% <sup>163</sup>. By in September 2013 China overtook U.S. as the world's biggest importer of oil <sup>164</sup>. Natural Gas imports have also risen drastically and are expected to constitute half its natural Gas consumption by 2030<sup>165</sup>.

This massive dependency on energy imports severely weakens China's energy security, leaving the CCP extremely apprehensive, especially over oil imports. This fragility is further increased by the various bottlenecks the oil needs to pass through on its way to China. In particular the Strait of Malacca where 85% of China's oil imports sail through every year, mostly coming from the Middle East and Africa, and is often dubbed "the Malacca dilemma". 166.

Due to this the CCP is diversifying its energy imports. China has done so by promoting domestic production and stymieing its reliance on coal. Globally the CCP has engaged in so-called "energy diplomacy" whereby Chinese energy companies "invest heavily in foreign oil infrastructure, acquire equity in oil industry assets and secure oil supply contracts" which also ties into China's "Going out" policy (走出去战略). The Going Out policy was implemented in 1999 to aimed to incentivize Chinese companies in taking part in Foreign Direct Investment (FDI) abroad, the bulk of which have been engaged in by various SOEs spearheaded by the energy sector. The SOEs are mostly driven by financial incentives but also gain from the government's, seemingly endless, foreign currency reserves which enables China to inject copious amounts of capital into overseas projects. These include: massive offshore LNG projects in Australia and Russia to oil fields in South American and Canadian oil sands as well as massive oil pipeline

<sup>&</sup>lt;sup>159</sup> Doyle, China plans first commercial trip through Arctic shortcut in 2013, Reuters, 2013

<sup>&</sup>lt;sup>160</sup> Linyan, Lasserre, & Alexeeve, forthcoming.

<sup>&</sup>lt;sup>161</sup> Rainwater, 2012 p. 64.

<sup>&</sup>lt;sup>162</sup> Energydata, 2013.

<sup>&</sup>lt;sup>163</sup> Kennedy, 2010, p. 138.

<sup>&</sup>lt;sup>164</sup> Holland T., Oil price heading for US\$200 as China's imports set to surge, SCMP, 2013.

<sup>&</sup>lt;sup>165</sup> Kennedy, 2010, p. 138.

<sup>&</sup>lt;sup>166</sup> Zweig & Jianbai, 2005.

<sup>&</sup>lt;sup>167</sup> Rainwater, 2012 p. 65.

construction in Myanmar<sup>168</sup>, Kazakhstan and Russia. If run on full capacity these last three would make up 14% of China's projected oil imports for 2015<sup>169</sup> while also diverting supplies from Malacca. It is over this backdrop that China's energy and resource manoeuvres in the Arctic must be analysed.

If China can diversify its energy imports and mitigate its dependence on the Strait of Malacca by importing from, or through, the Arctic, then from a strategic point of view China would want to play a role in them. Many foreign commentators have focused on the Chinese rhetoric that the Arctic is "a common heritage of all humankind", 170 as being an assertive claim to rights in the Arctic however any resource located in the high seas is not owned by any one country 171. Considering that 84% of undiscovered resources are estimated to lie within the EEZ of Arctic Countries it is very unlikely that Beijing can claim any rights to deposits in the Arctic. Besides, China does not have the technological knowhow or experience required for cold water drilling 172.

There is a consensus within academic circles that its Arctic interests are best served by bilateral and multilateral cooperation which is in line with its worldwide "energy diplomacy". That way China can negotiate its way into a position of power via unofficial channels as well as securing its much needed energy supplies. Using national oil companies to acquire drilling projects and securing supply contracts in the Arctic the CCP hopes to mitigate the vulnerability of their supply chains <sup>173</sup>.

Recently Chinese companies have been very busy in the Arctic region. In June 2013 China's largest oil and gas company, CNPC and the world's largest publicly listed oil firm, Russia's Roseneft signed a contract worth \$270 billion. This will supply China with 300.000 barrels of oil per day (bpd) over 20 years via a pipeline into China. This amount could rise to 900.000 bdp<sup>174</sup>. CNPC also signed a framework agreement with Russian energy company Novatek to acquire 20% of the \$20 billion Yamal LNG project expected to launch 2015-16<sup>175</sup>.

In Canada companies such as Sinopec and CNOOC have invested more than \$16 billion in 2011 and 2012 alone <sup>176</sup> and in 2013 CNOOC made China's biggest ever investment when it bought Canadian energy company Nexen for \$15 billion spiking Canada to restrict ownership of foreign SOEs on Canadian oil resources <sup>177</sup>.

Greenland with its vast deposits of iron ore, oil and rare earths has become an investor hot spot for Chinese business. It's the only that can rival China's dominance in Rare Earth Elements (REE), such as uranium. Which Chinese investors are interested in exploring and Greenland has

<sup>&</sup>lt;sup>168</sup> The oil from the Myanmar pipeline is not locally produced but shipped from Africa and transported from Myanmar's southern coast into Yunnan thereby avoiding the Strait of Malacca.

<sup>&</sup>lt;sup>169</sup> Kennedy, 2010, p. 140.

<sup>&</sup>lt;sup>170</sup> See e.g. Qian, Arctic research set to be beefed up, China Daily, 2010;

<sup>&</sup>lt;sup>171</sup> Jakobson & Peng, 2012, p. 17.

<sup>&</sup>lt;sup>172</sup> Campbell, 2012, p. 5

<sup>&</sup>lt;sup>173</sup> Kennedy, 2010, p. 139.

<sup>&</sup>lt;sup>174</sup> Pinchuk, Rosweneft to double oil flows to China in \$270 billion deal, Reuters, 2013

<sup>&</sup>lt;sup>175</sup> CNPC, CNPC and Russian oil and gas giants conclude agreements, 2013

<sup>&</sup>lt;sup>176</sup> Rainwater, 2012, p. 72

<sup>&</sup>lt;sup>177</sup> On Nexen deal see: Rocha, *CNOOC closes \$15.1 billion acquisition of Canada's Nexen*, Reuters, 2013; on owvershiop restriction see: Romanowska, *Will Canada's new foreign investment rules kill oil sands development?*, Alberta Oil Magazine, 2013)

welcomed Chinese cooperation opportunities but projects have thus far not materialized <sup>178</sup>. Given the importance of many REEs in high-tech manufacturing and Greenland's vast deposits of them this could turn into a highly geopolitically sensitive subject.

These manoeuvres usually receive extremely negative coverage in Western, as well as Asian, media. It is often seen as a sign of China trying to exert its influence in the Arctic and a ploy to hog up the region's recourses. Chinese companies are certainly trying to get its share of the recourses but they are playing by the rules and participating in a competitive market with almost every other energy giant such as Statoil, Start, Shell, Exxon, ConocoPhillips and Roseneft to name just a few. There are various companies involved in prospecting (and drilling) off the coast of the Faroe Island, Norway and Greenland. The area is rich in resources and the conditions are favourable enough to start prospecting for and exploiting those resources and the energy companies have started carving up that pie.

#### **Fishing**

Sometime in this century Arctic fishing grounds will open up and Asian fishing vessels might become a common sight in the Arctic and North Atlantic summer seas. This will bring unforeseen challenges to the management of those fisheries.

Distant Water Fishing (DWF) is defined as "major fishing areas that are not adjacent to the fishing country, such as in the exclusive economic zone (EEZ) of another host country or on the high seas" China has the world's biggest DWF fleet, estimated at around 3400 vessels and China is by far the biggest fishing nation in the world measured in catch 180.

China views DWF industry as a strategic area and important for national maritime rights, economic growth, technology development, food security, diplomacy and job creation<sup>181</sup>. The fishing industry is an important part of China's "going out" policy<sup>182</sup> but due to overexploitation in its local fisheries<sup>183</sup> China has shifted from local to global fishing<sup>184</sup>. To promote this development the Chinese government funds scientific research as well as providing stimulus such as tax abatements and subsidies, which are estimated around 20% of the value of the overall catch in 2000<sup>185</sup>. With growing local fish consumption it is also increasingly important to Chinese food security, therefore China will continue promoting its DWF fleet by deeper modernization and reformation as well as developing it "from small to large, from inshore to offshore" <sup>186</sup>.

<sup>&</sup>lt;sup>178</sup> Macalister, *Greenland explores Arctic mineral riches amid fears for pristine region*, Guardian, 2014: Jun, *China's Arctic Mining Adventure Left Out in the Cold*, Caixin, 2013):

<sup>&</sup>lt;sup>179</sup> Mallory, 2012.

<sup>&</sup>lt;sup>180</sup> Blomeyer, Goulding, Pauly, Sanz, & Stobberup, 2012.

<sup>&</sup>lt;sup>181</sup> 三农资讯 [Information Centre for Rural Affairs], 2012.

<sup>182</sup> Ibid.

<sup>&</sup>lt;sup>183</sup> Lebling, 2013

<sup>&</sup>lt;sup>184</sup> Blomeyer, Goulding, Pauly, Sanz, & Stobberup, 2012: 三农资讯 [Information Centre for Rural Affairs], 2012.

<sup>&</sup>lt;sup>185</sup> Sumaila, Lam, Le Manach, Swartz, & Fauly, 2013

<sup>186</sup> 三农资讯 [Information Centre for Rural Affairs], 2012

Estimating how much China's DWF fleet catches per year is extremely difficult due to a number of factors. In essence China massively overreports its domestic catch<sup>187</sup> whilst grossly underreporting its global catch<sup>188</sup>.

According to a report done for the European Parliament China's estimated average annual DWF catch between 2000 and 2011 was 4.6 million tons (± 687.000, 95% confidence interval), 12 times higher than what China reported to FAO for the same period 189. This means that, like the report puts it, "the activities and catches of the Chinese distant-water fleets are almost completely undocumented and unreported, and often ... may actually be illegal, thus spanning the entire gamut of IUU fishing" 190. This is most evident in West Africa where China is estimated to catch 3.1 million tons every year, over 70% of that is thought to be IUU catches, It is important to note that the study does not differentiate between legal and illegal fishing so this data is not definitive.

Another point of contention are fishing access agreements. These agreements are signed between a host state and (usually) a third county granting it access to the host country's fishing grounds.

A lot of the Chinese contracts, especially in Africa, are kept secret and are not in the public domain so there little is known about them. According to FAO China has fishery agreements with 35 countries, the EP report found evidence of Chinese presence in 79 jurisdictions <sup>191</sup>. This secrecy, and overall opaqueness, makes it hard to know how far reaching each contract is and how it is tied to, for instance, financial aid and development programs.

In light of this it is not surprising that Chinese ships are frequently in the news for illegal fishing. Reports from Japan, Russia<sup>192</sup> Argentina<sup>193</sup> and Tanzania<sup>194</sup> can be found just in 2012-2013. In West Africa where their estimated IUU fishing is higher than the annual catch of Iceland, U.K., Ireland, Denmark (including Greenland and Faroe Islands) and Portugal combined<sup>195</sup>.

Most reports on Chinese fishing practices do however commemorate Beijing for the willingness to improve <sup>196</sup> and they are considered by many to be active players within RMFOs and ready to cooperate. They have however been reluctant to change any rules regarding IUU fishing and have become increasingly difficult in quota negotiations. China, furthermore, seems to accept that standoffs and disputes will become increasingly frequent in the future <sup>197</sup>.

The Arctic countries have had their share of skirmishes over fishing rights, but all in all EEZ boundaries have been respected. What will happen when 4 massive Asian fishing nations are thrown in the mix is anyone's. China has certainly fished illegally within the EEZ of many

<sup>&</sup>lt;sup>187</sup> Watson & Pauly, 2001

<sup>&</sup>lt;sup>188</sup> Blomeyer, Goulding, Pauly, Sanz, & Stobberup, 2012

<sup>&</sup>lt;sup>189</sup> Ibid. p. 27

<sup>&</sup>lt;sup>190</sup> Ibid. p. 22

<sup>&</sup>lt;sup>191</sup> Ibid. p26

<sup>&</sup>lt;sup>192</sup> Globaltimes, Russian coast guard fires at Chinese fishing ship, 2012

<sup>&</sup>lt;sup>193</sup> Merco Press, Argentina confirms one million dollars fines on each of four vessels caught illegally fishing, 2013

<sup>&</sup>lt;sup>194</sup> Tanzania Daily News, *Tanzania: Fishing Convicts Change Advocates*, 2013

<sup>&</sup>lt;sup>195</sup> Eurostat, *Fishery statistics*, 2011

<sup>&</sup>lt;sup>196</sup> Blomeyer, Goulding, Pauly, Sanz, & Stobberup, 2012

<sup>&</sup>lt;sup>197</sup>三农资讯 [Information Centre for Rural Affairs], 2012

countries and will probably continue that practice in the near future as will other big DWF nations. This will require much more robust patrolling and guarding of Arctic territorial waters.

Right now, in the context of the Arctic, Chinese scholars and commentators have mostly mentioned future fishing potential in passing, but that is changing. Tang Guoqiang <sup>198</sup>, for instance, recently said "waters in the region will become new and major fishing grounds".. Research and robust debates will increase and long before Chinese vessels cross the Bering Strait they will likely have accumulated a wealth of knowledge on Arctic fishing.

<sup>&</sup>lt;sup>198</sup> (唐国强 [Tang Guoqiang], 2013)

### **Future cooperation or possible conflicts?**

So far China's Arctic strategy has emphasized scientific cooperation and refrains from making too assertive claims on issues such as hydrocarbon extraction and shipping. However, Sino-Icelandic Arctic engagement has been developing into a broader cooperation. The nations signed a bilateral FTA in April 2013, Icelandic projects in renewable energy within China are "nearly unlimited" the countries signed a memorandum of understanding on marine and polar science and technology as well as a framework agreement on Arctic cooperation and Arion bank and one of China's largest financial institutions, China Development Bank, have a confidential declaration of cooperation.

This emphasis on scientific cooperation has now turned into a broad academic cooperation in both the natural and social sciences. Under the leadership of Icelandic Center of Research (RANNIS) and PRIC the China-Nordic Arctic Research Center (CNARC) was established. This is the first international platform where Chinese scholars can engage with foreign scholars in both natural and social sciences. The Center is headquartered in Shanghai and within it are four Chinese and six Nordic institutions<sup>200</sup>. CNARC's purpose is to provide a forum for academic cooperation focusing on Arctic climate change, resources, shipping; and economic cooperation as well as policy-making and legislation<sup>201</sup>. Under CNARC's auspices Chinese and Nordic scholarly cooperation on Arctic matters will increase manifold, benefitting both parties. China will gain a from the experience and knowledge the Nordic nations bring to the area and for the first time China will take part in international Arctic research in the social sciences, while the Nordic institution will benefit from Chinese research capabilities and capital. Given its broad scope this platform could turn into an important forum for academic dialogue between these parties.

More importantly to China, Iceland and the Arctic as a whole will be China's increased activities within the Arctic Council. The inclusion of the new permanent observers added to the Council's already growing legitimacy, the Council may possibly develop from a decision shaping to a decision making forum. This is beneficial to Iceland due to the high importance its strategy puts on consolidating the Arctic Council as the "most important consultative forum on Arctic issues". Within that capacity the focus will be on scientific research but China will also be able to voice its opinion on various Arctic matters and engage bilaterally with other countries on other issues such as the opening shipping routes and resource extraction. How the Council "soft power" will balance the varying opinions and interests of Arctic and non-Arctic nations remains to be seen.

There is a perception that China is "making a grab" for Arctic resources, while Chinese scholars insist that these resources are not China's and their main focus is in scientific and environmental arenas. Nevertheless in a broader sense the Arctic region offers an opportunity for China to alleviate to some degree their dependence on the Strait of Malacca while also securing sources for its ever growing reliance on oil and gas. Thus, Chinese companies will increasingly take part

<sup>&</sup>lt;sup>199</sup> Mbl, "Nánast ótakmörkuð verkefni", 2013

Nordic Members are: Arctic Center of the University of Lapland (Finland), Fridtjof Nansen Institute (Norway), Icelandic Center for Research (Iceland), Nordic Institute of Asian Studies (Denmark), Norwegian Polar Institute (Norway), Swedish Polar Research Secretariat (Sweden). Chinese members are: Center for Polar and Oceanic Studies (Tongji University), Research Institute of Polar Law and Politics (Ocean University of China), Shanghai Institutes of International Studies(SIIS) and Strategic Studies Division, Polar Research Institute of China (PRIC

<sup>&</sup>lt;sup>201</sup> Tomasik, *China-Nordic Arctic Research Center*, Arctic Portal, 2013

in oil, gas and mineral extraction in the Arctic. They will however likely not act any differently than other "western" players and will secure projects through conventional channels and partnerships with Arctic countries.

On January 22<sup>nd</sup> 2014 an exploration permit will be formally granted to a cooperation between CNOOC, Statoil and Eykon, with 60%, 25% and 15% ownership respectively. It is too early to predict if any oil is likely to be discovered but these two giant oil companies will bring a wealth of capital and experience to the region. For now though the scope of that partnership will be limited to prospecting for oil. More realistically, is the potential in Greenland with its vast deposits of hydrocarbons and minerals. There Iceland and China would be playing completely different roles. China has an interest in developing mining projects while Iceland could make a meaningful contribution through shipping and servicing those projects as well as possibly by acting as a service hub and offering harbour facilities for Greenlandic production as Iceland can offer infrastructure not present in Greenland.

Both China and Iceland have vested interests in developing Arctic shipping routes but for different reasons. China hopes to gain access to shorter routes to European and American markets while Iceland's interests as an Arctic country are much more complicated. First and foremost there are environmental concerns that Iceland needs to address in cooperation with other Arctic nations. Iceland does though have a dream of establishing a transhipment hub but for now this dream is just that, a dream. A number of variables would have to go Iceland's way for that to be feasible, first and foremost is reliability and safety for container vessels to cross the Arctic but also technology development of large ice strengthened container vessels, vicinity to the main seaway and interest from shipping companies to name just a few.

However, remote as this this dream is the possibility is still there and should be pursued to some degree. For now that is limited to paying close attention to any developments, promoting Iceland as a feasible location and researching these routes, in particular the Trans Polar Sea route. Iceland has however limited capacity to research the feasibility of the TSR but one of the main foci of CNARC is to research sipping routes. This will be a good platform for Iceland to pursue ways on how Iceland could be a feasible place for a transhipment hub in either bilateral or multilateral cooperation. China would likely welcome such a cooperation, mainly because it is one of the few players who is actively researching that route and if it would do so within a multilateral Arctic institution it would perhaps not ruffle as many feathers.

At some point, the Arctic seaways will open up sufficiently enough to become feasible for Asian DWF fleets to come south into the Arctic Ocean. There they will have equal rights to those fisheries. This will put immense stress on the management of North Atlantic and the Arctic Seas. Parts of the Oceans are managed by RFMOs but some areas of the North Atlantic and large part of Arctic are wholly unregulated. The five littoral states have already begun negotiating a framework to rectify this and it is in the best interest of all the Arctic Nations to have a RFMO in place before the Asian countries have a vested interest in those fisheries. China has joined various RFMOs and its commercial interests would likely be best saved within one covering the Arctic and North Atlantic oceans. China could, however, become unyielding in quota negotiations if it perceives itself to have a right to those fisheries and if it thinks to affect its food security.

China also engages in large-scale IUU fishing within the EEZ of numerous countries and there is little reason to think they would stop those activities in the Arctic. This could cause problems

for the largely unguarded waters around Iceland. How far Iceland and China would go to protect their interests is impossible to guess, but Iceland has fought three "wars" with Britain to protect its fishing grounds and China is currently fighting over fishing rights with the majority of its maritime neighbours. If these problems do occur they would need to be negotiated within relevant organizations.

Within the Arctic, Iceland and China play different roles. To China, and other major players, the Arctic will increasingly revolve around economic gains in the hydrocarbon and mineral field and, to some extent, Arctic shipping. China will be engaging in big power politics, with nations and enterprises jockeying for position. However thus far all players have played by established rules, frictions have been rare and the area is very stable. Additionally, in the context of China's overall foreign policy Arctic's importance will doubtlessly increase but will still remain a low priority. Iceland on the other hand has a complex suite of opportunities, dangers and interests vested in the region but will stand outside the big power manoeuvring. Iceland's main attention will be geared towards locating its biggest opportunities and attempting to capitalize on them, while mitigating adverse effects of prominent dangers, such as environmental issues. Iceland does however not have the means to pursue those interests it stands to gain the most from. China on the other hand is awash with investment capital, which it realizes, but lacks the legitimacy in the region an Arctic nation has. In this regard their Arctic strategies do complement each other and a partnership between these two nations could be beneficial to both

Iceland recognizes that non-Arctic countries have interests in the Arctic and is willing to cooperate with these players if both parties benefit from that partnership. Nevertheless regardless of how much Sino-Icelandic relations might increase. The countries' diplomatic relations will be no different than any other diplomacy. That is, they are based on self-serving economic and strategic principles. Given these different strategic and economic interests will there be room for deeper cooperation as the interaction become more frequent or are these countries too disparate and will go down a road of ever increasing confrontations? This paper has synthesized and assessed the three defining features of their Arctic endeavour and their respective strategies, interests and roles they will play in the Arctic theatre could create the right synergies for a fruitful cooperation.

If one steps back and looks at the big picture, than it can be discerned that no other country has as vested interests in or the willingness to actively develop the Transpolar Sea Route as Iceland and China. Furthermore with the establishment of CNARC a good platform to pursue that mutual interest has been created. A Chinese company is also a position where, perhaps by happenstance, it is actively taking part in Iceland's other Arctic adventure. The countries are in a position where China can bring its capital to pursue these shared interests which Iceland would be unable to pursue on its own, while Iceland can offer an increased access to a region where it is largely met with animosity and distrust, but a presence which does not threaten Iceland.

On the other end of the spectrum are the fisheries where no nation has the right to keep China from. This could severely threaten the already fragile regional ecosystems and greatly contribute to overfishing, and perhaps IUU fishing. It will be hard to engage with China bilaterally on issues such as this and it will need the strength in numbers. So in conclusion there might be myriad opportunities Iceland and China can, and should, pursue but in the end Iceland's core interests, as a small state, are best served within a multilateral forum such as the Arctic Council, especially when major disagreement occur.

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