A Speech
by
the President of Iceland
Ólafur Ragnar Grímsson
at the Google Workshop
Maritime Domain Awareness

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Distinguished participants
Dear friends

It is indeed a great honour to join you here today and tomorrow in a dialogue of the utmost importance, even urgency: a dialogue on the preservation of the ocean resources. I profoundly believe, based on the experience of my country, that this dialogue can now be furthered due to the extraordinary tools created by innovative information technologies.

It was at the World Ocean Summit, organized by The Economist two years ago in Singapore, that Jenifer and I started to explore how to bring the Icelandic monitoring model to the attention of others. Then we were privileged to host a delegation from Google in Iceland, organizing exploratory discussions with official institutions and also advanced IT companies. Last October, both Jenifer and Eric Schmidt participated in the first Assembly of the Arctic Circle, a new venue for international dialogue and cooperation on the Arctic, attended in Reykjavík by over 1,200 participants from 40 countries.

I wish to thank the Google Ocean Programme for bringing together now such a distinguished group of experts and visionaries; hopefully our dialogue will help to establish the necessary programmes of actions and agreements.

We all know that time is short. Our present exploitation of the ocean resources allows us only a few decades to prevent its destruction.

The premise of our deliberations is the humble acknowledgement that we are still in the early stages of understanding the forces which dominate the seas and determine their future, the laws which govern the harmony between the different species and the balance which must prevail among the various bio-systems based in the salty waters. We certainly lack sufficient awareness of how the aggressive arrival of *homo economicus* is challenging the sustainability of the oceans.

International dialogue on the oceans, negotiations and discussion must take account of this awareness that our journey is still in its early stages. Our common knowledge is so limited that the oceans must always be given the benefit of the doubt and economic utilisation must rest on sound scientific recommendations – otherwise we will risk destroying what to future generations will be the essence of their inheritance.

The gathering here today is a clear manifestation that, thanks to the advance of IT technologies, we can now work for a fundamental breakthrough and your Icelandic partners are proud to be in your coalition.

The Icelandic model of ocean management can be helpful, both as a reference point and as an inspiration that it is indeed possible to protect fish stocks in a programme of sustainable utilisation while at the same time building a highly successful and profitable fishing industry.

Because our struggle to extend our economic zone from 4 to 200 nautical miles was a direct continuation of our successful campaign for the establishment of the Republic, the people of Iceland have been deeply aware of our responsibility to preserve the resources of the ocean.

For decades, the Marine Research Institute has by law had a formal role in determining the annual catch of various species and the authority to close areas to fishing vessels when the protection of spawning fish so requires. At first, some politicians and local community leaders, and of course many fishermen, were not ready to accept its recommendations, believing that their own instinct was a better guide, but gradually our annual fisheries catches have become firmly based on scientific recommendations.

To strengthen this system, we developed in the 1980s a comprehensive regime of catch quotas for every vessel, making them transferable from the 1990s. Although this system is still hotly debated in my country, and certainly has its faults, especially regarding how commercially-based transfers by individual companies can affect the future of fishing communities, the result has been that Iceland is probably the European country that has succeeded best in recent decades in

maintaining its fish stocks at sustainable levels while making its fishing companies economically stronger and more profitable.

The scientifically-based quota system is also one of the reasons why Iceland has come out of the 2008 financial crisis earlier, and more effectively, than anyone expected, demonstrating a clear correlation between a sustainable fishing regime and recovery from a severe banking collapse!

Due to its significance for our economy, the fishing sector has furthermore served as the basis for technological innovations by a multitude of engineering and IT companies, opening routes for them to global markets.

Among those is the computerized system which the Icelandic Directorate of Fisheries has developed in cooperation with innovative IT companies like TrackWell. It allows the Directorate to have up-to-date information on the catch of each vessel, classified by species, port of landing, the fishing gear used, the fishing grounds and the buyers of the catch. This information is then immediately put on the Directorate's website and updated every six hours, so competing fishing companies can simultaneously check on each other and everybody else anywhere in the world can access their performance in a transparent way.

The nexus between IT and responsible fisheries is probably our best hope of reform, and therefore the dialogue initiated by Google is of great importance. I express my full support for its continuation and our readiness to offer assistance and advice. Let me conclude my opening remarks by offering three proposals to be considered in our continuous cooperation.

First. *Focus on the Arctic.* There are many reasons why: (a) The Arctic is fast acquiring global significance, especially since, following the Kiruna Ministerial Meeting, more than half of the G20 countries will be represented, in one way or another, at the Arctic table. (b) The aggressive melting of the sea-ice is creating a new ocean. For the first time in human history we are witnessing such a monumental transformation on planet Earth. (c) Climate change is already causing large movements of fish stocks; the recent mackerel dispute in the North Atlantic demonstrates how Arctic states and others now have to deal with migrating species in a new way. (d) The United Nations Law of the Sea is already a recognized and agreed framework within which to reach agreements.

In addition to these reasons there are already existing instruments ready to be used to promote responsible and monitored fisheries. One of these is the Arctic Circle, which we established last year and which

succeeded so well that its First Assembly in Reykjavík became the most wide-ranging international forum on the Arctic.

We have already decided that ocean resources and fisheries, marine management and other related issues will be among the key sessions at the Second Assembly of the Arctic Circle in Reykjavík this fall. We have discussed the content of these sessions with the Director General of the FAO, Dr José Graziano da Silva, and the Assistant Director-General of FAO Fisheries and Aquaculture, Mr. Árni Mathiesen, both of whom have expressed an interest in attending the Assembly. Furthermore, marine research institutes and fishing companies from various countries will be represented there.

The Arctic Circle is also planning, in cooperation with the Government of Greenland, another smaller forum in Greenland to be held prior to the Assembly this fall, and next year, similar gatherings in Alaska and Singapore, the latter intended primarily to focus on the role of the Asian countries in the Arctic, some of which are leaders in the global fishing industry.

Thus, the Arctic Circle framework can offer the Google process many interesting ways to move forward on these issues, both by reporting on the conclusions reached at this meeting as well as gathering additional partners in these important endeavours.

I therefore take this opportunity, on behalf of the Arctic Circle, to offer Google a strategic relationship in the next few years in order to strengthen our common cause.

Second. *Country-by-country zones and the global commons.* These must be the core dimensions of our strategies. The record of global negotiations, the never-ending series of diplomatic gatherings, unfortunately is not a rapid road to success. Just look at the record from Kyoto to the present.

Therefore, I believe we should concentrate on country-by-country agreements, supported by both public and private partners who recognize that the existing IT technologies can enable them to protect their marine resources while at the same time building highly successful and profitable fishing industries.

This can be done by using tracking devices, similar to those which for years have been obligatory instruments on every Icelandic vessel, large and small. They send signals to satellites or other receivers, enabling the authorities to monitor where each vessel is at all times, creating a continuous record of vessel movements. This supports rescue

efforts and enables companies to assemble data on the basis of which they can organise their fleet in a more profitable way.

All nations are linked to a strict international regime which obliges every aeroplane that takes off, whether large or small, to meet specific technical requirements. We should similarly advocate country-by-country agreements aimed at installing tracking instruments inevery fishing vessel and thus transform the foundations on which a global system of responsible and safe fisheries can be firmly established.

Then we should extend this country-by-country cooperation to areas of the global commons, the oceans beyond the 200-mile zones; use existing satellite technologies to monitor fishing vessels in the open oceans, list publicly their movements on open platforms and announce the location of vessels that have not accepted the tracking devices. Through the global social media and other IT instruments this information would then become public knowledge. Thus we can use the pressure created by transparency and public availability of data to transform fisheries, both within and outside the 200-mile zones.

Third. *Use 99%*. That should be our second slogan; our profound goal – together with the sustainability of the ocean resources. Let me explain.

It is not enough to protect the fish stocks. We should maximize the utilization of each fish brought out of the ocean. Unfortunately only 50% or even less of its volume and weight is now being utilized. We have created elaborate processes and industrial mechanisms to destroy half of the global fish stocks after they are caught.

This was also the case in Iceland until 30 years ago. We had thrown the fish heads and the backbones away after filleting the fish but then decided to create a drying process which enabled us to preserve them in perfect conditioin for up to two years with zero infrastructure, export them to African markets where they are used as key ingredients in great dishes. The drying process takes only about five days and the product lasts for a long time.

This gave us approximately 75-80% utilization. It left the fish skin, the inner organs and other parts previously thrown away. Now we have developed industrial processes which take the remaining 20% and create various health and cosmetic products like omega 3, calcium. enzymes, collagen and other items. Thus what is still thrown away by most fishing companies all over the world could bring great profits by being processed for the health, pharmaceutical and fashion markets.

At the seafood expo in Boston next year, a collection of Icelandic companies intends to present this case for commercially viable use of fish by-products. Thus the goal "Use 99%" is already a part of the Icelandic model.

My proposal is that we should try to explore ways to make that target global because it does not make sense to work hard to protect fish stocks and advocate sustainability of ocean resources if we then throw away half of what is caught due to ignorance and irresponsible business methods.

Here, also IT innovations can be helpful. By utilising commercial stripe marking, the bar-code labelling we all know from our everyday shopping, putting it on every piece of fish product sold anywhere in the world, we can inform the customers whether the producers adhere to the "Use 99%" principle.

Icelandic companies have a well-established practice of using such bar-codes in both the European and US markets, indicating the vessel that caught the fish, the processing factory and even the individuals who handled the fish on its way from the ocean to the consumer. We now have the technological ability to allow buyers of fish, whether in Waitrose in London or Whole Foods in New York, to check on their smartphones whether the companies adhere to sustainable fishing practices, respect the preservation of the stocks and follow the 99% method in their processing.

I hope that those three proposals will help to further our dialogue and cooperation. I can assure you that there are many interested and willing partners in Iceland, prepared to join a global campaign, aimed at preserving the resources of the oceans, inspired by the need to treasure the marine riches of Mother Earth.