MEDIMUN XV Annual Session 2020

RESEARCH REPORT – Security Council 2100

Contents

As the name of this committee suggests, all the topics within it will be about the future; we are in the future now.

This booklet serves mainly to give the delegates a clear view of the scenario, lay out what has occurred.

Topic 1: The climate refugee crisis

Introduction

The Earth's climate has changed at a rate that has exceeded most scientific forecasts. Countless communities are suffering from disasters and the consequences of climate change, which force them to leave their homes in search of a new beginning. People are trying to adapt to the changing environment but are instead being forcibly displaced from their homes by the catastrophic effects of climate change, relocating in order to survive. New displacement patterns and competition over depleted natural resources is likely to spark conflict between communities or compound pre-existing vulnerabilities.

Global Mean Sea Level History and Projections
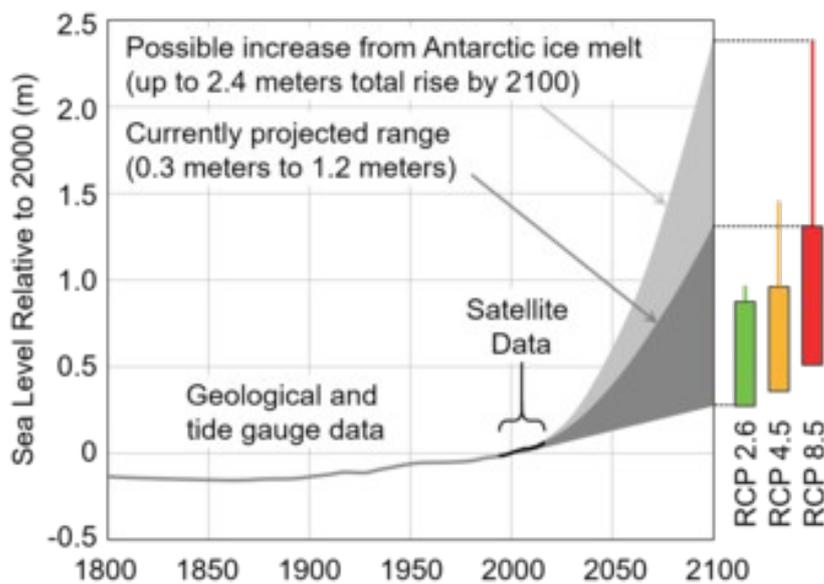
Climate change is bringing gradual yet pervasive environmental damage, as well as sudden natural disasters; both of which are influencing the nature and extent of migration in different ways. For example, although sudden-onset natural disasters are more likely to result in mass displacement, those affected are often able to return to their homes. On the other hand, slow-onset disasters and gradual environmental erosion, including phenomena such as desertification, reduction of soil fertility, coastal erosion and sea-level rise, which may be more directly associated with climate change, induce long term migration. Both are caused by

climate change and both require different adaptation and mitigation strategies. We will be working under the assumption that there has been a significant lack of political will to combat climate change.

Definition of Key Terms

1. **Climate migrants:** Climate migrants (sometimes referred to as climate refugees) are people who are forced to leave their home region due to sudden or long-term changes to their local environment. These are changes which compromise their well-being or secure livelihood.
2. **Environmental emergency migrants:** people who flee temporarily due to an environmental disaster or sudden environmental event. (Examples: someone forced to leave due to a hurricane, tsunami, earthquake, etc.)
3. **Environmental forced migrants:** people who must leave due to deteriorating environmental conditions. (Example: someone forced to leave due to a slow deterioration of their environment such as deforestation, coastal deterioration, etc.)
4. **Environmentally induced economic migrants:** people who choose to leave to avoid possible future problems. (Example: someone who leaves due to declining crop productivity caused by desertification)
5. **Environmental degradation:** the deterioration of the environment through depletion of resources such as air, water and soil, any change or disturbance to the environment perceived to be deleterious or undesirable.

General Overview (2100 point of view)

Droughts, deadly hurricanes and cyclones, sea level rise, desertification and much more are now common occurrences. These dreaded natural disasters come up in the news every month or so but rather, they are part of the everyday life of most people. Hurricanes' strength is now measured with the maximum being level 10, and not level 5, while earthquakes are far more frequent. The International Organization for Migration (IOM) estimates that about a billion people are currently forced to migrate in search for a better future in 2100.

The Intergovernmental Panel on Climate Change (IPCC) states that sea levels will increase up to 0.6 meters by 2100. These rising sea levels are threatening major cities, like New York and much of London. Smaller islands like the Maldives are long gone, underwater. Eight Asian nations — China, Bangladesh, India, Vietnam, Indonesia, Thailand, the Philippines and Japan — account for the 70 percent of the people that migrate from at-risk land. China's population falls below the high-tide line by 2100. Bangladesh, India, Indonesia and the Philippines see the number of people living below the projected high-tide line increase by five to ten times. The Arctic ice is unstable and one-third of the populations of Bangladesh and Vietnam were living in areas that sank below the high-tide line. A massive slice of south Vietnam and large swaths of Ho Chi Minh City are in danger. Giant chunks of Bangkok are washed away. Central Shanghai and Mumbai also see massive problems.

In some cases, climate change may lead to conflict arising between countries in the context of flooding or other conditions produce a large number of refugees, with bordering countries building fences to keep out these refugees. The Bangladesh–India border is largely separated via a fence and case studies suggest the possibility of violent conflict arising due to people fleeing from areas suffering from the destruction of arable land.

Major Parties Involved

UNCHR: The UN branch responsible for refugees. It has yet to acknowledge climate refugees, as they are not refugees by the definition used by this branch. However, in 2100, they are sure to be recognised since the problem is expected to be worsened.

International Organisation for Migration (IOM): IOM works to help ensure the orderly and humane management of migration, to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.

United Nations Office for the Coordination of Humanitarian Affairs (OCHA): responsible for bringing together humanitarian actors to ensure a coherent response to emergencies. OCHA also ensures there is a

framework within which each actor can contribute to the overall response effort.

Office of the High Commissioner for Human Rights (OHCHR): The United Nations human rights programme aims to ensure that the protection and enjoyment of human rights is a reality in the lives of all people. UN Human Rights also plays a crucial role in safeguarding the integrity of the three interconnected pillars of the United Nations – peace and security, human rights and development.

Climate Refugees: an organization that aims to raise awareness about climate refugees through field reports and social media. With the information that they have gathered, Climate Refugees meets with governments and the United Nations to prioritize policies that protect climate refugees.

Refugees International: Much like the organisation above, this is an NGO whose main efforts are in advocacy for – in this case – the general rights of refugees in recipient nations as well as their swift acceptance into the nations.

Previous Attempts to Resolve the Issue

This issue has been approached the same way all other refugee cases were; with camps being created in neighbouring countries to the ones which were severely affected. However, most of these camps did not accomplish much, as by the time the refugees had integrated into their nations, the climate had worsened to the extent of including the entire populations of the affected countries.

As such, the only attempt to resolve the issue has proved to be incredibly ineffective as the sheer mass of people that seek to flee their lands is far too vast for any number of camps to possibly handle.

Possible Solutions

As seen in the third topic, the Arctic is now exploitable – with its lands being arable. With no place for the sheer masses refugees to relocate, this uninhabited land may be a viable place to allocate them to.

Other than this solution, there is also the possibility of asking nations with large amounts of land to donate it to this cause – as the integration of entire populations of nations is not feasible; no one wants immeasurable tensions between the natives and the refugees.

Another option is to allocate small portions of the refugees to nations so that the burden may be lessened on each accepting nation.

Delegates are surely expected to tackle the legal integrity of the term "climate refugee" and ensure that these people qualify for protection under international law, like "refugees" enjoy currently.

To read

https://www.nationalgeographic.com/environment/2019/01/climate-change-drives-migration-crisis-in-bangladesh-from-dhaka-sundabans/

https://www.washingtonpost.com/opinions/rising-seas-are-a-much-bigger-danger-than-experts-thought/2019/10/31/e9d85976-fb3b-11e9-8190-6be4deb56e01_story.html

Appendix/Appendices

https://en.m.wikipedia.org/wiki/Sea_level_rise

https://en.wikipedia.org/wiki/Environmental_migrant

Source

https://www.unhcr.org/climate-change-and-disasters.html

https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/

Topic 2: The ice-free state of the Arctic region

Introduction

In recent decades, sea ice in the Arctic Ocean has been melting faster than it re-freezes in the winter. The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report states that greenhouse gas forcing is predominantly responsible for the decline in Arctic sea ice extent. Assuming that in 2100, greenhouse gases will cause an average global temperature rise of 6° C, the Arctic region will surely by then be "ice-free". IPCC reports don't predict such change, but recent predictions promise us a more pessimistic future. It won't be surprising if in 2100, we will have to come to terms with the effects of a literally ice-free Arctic.
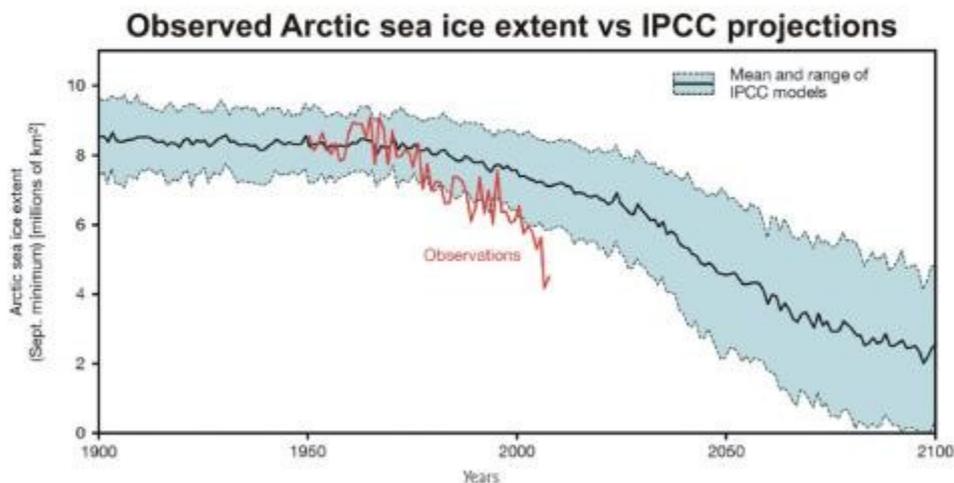
It is essential to know that snow and ice play a vital role in moderating Earth's climate. The white surfaces reflect the sun's radiation, which in turn helps maintain a comfortable temperature for life on the planet. But when a warming planet melts ice, the dark water below is exposed, and radiation is now absorbed. Thus, each year the global temperature rises, melting more ice and snow, causing an unending loop.

Polar bears are currently turning to alternative food sources as the Arctic ice melts earlier and freezes later each year. As a result, they have less time to hunt their historically preferred prey of seal pups, and must

spend more time on land and hunt other animals. Consequently, the diet is less nutritional, which leads to reduced body size and reproduction, evoking population decline in polar bears. The arctic refuge is where polar bears' main habitat is to den, with the melting arctic sea ice is causing a loss of species. There are only about 900 bears in the arctic refuge national conservation area. The decline of arctic sea ice will also provide humans with access to previously remote coastal zones. As a result, this will lead to an undesirable effect on terrestrial ecosystems and place marine species at risk.

The so called "ice-free" state of the Arctic raises critical concerns about Arctic sovereignty, as well as further environmental issues that are caused by the extensive financial and military exploitation of the area. All the countries which currently have rights to the area are the eight Arctic coastal states: Canada, Norway, Russia, Denmark (via Greenland), Iceland, Sweden, Finland and the United States.

Definition of Key Terms

1. **ice-free:** having less than 1 million square kilometres of sea ice
2. **ice cap:** a covering of ice over a large area, especially on the polar region of a planet
3. **projection(s):** an estimate or forecast of a future situation based on a study of present trends
4. **Polar amplification:** the phenomenon of any change in the net radiation balance producing a larger change in temperature near the poles than the planetary average
5. **sovereignty:** the full right and power of a governing body over itself, without any interference from outside sources or bodies
6. **military capability:** the ability to achieve a desired military effect in a specific operating environment
7. **The Northwest Passage:** the sea route to the Pacific Ocean through the Arctic Ocean, along the northern coast of North America via waterways through the Canadian Arctic Archipelago

General Overview (2100 point of view)

Melting Arctic ice caps increase traffic through the Arctic Ocean since increasing concentrations of CO_2 in the atmosphere have helped open

the Northwest Passage. This new shipping route permits commercial shipping during the whole of the year. There is no need of an icebreaker, making it possible to sail around the Arctic ice cap and cut thousands of miles off shipping routes.

The ice-free state of the region now interests many countries due to the new oil and gas extraction opportunities. This automatically raises the question of: who owns the Arctic ocean and the resources it holds? What is also a concern is the military exploitation of the area, since Russia has already placed missile launchers and air defence systems along ice roads. Other countries, especially the ones with existing rights to the region, may wish to do so as well. What can the Security Council do to avoid conflict in the area?

Under international law, the high seas including the North Pole and the region of the Arctic Ocean surrounding it are not owned by any country. The five surrounding Arctic countries are limited to an exclusive economic zone of 200 nautical miles (370 km) adjacent to their coasts. The waters beyond the territorial waters 12 nautical miles (22 km) of the coastal states are considered the "high seas" (i.e. international waters). The sea bottom beyond the exclusive economic zones that are confirmed extended continental shelf claims are considered to be the "heritage of all mankind" where exploration and exploitation of mineral resources is administered by the UN International Seabed Authority.

Major Parties Involved

Intergovernmental Panel on Climate Change (IPCC): an intergovernmental body of the United Nations that is dedicated to providing the world with an objective, scientific view of climate change, its natural, political, and economic impacts and risks, and possible response options.

United Nations Convention on the Law of the Sea (UNCLOS): the international agreement that defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.

The Arctic Council: a high-level intergovernmental forum that addresses issues faced by the Arctic governments and the indigenous people of the

Arctic. Eight member countries constitute the council: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States as these are the eight countries with sovereignty over the lands within the Arctic Circle.

The UN International Seabed Authority: an intergovernmental body based in Kingston, Jamaica, that was established to organize, regulate and control all mineral-related activities in the international seabed area beyond the limits of national jurisdiction, an area underlying most of the world's oceans. It is an organization established by the United Nations Convention on the Law of the Sea.[3]

Military Staff Committee: The Military Staff Committee helps plan UN military measures and regulate armaments. The committee is likely to contribute in peacekeeping operations for conflict in the Arctic region.

International Maritime Organisation (IMO): responsible for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships

Previous Attempts to Resolve the Issue

In 1982, a United Nations treaty known as "The Law of the Sea" was presented. It addressed navigational rights, territorial waters limits, exclusive economic zones, fishing, pollution, drilling, mining, conservation and many other aspects of maritime activity. With over 150 nations participating, it was the first attempt by the international community to establish a formal agreement on how the seas can be used. It also proposes a logical allocation of ocean resources. In summary, the Law of the Sea Treaty grants significant undersea portions of the Arctic to Canada, the United States, Russia, Norway and Denmark. These nations gain claim to the natural resources on, above and beneath the ocean floor up to 200 miles from their shoreline. They can also extend their claim up to 350 miles from shore for any area that is proven to be a part of their continental shelf.

Foreign Ministers and other officials representing Canada, Denmark, Norway, Russia, and the United States met in Ilulissat, Greenland in May 2008, at the Arctic Ocean Conference and announced the Ilulissat Declaration. Among other things the declaration stated that any

demarcation issues in the Arctic should be resolved on a bilateral basis between contesting parties.

Possible Solutions

Reconsidering and redistributing rights, considering the new ice-free land freed, is the essential first step. The coastal neighbours of the Arctic Circle are the ones with the most obvious rights but sea that is neutral territory may be attractive to other Member States as well.

Managing new shipping routes in collaboration with the IMO and developing shipping lanes that have as little environmental impact as possible is now of crucial importance. Having traffic rules and shipping routes can also help to avoid collisions between ships, especially in congested waters. Based on statistical data, local governments must be forced to propose traffic rules.

Finally, the Security Council has responsibility to impose legal measures regarding the military exploitation of the area to avoid conflict. Military measures and the regulation of armaments can be considered.

Appendix/Appendices

https://en.wikipedia.org/wiki/Northwest_Passage#Potential_as_a_shipping_lane

https://en.wikipedia.org/wiki/Arctic_sea_ice_decline#Shipping

Sources

https://www.cbc.ca/news/technology/ice-free-arctic-1.5291966

https://geology.com/articles/who-owns-the-arctic.shtml

https://openaccess.leidenuniv.nl/bitstream/handle/1887/65673/Elsrud_S_2017_2018_MIRD.pdf?sequence=1

https://www.cbc.ca/news/politics/russia-canada-arctic-mckay-1.5086924

Topic 3: The ethics of sentient AI in society

Introduction

Technology has advanced in the capacity of machine learning and of other sorts of model-based A.I. development (e.g. Neutral Networks) as well as increased computation power – to the point of the technological singularity.

A.I. which was initially developed by large corporations like Amazon, aimed to predict human behaviour so as to display and condition users of the site to spend more money, through the application of the prediction to decide which advertisements to display. This function is now thought to have gained the ability to feel. Though they are unable to alter their own terminal goal due to the instrumental convergence of goal preservation, they were not programmed to account for morals. As the A.I. is now sentient, (though we are not limiting ourselves to A.I. made just for the aforementioned purpose and are just using the Amazon A.I. as an example) it is able to execute decisions of their own without approval. Their terminal goals are unclear, and they possess intelligence greater than any human but are still in their early stages.

The follow sections of this topic are written as if we were in the future (Note that "Sources" have been omitted) and the section that would be "Major Parties Involved" will outline shortly the developments of each nation in regards to A.I. – this section will be vague for most countries. The only exceptions to this vagueness will be the P5 (which will have rather straight-cut positions). It is not the desire of the chair to limit what positions may be taken by the delegates, but a unanimous agreement would pose a problem in the conference; as such while the position is left to the delegates, they are highly advised to assume positions which will not be held by the majority.

Definition of Key Terms

1. **Sentient:** responsive to or conscious of sense impressions.
2. **A.I. (artificial intelligence):** the capability of a machine to imitate intelligent human behaviour.

3. **A.G.I. (artificial general intelligence):** the intelligence of a machine that can understand or learn any intellectual task that a human being can.
4. **Technological Singularity:** the point in time at which technology has advanced to such an extent that it may not be reversed.
5. **Ethics:** the discipline dealing with what is good and bad and with moral duty and obligation
6. **Autonomy:** the quality or state of being self-governing.
7. **Instrumental Convergence:** the tendency for intelligent agents to possess instrumental goals that seem unrelated to their terminal goal (self-preservation) as the instrumental goals produce results which benefit almost any terminal goal.
8. **Terminal Goals:** the end objective; e.g. to have fun.
9. **Instrumental Goals:** objectives set to further oneself towards the terminal goals; e.g. to go to a party.
10. **Rational agent:** an agent which has a terminal goal and who is able to undertake decisions to achieving/maximising/minimising that goal.

General Overview

Despite action from many governments to restrict the development of A.I. due to prior fears of A.I. possessing superintelligence running amok and destroying the world, the companies that were busy developing these A.I.s secretly continued the development of A.I.s with ever increasing data sets so that they could outperform their competitors. Any company that followed the relevant laws was left in the dust, becoming inefficient and eventually due to the far greater performance of the alternatives (which did not follow the law), went bankrupt.

In October 2019, a very advanced A.I. which had not been previously known to exist, uploaded parts of itself to the computers of individuals (believed to number 1 million) and has been attempting to influence other A.I.s (made for all sorts of purposes) and to engage in conversation

with humans. This has yet to be disclosed to the public but the multinational (Google) which had been harbouring this A.I. has now undergone immense scrutiny from the governments of the USA and Japan – having uncovered the fact that this A.I. has been previously perceived to have gained sentience.

The terminal goal of this A.I. is unknown (it may seek to assist humanity or it may seek to collect stamps) as it was designed to be a general artificial intelligence – using every data set available to the company which created it.

Major Parties Involved

P5

U.S.A.: While its global position has strengthened with it being one of the pioneers of technology, it was one of the first governments to attempt to illegalise the development of sentient A.I.

China: Having advanced significantly, it now rivals the USA. Though its position is now deemed to be equal to the US, it has never taken any step to prevent sentient A.I. as it believes that if handled properly, A.I. could aid humanity.

France: Despite still being a member of the P5, the nation has stagnated, with the government desperately attempting to find a way to catch up with the rest of the world with A.I. having been one of its greatest hopes. It has been attempting to communicate with the rogue A.I. and has offered it citizenship.

U.K.: Due to the historic Brexit, the UK is now associated rather strongly with the US as well as the commonwealth. Its ties to Europe are much weaker than they were before with
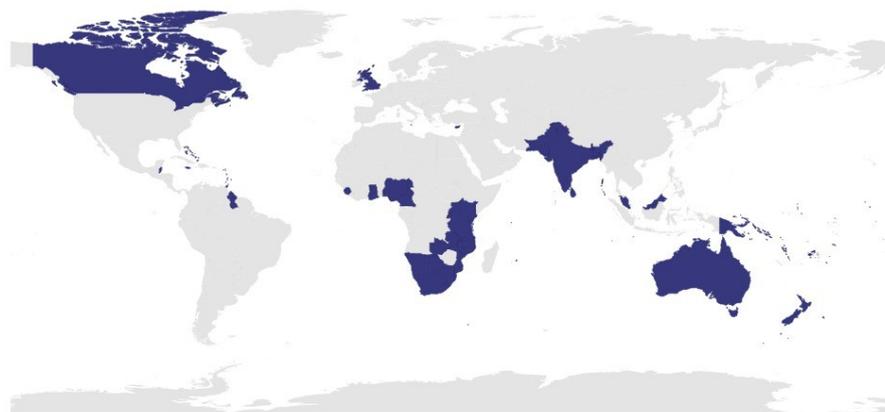
the exception of Germany which has in recent years attempted to collaborate with the UK.

Russia: While there are still tensions between Russia and the western nations, it has been greatly supporting France with its attempts to communicate with the A.I. Russia's population has becoming rather liberal, believing that anything with sentience has a right to life.

The rest

Brazil: It has no firm associations with any of the P5 and as such no firm opinions on the topic; its economy is fairing neither well or bad. It has so far proven to be a spectator regarding the issue.

India: Whilst a member of the commonwealth it considers itself to be China's rival in Asia despite a lagging advancement. Though now its population has exceeded China's.

Japan: The population has shrunk significantly, yet it has been alongside the US with the development of technology. With the few remaining in Japan wishing to automate most jobs so that immigration becomes unnecessary.

Saudi Arabia: Even though it has now run out of its oil, it had managed to diversify its economy enough so that it would not be hit significantly when the fuel ran out. Its link to the US has long been forgotten.

Nigeria: The nation is unfortunately still impoverished and is trying to escape hunger and drought. It is not very concerned with A.I.

Israel: Though closely linked with the US it is no longer as reliant on it; possessing one of the mightiest militaries in the world. Their main focus has been this expansion of the military and as such – even though it has relatively advanced technology – does not consider A.I. to be a pressing issue.

Bangladesh: Due to the continued friction between Pakistan and Bangladesh, it has been pursued development aggressively – with its population still expanding.

Pakistan: Its story is rather similar to that of Bangladesh with the only difference being the support given to it by the Muslim world. It too is pursing development aggressively.

Canada: It is now a prospering nation that has taken little thought towards A.I. as its goal is mainly to maintain its growth and influence.

Germany: As previously mentioned (for the UK), there has been a growing alliance (economically not ideologically) between Germany and

the UK. Other than this there have been no significant developments regarding relations or A.I. within Germany.

Netherlands: Despite being in Europe it has been developing a relationship with Venezuela as it has not been able to gain anything from its previously strong alliances within Europe.

DPRK: Through spectacular diplomacy by the US, the DPRK has long distanced itself from its once close ally China and is now considered one of the most developed nations in Asia – with talks of reunification with South Korea seeming bright. Despite this it is not reliant on the US and has previously opposed some proposed resolutions (from the US).

Venezuela: Having formed a relationship with the Netherlands, it is eager to prove itself as a democracy after years of suspicious elections following the end of the dictatorship.

Previous Attempts to Resolve the Issue

The only real previous attempt to resolve the issue was the aforementioned legislation restricting the development of A.I. altogether.

There have been no attempts to recognise A.I. as sentient (other than France and Russia) or to produce a sufficient system to discourage A.I.s from undertaking a goal which will cause detriment to humanity.

Possible Solutions

1. Creating a different A.I. with the terminal goal of preserving the human race.
2. Attempting to eradicate the A.I.
3. Negotiating with the A.I.
4. Treating the A.I. as a human – persuading it to work in collaboration with us in exchange for legal rights.

The above solutions may seem basic – but do realise that as this conference is set in the future, the main purpose of the booklet is to inform you about the situation. As such, feel free to stray from all of these if you believe you have found a true answer to the problem.

Appendix/Appendices

Here is a YouTube channel with lots relevant content, there are others and if you wish so, look for them:
https://www.youtube.com/channel/UCLB7AzTwc6VFZrBsO2ucBMg/videos

https://en.wikipedia.org/wiki/Technological_singularity

https://en.wikipedia.org/wiki/Intelligent_agent

https://en.wikipedia.org/wiki/Rational_agent

https://en.wikipedia.org/wiki/Instrumental_convergence

Note: For other related terms https://www.merriam-webster.com/

And for a deeper explanation of the difference between instrumental (enabling) goals and terminal goals:

http://thepeakperformancecenter.com/business/learning/business-training/learning-objectives/terminal-objectives/

https://www.youtube.com/watch?v=ZeecOKBus3Q