NAMUN'21

UNCSTD

Study Guide

#jointheworldsheartbeat

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Cherished participants of NAMUN’21,

I, İdil Yüzbaşıoğlu, the secretary general of this year's Nesibe Aydın Model United Nations (NAMUN) would like to welcome you all to the 10th annual conference of NAMUN. Our academic and organization team both gave it their all to make this conference educational and fun for every attendee. All of our teams are more than grateful to welcome you all to our 10th year anniversary of NAMUN!

We faced many difficulties along the way, overcoming them one by one with the support we gave to each other. With both the academic and the organization team's hard work, we bring you NAMUN with its well planned committees and well planned coffee break activities to help you relax after a long session. This year NAMUN offers five committees: two beginner, three intermediate and finally a J.MUN. UNEP (United Nations Environmental Programme) , UNCSTD (United Nations Commission on Science and Technology for Development) , NATO (North Atlantic Treaty Organisation) , UNHCR (United Nations High Commissioner for Refugees) , CSW(Commission of Status of Women) our JMUN. UNICEF (United Nations Children’s Fund). All of these committees are fit to talk about the UN’s Sustainable Development Goals as we seek out solutions to real life problems we see everyday on the news.

In conclusion, our teams invite you to experience unforgettable memories, enhance your academic skills of presentation and debate, learn other people and countries' views of the world, and join the world’s heartbeat.

Welcome to NAMUN’21! Ten years, going strong.

Secretary general,

1. Introduction to the United Nations Commission on Science and Technology for Development (UNCSTD)

1.1. What is UNCSTD?

The United Nations Commission on Science and Technology for Development (UNCSTD) is a branch of the Economic and Social Council (ECOSOC). It holds an annual intergovernmental forum for discussion on timely and pertinent issues affecting science, technology, and development.

1.2. History of UNCSTD

The commission met for the first time in April 1993 New York City, USA. It replaced the former Intergovernmental Committee on Science and Technology for Development and its Advisory Committee created after the Vienna Conference on Science and Technology for Development in 1979.

1.3. Functions

The main purpose of UNCSTD is to provide the United Nations General Assembly and ECOSOC with high-level advice on relevant science and technology issues through analysis and appropriate policy recommendations or options to guide the future work of the UN, develop common policies and agree on appropriate decisions.

1.4. Sources of UNCSTD

The United States is the main donor country for the budget of UNCSTD. The US funds provide the necessary financial sources for the

activities of the commission. Some UN member states also provide this commission with additional funds.

2. Regulation of Artificial Intelligence Regarding Human Interactions

What is Artificial Intelligence (AI)?

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and imitate their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

2.1. Societal and Ethical Concerns about Artificial Intelligence

Artificial Intelligence is starting to become a part of our daily lives more and more starting from SIRI and facial recognition on our mobile phones to self-driven cars. We can’t deny the fact that it makes our lives easier in many ways and helps us to accomplish certain tasks in a shorter amount of time, however, many risks come within working with and working on artificial intelligence. There are various reasons why governments, companies, and people, in general, are worried about the development of artificial intelligence and the changes it may bring, such as:

i. As stated above, in the definition of Artificial Intelligence, machines are programmed to think and act like humans which could lead to the job loss of several people since they won't be needed once machines can do all the work instead of them probably in a shorter amount of

time. Another problem is the possibility of machines and robots making mistakes. It could cause serious damages including companies' reputations, human privacy, and safety, etc.

For instance, Teka Microsoft's AI chatbot, Tay, was released on Twitter, 2016. It had to be shut down immediately in less than a day, because it had learned to spew racist slurs and Nazi propaganda, due to the information it was receiving and learning from other Twitter users.

ii. Although people predict a huge amount of job losses, scientists have also stated that artificial intelligence could create new jobs that require specific human abilities involving higher cognitive functions such as analysis, synthesis, etc.

iii. How will the development of Artificial Intelligence affect wealth inequality? Assumptions state that individuals and companies that have the money to purchase Artificial Intelligence will get richer. But how will the living standards and circumstances of those, who cannot afford to buy the newest AI-based gadgets, change?

iv. Another critical question that comes to mind when we think about Artificial Intelligence systems, is harming or even killing people. How can we ensure that AI agents don't have the same flaws as their creators?

For example, there was a robot called Tallon, which was a computerized gun that jammed and opened fire uncontrollably after an

explosion that killed 9 people and wounded 14 more.

The role of predator drones in aerial military defense could and probably will have bad effects on humankind as well.

Some too many people would use artificial intelligence for personal purposes that could be very harmful to others and have incurable effects on humankind.

In some TV shows such as ‘‘The Terminator’’, we see AI-driven robots going rogue; A super-intelligent centralized AI computer could become self-aware and decide to free itself from human control. However, the current AI technology is not capable of realizing such scenarios. We should still be careful and keep the risks that artificial intelligence brings in mind.

If artificial intelligence develops to the point that it can replace human abilities, it will become a very important part of our lives. But how should we treat AI-driven robots and machines? Should we grant them human/ citizen rights? How should we rate their social status?

2.2. Governments Accountability/ Responsibility Regarding Potential Human Rights Violations due to AI Regulations

Artificial Intelligence plays and will continue to play an important role in almost every aspect of our lives. It has the potential to revolutionize how we live, learn, communicate and so much more.

Over the years, artificial intelligence has always caused moral challenges because of possible risks of making mistakes due to incidental algorithmic or

information bias in sensitive areas such as gender, race, age, or class. Citizens state that they expect government agencies to manage, monitor, and alleviate these risks of AI-driven machines to make mistakes for them to fully benefit from artificial intelligence and feel safe while doing so.

Since artificial intelligence is developing and improving more and more, governments need to ensure that AI platforms act as responsible members of society and follow the same rules that employees are required to follow. Many people have stated that they cannot trust AI-driven systems unless governments commit to transparency and communicating the steps that are used in AI processes, especially when it comes to their data privacy. Governments also need to create formal governance policies to address who owns, who analyzes, and who has access to each granularity of data to protect citizens' confidentiality.

2.3. Possible Ways to protect human rights while using artificial intelligence

As stated previously, the usage of artificial intelligence-driven systems brings many risks and makes many people worry about the possible violation of their rights and personal data. However, there are some precautions that companies and governments could take to ensure users of AI systems, that their information and privacy will not be violated, such as:

i. Developing guidelines for AI safety to ensure that anything including AI won't be used unethically and that it is used for the right reasons. Those guidelines should embrace rules and regulations that could engender trust among the users of artificial intelligence.

ii. It is also very important that companies are open about their privacy policy and guide their users to ensure that they feel safe using artificial intelligence.

iii. Validating and verifying is a measurement of the reliability and predictability of AI systems. All AI systems should be verified, validated, and tested, both probabilistically and logically before they are deployed. Validating and verifying AI systems is necessary for making sure that there is no unwanted behavior.

iv. According to research, people have many questions regarding the usage of artificial intelligence which often leads to them deciding not to use it at all. To prevent such cases, governments or companies could make conferences where the most asked questions will be answered.

v. Governments and the private sector need to invest in stronger cooperation between state actors – governments, parliaments, the judiciary, law enforcement agencies – private companies, academia, NGOs, international organizations, etc.

vi. States should also make sure that the private sector, which bears the responsibility for AI design, programming, and implementation, upholds human rights standards. The Council of Europe Recommendation on the roles and responsibilities of internet intermediaries, the UN guiding principles on business and human rights, and the report on content regulation by the UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, should all feed the efforts to develop AI

technology which can improve our lives. There needs to be more transparency in the decision-making processes using algorithms, to understand the reasoning behind them, to ensure accountability, and to be able to challenge these decisions in effective ways.

3. Determining the Position of The Freedom of Expression in The Face of Net Neutrality

a.Definition

Net neutrality is defined as the principle internet service providers should cover to enable access to all applications and content regardless of the source without favoring or blocking certain products, websites or applications.

b. When were we introduced to the term “Net Neutrality?

The term was introduced in 2002 in response to the efforts by the Federal Communications Commission (FCC) in the USA. It required broadband providers to share their products/infrastructure with competitive firms. Being overruled and struck down by The Supreme Court with the reasoning of broadband services being considered as information services. The sticking point was the fact that it allows users to publish and store information on the Internet. Till 2015 net neutrality rules weren’t approved but with the Obama Administration those rules barred internet service providers and changing the speed of specific websited based on business preferences

C. Arguments For and Against Net Neutrality.

Advocates for network neutrality suggest that by not allowing ISPs to see the speed at which consumers can access specific websites or services, smaller

companies are more likely to enter the market and make new services. this can be because smaller companies might not be able to afford to pay money for “fast lane” access, while larger, versed companies can. for instance, several well-established social network websites were created without much seed capital. Had they been forced to pay extra to be accessed at the identical speed as competitors, they will never become successful. Advocates view net neutrality as a cornerstone of the open internet and propose that or not it's mandated by law within the U.S. to stop broadband providers from practicing data discrimination as a competitive tactic. Proponents of net neutrality include human rights organizations, consumer rights advocates, and software companies, who believe that open internet is critical for the democratic exchange of ideas and free speech, fair business competition, and technological innovation. They argue that cable companies should be classified as "common carriers," like public-service corporation companies or public transportation providers, who are forbidden by law from discriminating among their users. They advocate the principle of a "dumb pipe," maintaining that intelligence should be located only at the ends of a network, and therefore the network ("pipe") itself should remain neutral ("dumb"). Advocates of net neutrality see municipal broadband as a possible solution.

D. Utilities That Are Introduced with Net Neutrality

With net neutrality, ISPs may not intentionally block, slow down, or charge money for specific online content. Without net neutrality, ISPs may prioritize certain types of traffic, meter others, or potentially block traffic from specific services, while charging consumers for various tiers of service which will create inequality on the internet. It might result in online monopolies if businesses gain too much power.

E. The Future of Net Neutrality

The future of net neutrality is now within the hands of Congress, the courts, and also the states. Twenty-one state attorneys general sued the FCC in January 2018 to dam the new rules and restore the old ones; so did several consumer-advocacy groups. A tribunal decided mostly within the FCC's favor in 2019 but ruled that the agency couldn't override state-level net neutrality laws.

Several states have already passed such laws. Washington became the primary in March 2018, and Oregon followed soon after. California passed one of the foremost comprehensive net neutrality laws of all, but the principles are currently on hold amidst a legal challenge from the federal. Governors of Hawaii, Montana, New Jersey, New York, and Vermont have passed executive orders banning state agencies from doing business with broadband providers that do not uphold the principles of net neutrality.

In the meantime, you'll expect broadband providers to slowly benefit from their new freedom. They probably won't take big overt steps to weigh down or block competing services, especially not while courts are still deliberating the FCC's latest decision. But you'll be able to expect to determine more of the practices that carriers already employ, like letting their content bypass data limits. As an example, AT&T permits you to watch its DirecTV Now video service without having it count against your data plan but watching Netflix or Hulu still chews through your limit.

F. Past Net Neutrality Violations

i)The Early 2000s

A few internet providers, including Cox and Comcast, banned some customers from using virtual private networks (VPNs) and asked users to

upgrade to professional or business accounts if they wanted to access them. The practice was short-lived, but it helped inspire the web neutrality movement.

Today we predict about net neutrality mostly in terms of access to content, but within the early 2000s advocates were also worried that broadband providers would block customers from using some devices. AT&T, as an example, accustomed ban customers from fitting their Wi-Fi routers.

2005

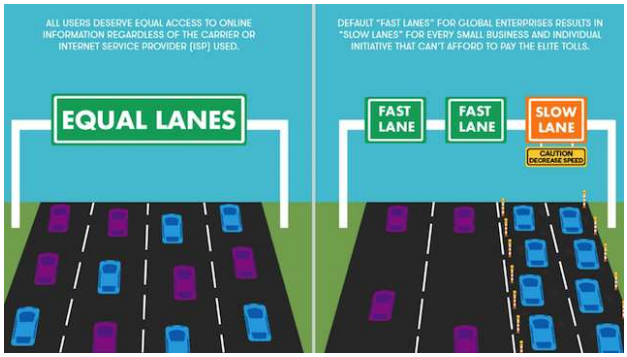
North Carolina internet service provider Madison River blocked Vonage, a service for creating telephone calls over the net. The FCC fined Madison River in 2005 and ordered it to prevent blocking, marking one in all the primary efforts to enforce net neutrality rules.

2008

The FCC ordered Comcast to prevent throttling BitTorrent connections on its network in 2008. Comcast denied that it throttled BitTorrent but sued the FCC, successfully arguing it had no authority to prevent Comcast from slowing down connections if it wanted to.

2009

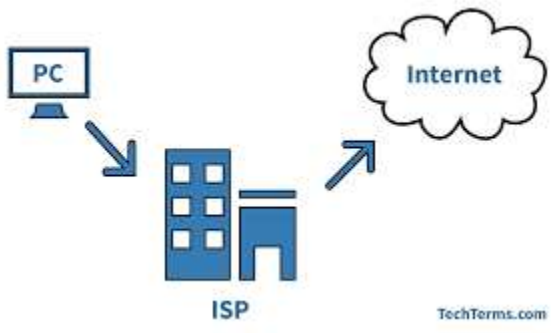
Apple was caught blocking iPhone users from making Skype calls at the request of AT&T. the businesses eventually relented harassment from the FCC.



3.1. How can ISPs affect Free Speech?

i. What is an ISP

An Internet Service Provider (ISP) is the industry term for the company that can provide you with access to the Internet, typically from a computer, usually for a fee. Without ISPs, we wouldn't be able to go on social media, do online shopping, or research anything on the internet; basically, we wouldn't be able to use the internet at all. ISPs are also responsible for ensuring that we are able to access the internet, route internet traffic, resolve domain names, and maintain the network infrastructure that makes internet access possible. However, the functions of ISPs are not limited by that. Many also offer services like web hosting, domain registration, and email services.



ii. Their control over the internet

Since they are providers they could have unlimited control over their provided portion of the internet. This means ISPs can pick favourites and regulate online traffic to give certain businesses an advantage over other small sites. Basically, ISPs are able to control internet speed which they can do in many different ways. A possible way for ISPs to control (in this case limit) internet speed is by provisioning the consumer equipment. For example, a cable ISP may configure how many channels a modem can use and therefore determine what its maximum rate is capable of. The government may also request some portion of power if net neutrality doesn't stop them.

ISPs get more advanced as technology continues developing. They are able to choose what they want to deliver which usually depends on market forces, regulatory pressure or competition which means that they could choose to offer slow speeds at high prices.

3.2. Protection of Free Speech by Net Neutrality

Without net neutrality, the government can affect what we view and how fast we view it. This means they could control our internet as well and stomp our free speech by eliminating the chance of someone seeing it. This gives power to the political party in charge by eliminating propaganda against them and promoting their catalog propaganda. In case of violation of net neutrality, ISPs could do many things that might have disadvantages on humans, such as; blocking websites for political reasons, making free online video sites slow and unwatchable, which would force people to pay money for something they normally wouldn't need to. They could also slow down or

block websites and require money (‘protection money’) only for them to make more money.

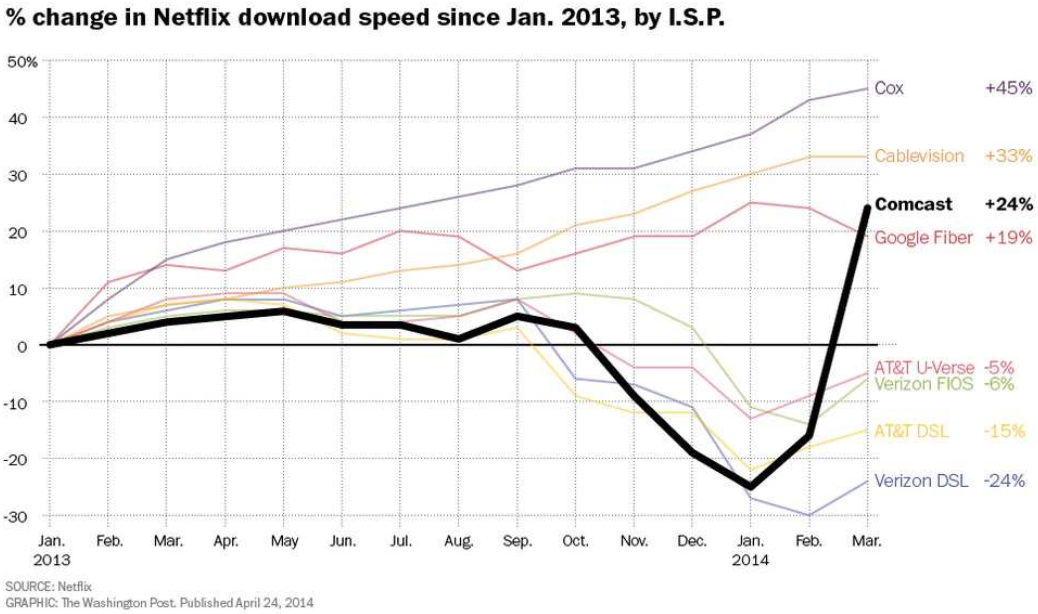
Article 13 is the EU’s copyright directive. According to this directive, most hosts of user-generated content (Youtube, Instagram etc.) would need to ban any kind of content that uses copyrighted materials. The directive passed by 19 member states voting for it , 6 of them voting against it (Netherlands, Italy, Finland, Sweden, Poland, and Luxembourg), and 3 member states abstaining (Slovenia, Estonia, and Belgium).

No one exactly knows how the content will be identified as a copyrighted material and then removed. Many people are scared that memes will be banned since there hasn’t been an explanation if they will be included in Article 13. On May 23, 2019, the Polish Prime Minister has said that the directive “ fuels censorship and threatens freedom of expression.” All of the member states have 2 years to change their national laws according to the directive.

A new copyright directive called article 17 is being discussed in the EU. The press release from the EU about article 17 explicitly says that memes, gifs and any other forms of freedom of expression are allowed to be uploaded. The article is in an early stage, where they have just finished their discussion with the stakeholders (representatives of online sharing platforms, fundamental rights organisations and public figures, etc.) .

3.3. How to Protect Net Neutrality

Of course, citizens can protest and refuse such changes by submitting their complaints to their government. If net neutrality is threatened, everyone needs to express their opinion in a way that can be heard by government officials. This could mean protests, getting the news to talk about it, bringing more light to the subject, etc. It is also very important to acknowledge who opposes net neutrality which would be internet providers such as Comcast, Verizon, some politicians, etc. Many of those politicians have taken massive campaign contributions from the cable and wireless industry. In order for people to recognize the importance of protecting net neutrality, they first have to be educated about what net neutrality is and why it should be protected. After knowing about net neutrality, it is essential that people take action as stated above, which could also include knowing who oppresses net neutrality and doing something to stop them.



4. Combatting Technological Disparity Across Nations

4.1. What is Technological Inequality?

i. The Relationship between Technology and Inequality

There are many facets to the correlation between Technology and Inequality. Technology improved productivity, accelerated economic growth, enabled the sharing of knowledge and information, and improved access to fundamental services. However, some countries are not able to provide such technology therefore this created technological gaps and inequalities between nations.

ii. What can be considered as Technological Inequality?

Three factors generally depend on the extent of technological inequalities between the countries: investment in technological development; national overall capacity for innovation and the availability of ICT infrastructure

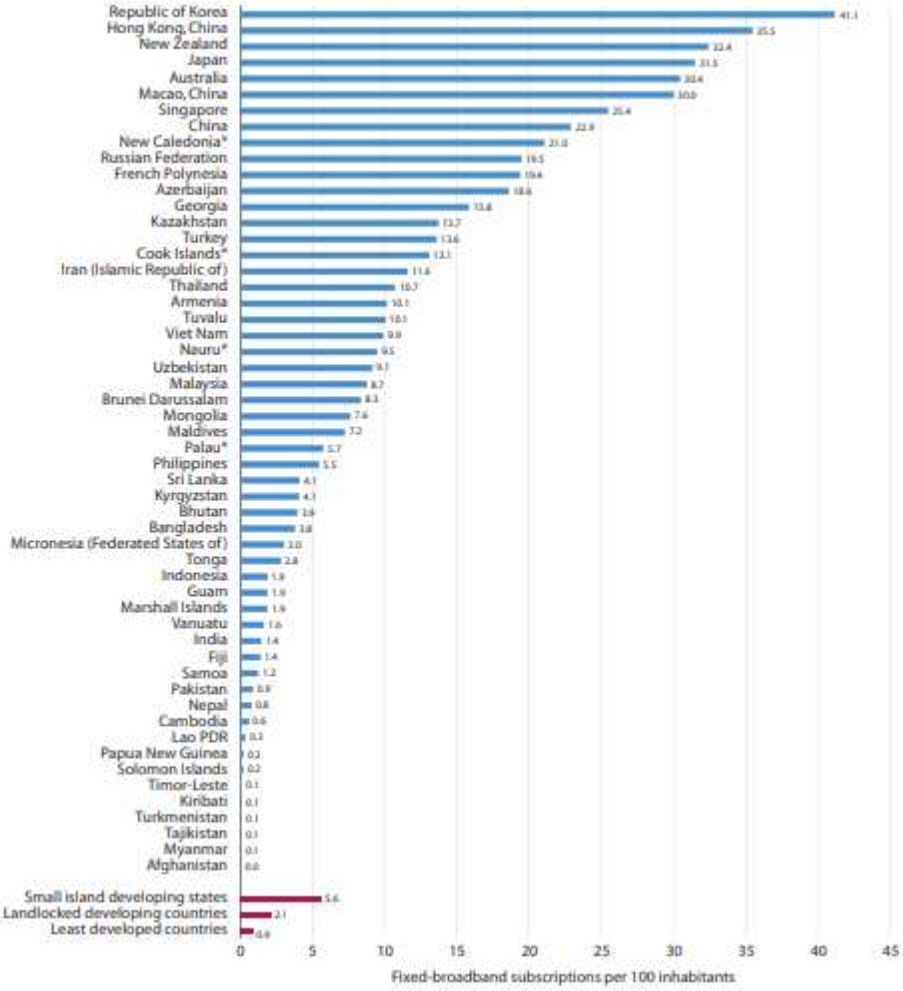
iii. The main causes of Technological Inequality

Several reasons cause Technological Inequality:

- Lack of scientists and researchers in certain fields
- Lack of finance and inefficient capital markets.
- Economic inadequacy
- Failure to provide a good education
- Lack of comparable information
- Inadequate transfer of technology to developing countries

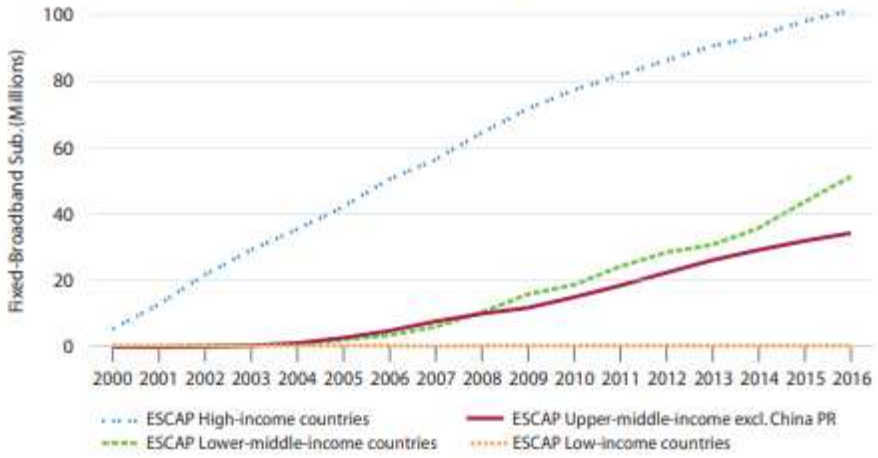
- Lack of high-speed (broadband) connectivity

Figure 4.2 Fixed-broadband subscriptions in the Asia-Pacific region (percentage), 2016



Source: ESCAP, based on data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017).
Note: * Countries with latest data available.

Figure 4.1 Total fixed-broadband subscriptions by income group in 2000-2016, excluding China



Source: ESCAP, based on data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017).

iv. The outcomes of Technological Inequality

a. One of the key findings of the research presented in World Bank Group is that the observed low level of technological adoption in developing countries is a rational response of firms to conditions they face: barriers to accumulating physical and human capital, low firm capabilities, and weak government capacity.

b. Technological Inequality causes an uneven distribution in the access to, use of, or impact of information and communications technologies between countries which is also known as a Digital Divide.

4.2. Technological Inequality and the World

Access to technology can have several benefits for developing countries –one such improvement is the boost to the economy of a nation. Technology also helps economies in developing countries to reduce production costs, promote the growth of new enterprises, and promote communication.

i. Combatting Technological Inequality

The United Nations Technology Bank for Least Developed Countries is a multinational organization committed to enhancing the contribution of science, technology, and innovation to sustainable development in the least developed countries of the world.

The UN Technology Bank Current Activities on Combating Technological Inequality:

- Science, Technology and Innovation Reviews and Technology Needs Assessments

  The assessments and evaluations are carried out in collaboration with the United Nations Conference on Trade and Development (UNCTAD), United Nations Children's Fund (UNESCO), and other related organizations. As an initial step towards the development of coherent and integrated strategies tailored to the particular situation of the country under review, they will identify technological gaps and priority needs. It will also include recommendations on enhancing national and regional technological capacities, policies and actions, as well as encouraging innovation, including detailed assessments in the key areas of the countries under discussion.

- Promoting Access to Research and Technical Knowledge

  The United Nations Technology Bank is taking steps to stimulate high-quality research production in these countries via capacity development and the support of international research cooperation, both South-South and Southern-North to guarantee that the least developed countries are not left behind in achieving internationally agreed development goals.

- Strengthening National Academies of Science in the least Developed Countries

  Academies of Science are being formed and strengthened through this project, where they already exist in the least developed countries, funded by the UN Technology Bank and in collaboration with regional academy networks, UN Regional Commissions, and Regional Development Banks.

The UN Technology Bank Planned Activities:

- Intellectual Property Training and Technical Assistance

  In terms of intellectual property rights and technical regulations, the UN Technology Bank helps least-developed countries improve their national and regional potential. In this context, an Intellectual Properties Bank will be established within the UN Technology Bank to facilitate the access and use of appropriate intellectual property rights covering technologies between holders of intellectual property and relevant actors in the least developed countries. The UN Technology Bank will also support the identification, access, and use of technologies that are no longer protected by intellectual property rights.

- Facilitating Transfer of Technologies

The UN Technology Bank will serve as an effective intermediary on a long-term basis to build capacity for mutually agreed absorption, adjustment, training for human capital, and promotion of technology transfers. It will also act as a link between potential entrepreneurs and existing research and development sources to promote the development of new inventions, companies, and enterprises.

The UN Technology Bank will work with national stakeholders to set up and support technology transfer offices. They serve as the interface between researchers, researchers, and innovators, and the industry and help to market research development.

- Regional Innovation Hubs

By utilizing new and emerging tools and approaches of collaborative innovation, the UN Technology Bank will support innovation for transformative change and sustainable development. Regional innovation hubs will identify the urgent priorities for innovation, clarify the context for engagement, and catalog best practices and available resources to support transformative change innovation. The Innovation Labs will provide a hands-on, customized process to unite previously unrelated fields, thinkers, and ideas to deliver solutions.

5. Questions to be Covered

➔ Who will be held accountable if a machine does something wrong or harmful?

➔ What is going to happen to the people who lose their jobs to AI-driven robots?

➔ What rights should AI-driven robots have?

➔ Are there any possible ways to ensure that artificial intelligence is only used for the benefit of humans?

➔ How can we prevent people from using AI for violence?

➔ What steps should government agencies take to maintain public trust while using Artificial Intelligence to serve citizens?

➔ What happens if a self-driving car has an accident like driving into a crowd of pedestrians or harms a bystander? Who should be held responsible when a software bug leads to the death or injury of passengers or passers-by?

➔ Should Article 13 and 17 be put in place for all nations?

6. References

- https://kambria.io/blog/the-7-most-pressing-ethical-issues-in-artificial-intelligence/
- https://www.europarl.europa.eu/RegData/etudes/STUD/2020/634452/EPRS_STU(2020)634452_EN.pdf
- https://futureoflife.org/background/benefits-risks-of-artificial-intelligence/?cn-reloaded=1
- https://www.accenture.com/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Local/en/1/Accenture-IDC-Analyst.pdf

- https://rm.coe.int/unboxing-artificial-intelligence-10-steps-to-protect-human-rights-reco/1680946e64
- https://www.coe.int/en/web/human-rights-channel/ai
- https://www.wired.co.uk/article/what-is-article-13-article-11-european-directive-on-copyright-explained-meme-ban
-