Summary Report of Side Event

"Connectivity for all" (In Transport Through Artificial Intelligence (AI))

During the 78th Session of the Commission of UNESCAP

Organized by UNESCAP, Government of Mongolia, UN-OHRLLS, International Think Tank for LLDCs

Held on Wednesday 25 May 2022 at UNESCAP
16:15 pm- 17:30 pm – Bangkok Time
5:15 am – 6:30 am – New York Time

INTRODUCTION

The side event "Connectivity for all" (In Transport through Artificial Intelligence (AI)), was held during the 78th session of the commission of UNESCAP. The meeting was organized by the International Think Tank for Landlocked Developing Countries, the Government of Mongolia, UN-OHRLLS, and UNESCAP and was held in a hybrid format.

The side event provided a platform for discussion of existing and new solutions, including, digital transformation in managing connectivity challenges in Landlocked Developing Countries (LLDCs), mainly those in the Asia-Pacific region.

ATTENDANCE

The meeting was attended by more than 50 participants that included Representatives, and delegates from LLDCs, transit developing and donor countries, and experts from United Nations System organizations, as well as international and regional organizations, the private sector, academia and other stakeholders.

FORMAT

The side event featured welcoming remarks from the moderator Mr. Dulguun Damdin-Od Executive Director of the International Think Tank for Landlocked Developing Countries, and high-level opening remarks from, H.E. Mr. Collen Vixen Kelapile, President of the United Nations Economic and Social Council, H.E. Mr.Tumur Amarsanaa, Ambassador of Mongolia to the Kingdom of Thailand and Permanent Representative of Mongolia to UNESCAP, Mr. Sandagdorj Erdenebileg Chief, Policy Coordination, Monitoring, and Reporting Service, UN-OHRLLS, and Mr. Weimin Ren, Director Transport Division UNESCAP.

Opening remarks were followed by a presentation on exploring the connectivity of Kazakhstan, by Dr. Sandra Seno Alday, Lead Researcher International Think Tank for Landlocked Developing Countries; Presentation on Transport Connectivity for LLDCs: Dry ports and Intermodal linkages by Mr. Fedor Kormilitsyn, Economic Affairs Officer, Transport Division, UNESCAP; Presentation on Smart Connectivity along the Asian Highway Network presented by Mr. Edouard Chong Economic Affairs Officer, Transport Division, UNESCAP; presentation on Corridor connectivity in Mongolia by Mr. Yesukhei Enkhtuvshin, Director of the Investment Research Center of Ministry of Foreign Affairs of Mongolia and presentation on Building Digital Infrastructure to shape the Artificial Intelligence Landscape: the Asia and Pacific, by Dr. Chang Yong Son, Expert on ICT and Development UNESCAP.

The event was concluded with closing remarks from H.E. Mr. Tumur Amarsanaa, Ambassador to the Kingdom of Thailand and Permanent Representative of Mongolia to the UNESCAP.

Opening Remarks

H.E. Mr. Collen Vixen Kelapile, President of the United Nations Economic and Social Council.

Mr. Kelapile thanked the Government of Mongolia, the International Think Tank for Landlocked Countries, UNESCAP, and OHRLLS for supporting the event. Mr. Kelapile commended the outstanding performance of Mongolia as a member of the bureau and the Vice-Chair of the LLDC Group. He stated that despite having connectivity challenges such as cross-border lockdowns, that led to disruptions to access to global markets for landlocked countries, these countries took part more in implementing the use of both existing and new technologies. The President of ECOSOC stated that he was glad the side event would display all the established and new solutions that had managed existing connectivity challenges in landlocked countries mainly in Asia. These solutions include existing Artificial Intelligence, Smart Connectivity, transport corridors, dry ports, and intermodal linkages which lead to landlocked countries becoming land-linked countries, thus easier access to global markets.

Mr. Kelapile pointed out, that UN-ECOSOC has platforms that assist its member states to deal with connectivity challenges so as to set global standards and norms. He gave examples of the ECOSOC Financing for Development Forum (FfD Forum), which discusses issues relating to financing for sustainable development, as well as policies and strategies that encourage the private sector to assist developing countries to fund their development needs, and ECOSOC Multistakeholder Forum on Science, Technology and Innovation (STI Forum), which assists member states mostly LLDCs to build their capacities in science, technology and innovation. He also underscored that the council promotes regional cooperation and approaches aimed at ensuring connectivity for all.

H.E. Mr. Kelapile mentioned that Sustainable Development goal number 17 stresses the importance of partnerships in achieving SDGs. He commended the work that ESCAP is doing through partnerships and initiatives in achieving connectivity in the Asia- Pacific region. H.E. Mr. Kelapile concluded by stating he looked forward to hearing about interventions, such as infrastructures, policies, and frameworks that are required to achieve connectivity for all in the Asia- Pacific region.

H.E. Mr. Tumur Amarsanaa, Ambassador to the Kingdom of Thailand and Permanent Representative of Mongolia to the UNESCAP

H.E. Mr. Amarsanaa thanked those who attended the side event. He stated that the side event promotes regional connectivity including Artificial Intelligence in the cross-border transport sector, that can serve as the agenda for achieving Sustainable Development, and the social and economic goals of member states. Ambassador Amarsanaa mentioned that infrastructure development fosters inclusive growth and sustainable development and has been underlined in key policy documents as the 2030 Agenda for Sustainable Development Goals as well as programmes targeting countries with special needs such as the Istanbul Programme of Action for the Least Developed Countries, Vienna Programme of Action for the Landlocked Developing Countries, SAMOA Pathway for Small Island Developing States. Ambassador Amarsanaa stated that it has

been difficult for countries where connectivity is becoming an urgent priority to reach some goals in the development documents mainly as a result of the global health Pandemic.

Ambassador Amarsanaa stated that with the dependency on transit transport to access international markets, LLDCs are increasingly vulnerable to cross-border restrictions and border closures during pandemic periods. Therefore, national and regional initiatives to foster connectivity, and infrastructure development, are critical in the development strategy for digitalization and development of artificial intelligence, and the cross-border transportation network.

Ambassador Amarsanaa described Artificial Intelligence according to the UNESCO document on ethics of AI, which states that Artificial Intelligence can promote low-cost transport, increase the mobility of goods, reduce discrimination and unwanted risks, improve sustainability, and protect the network of all practices allowing to build strong respect for the rule of law in the digital world.

H.E. Ambassador Amarsanaa finalized by thanking all for participating in the side event and stating the side event is always an excellent platform for LLDCs, Academia and private sector, and other stakeholders to come together to share experiences, discuss best practices and debate effective strategies as we advance in the achievement of 2030 Agenda, and Sustainable Development Goals through enhanced connectivity for all.

Mr. Sandagdorj Erdenebileg, Chief Policy Coordination, Monitoring and Reporting Service, UN-OHRLLS

Mr. Erdenebileg stated that the pandemic has exposed LLDCs to connectivity constraints and associated trade bottlenecks at the border crossings and transit transport. Mr. Erdenebileg mentioned that according to a WTO report, in 2020 there was a decline of 11.4% in LLDCs' merchandise exports and a 7.7% decline in the rest of the world. He stated that merchandise imports for LLDCs decreased by 9.0% between the years 2019 and 2020, and commercial services exports of LLDCs decreased by 36% in 2020 from the peak of USD$43.4 billion in 2019, a sharper decline as compared to the world which had a decline of 20%.

Mr. Erdenebileg mentioned that the closing of borders and adoption of new restrictive border crossing protocols, has led to disruptions of supply chains for LLDCs, above all, connectivity challenges have been exposed by demonstrating inadequacy in transport, ICT and energy connectivity. As per OHRLLS estimates, LLDC countries need to build 200,000km of paved roads and 26,000km of railway infrastructure to reach the standard global average road and railway densities, which could cost about 500 billion USD, which is far beyond LLDCs' resource capacities.

Mr. Erdenebileg mentioned that road transport is a principal means of international trade for LLDCs, characterized by poor maintenance, missing links, and inefficient logistics services and caused high transport costs. Road transport promotes connectivity in LLDCs but faces challenges, whereas rail transport presents a greater potential for connectivity such as cost advantages and shorter border crossing time. He noted that the COVID-19 pandemic provides momentum to turn the crisis into an opportunity to utilize the advantages of railway as a sustainable mode of transport. He pointed out that air transport presents a great potential for LLDCs as it is not subjected to

borders and other impediments as in the case of surface transport modes according to a world assessment done. However, LLDCs have lower air transport connectivity.

Mr. Erdenebileg emphasized that the development and maintenance of multimodal transport corridors and digitalization of transit and border crossing procedures are crucial elements of sustainable connectivity for LLDCs. LLDCs and their transit neighbours and within regional agreements continue to make concerted efforts to develop efficient transit corridors to enhance their connectivity but more remains to be done. He pointed out that the use of ICT has become more essential for transit and border crossing facilitation and boosting the competitiveness of enterprises and facilitating international trade.

Mr. Erdenebileg stated that ICT connectivity is fundamental to LLDCs' integration into e-commerce and trade facilitation. In addition, LLDCs are being left behind as they have not been able to ride the wave of digitalization of trade. Only Kazakhstan, Azerbaijan, and half of LLDCs have been able to meet the targets set by the UN Broadband Commission for affordable entry-level service as 2 per cent of GNI per capita by 2020. He stated that according to ITU data, only 34% of the LLDCs population had access to the internet in 2021. High broadband prices in LLDCs are an impediment and the lack of direct access to submarine communication cables contributes to these high prices.

Mr. Erdenebileg noted that trade facilitation, became more crucial during the pandemic to ensure the swift movement of essential goods for the LLDCs. However, he noted that the LLDCs' TFA implementation rate is at 56.2% as compared to 75.8% for all developing countries including transit developing countries. He stressed that LLDCs require targeted support for policy development, financing, new technologies, innovation, and capacity building to enhance sustainable transport, connectivity, and recovery. He pointed out that a regional approach to addressing connectivity challenges can reduce the financial burden on individual countries and therefore need to be strengthened, by strengthening relevant institutions.

Mr. Erdenebileg concluded by giving an assurance that UN-OHRLLS will strongly advocate and mobilize international support and resources for the implementation of the priorities of the VPoA including connectivity.

Mr. Weimin Ren, Director, Transport Division, UNESCAP

Mr. Ren firstly thanked the Government of Mongolia for organizing the side event and for bringing together global and regional activism to discuss connectivity for all in transport through AI. He defined connectivity similar to the definition stated by the President of UN-ECOSOC. He underscored that the critical importance of inclusive and sustainable connectivity for all especially in this highly globalized and high interconnective world.

Mr. Ren mentioned that the COVID-19 pandemic was a shock to the global and regional connectivity, which particularly affected the situation of the Landlocked Developing countries. He noted that since 2020, ESCAP has been raising awareness of widening connectivity gaps and other negative fallouts from the pandemic. He stated that transport connectivity is already recognized as fundamental to UNESCAP's quest for sustainable development in obvious dimensions and has

become a core element for the pandemic response under-recovery strategies at all levels. He noted that Inclusive transport connectivity is crucial for landlocked developing countries to achieve the SDGs. He emphasized that during the event, discussions will be on seamless connectivity, other efficient transit transport systems and enabling infrastructure and operational conditions for international trade transport.

Mr. Ren stated that the speakers from the UNESCAP transport region will highlight, the regional transport agreements developed under UNESCAP, as well as related frameworks that yield to the needs of the countries with special needs. Inter-governmental agreements that formalized the Asian Highway network, the Trans-Asia railway network and the Dry-Ports of international importance, provide a unique framework for transport infrastructure connectivity in the Asia-Pacific region. Mr. Ren stated that UNESCAP's work in recent years has increasingly shifted to up regional transport connectivity that directly finds influence in landlocked developing countries.

Mr. Ren pointed out that UNESCAP has been encouraging the use of digital electronic information change between railways and among railways and border control agencies for efficient completion of border crossing formalities in the Euro-Asia transport corridors. UNESCAP has also noted enhanced coordination amongst stakeholders in the international transport corridors.

Mr. Ren stated that in 2021 UNESCAP and Economic Cooperation Organization supported the finalization of MOU railway free corridor among Kazakhstan, Turkmenistan and the Islamic Republic of Iraq. Mr. Ren mentioned that UNESCAP continues to support the implementation of an inter-governmental agreement on the Asia Highway Network, of which Mongolia is one of the contracting parties to enhance the access of Mongolia to Sea-Ports and facilitate the operation of the economic corridor initiative between Mongolia and neighbouring countries.

Mr. Ren concluded by underlining that there are no quick solutions to transport connectivity challenges for Landlocked developing countries, only sustained efforts by a wide range of stakeholders acting coherently can make a tangible difference. UNESCAP as a regional platform for intergovernmental cooperation of transport in Asia and the Pacific, will continue supporting the advancement of the connectivity of LLDCs acting in close cooperation with their valuable global and regional partners.

PRESENTATIONS

Exploring the Connectivity of Kazakhstan: Transport, Trade and ICT; by Dr. Sandra Seno Alday, Lead Researcher, International Think Tank for Landlocked Developing Countries

Dr. Alday began by stating that Kazakhstan is one of the ten landlocked developing countries in Central Asia. It is bounded by Russia to the North, the Caspian Sea to the west, China to the East, Turkmenistan, Kyrgyzstan and Uzbekistan to the south. It has the largest land area and the largest economy amongst LLDCs in the world. She noted that with no direct access to maritime trade, Kazakhstan just like other LLDCs faces higher constraints and inefficiency in international trade. In addition, trade costs can be as much as 250% higher and the time required to trade can be as much as 130% longer in most LLDCs as compared to non-LLDCs.

Dr. Alday discussed the findings of the study by the International Think Tank for Landlocked Developing Countries in partnership with The University of Sydney business school, which showcases the strategies by Kazakhstan to enhance its transport connectivity and information communications technology (ICT) connectivity towards boosting the country's trade connectivity. Dr. Alday noted that since the 1990s, Kazakhstan has undertaken strategic transport connectivity initiatives, that have effectively enhanced its transport efficiency and effectiveness. In the first place is the significant investment in rail and road infrastructure development coupled with participation in the Eurasian Economic Union, customs union agreements and other multilateral agreements to develop transport, transit and economic corridors.

Dr. Alday stated that currently, 11 international transit corridors pass through Kazakhstan, connecting key economic centres from the Asia-Pacific to Europe and Africa and also linking central Asia with global markets. The main corridor in which Kazakhstan is a major participant, is the Northern Corridor of the Trans-Asian Railway network, connecting western Europe with China, and the Kii Peninsula in Japan via Russia. The southern corridor, The Trans-Asian Railway runs along with South-East Europe to China and South East Asia through Turkey, Iraq, and Central Asian countries. The Central corridor of The Trans-Asian Railway connects Central Asia to North-Western Europe. The North-South International transport corridor is a multimodal passenger and cargo transportation route from Saint Petersburg in Russia to the Mumbai Port in India. The transport corridor Europe Caucasus Asia, connecting Eastern Europe with Central Asia via the Black Sea, The Caucasus and The Caspian Sea. The Trans-Caspian international transport route from China through Kazakhstan, Azerbaijan and Georgia and providing access to European countries through Turkey or Ukraine.

Dr. Alday mentioned the combination of freight, rail transport developments, and multi-lateral transport and economic agreements have led to a sharp reduction in the cost of document management and logistics and a significant increase in the speed of delivery of goods between Asia and Europe. She added that Kazakhstan has made important strides in digital transformation since the 1990s and the country continues to upgrade existing infrastructure and integrate information and communications technology in different economic sectors and lay the foundation for the country's digital future.

Dr. Alday noted that the Government of Kazakhstan launched the Digital Kazakhstan 2018-2022 in 2017. She added that the program has five priority areas; the digitalization of economic sectors aimed at digitally transforming traditional sectors in the economy, to increase labour productivity and capitalization, priority economic sectors, agriculture, mining, manufacturing and electric power and transport, and logistics.

Dr. Alday mentioned the transition to a digital state, aimed at strengthening the government's capability to offer E-services to individuals in businesses. The implementation of the digital safe road and the development high speed and secure infrastructure for data transmission storage and processing. This infrastructure will help support key trade-related initiatives, such as the ultimate Trans-border trade integrated settlement system, designed on the principle of having a single window through which multiple trade stakeholders can electronically transact, the system is envisioned to promote greater trade transit efficiency on the belt and road network.

Dr. Alday mentioned that human capital development aims at equipping the country's population, across sectors and generations with the skills and competencies required to participate in the knowledge economy. Key initiatives include the in-cooperation of FINTECH courses in universities and the large ASTANA-IT universities and programming schools such as QWANT. She added, the creation of an innovation Eco-system aimed at creating the conditions for the development of technology entrepreneurship and innovation within an eco-system that connects business, science and government.

Dr. Alday noted that Kazakhstan's transport and ICT initiatives have been complemented by the country's active and strategic participation in economic integration agreements, regional trade agreements and trade facilitation agreements. This has been instrumental in boosting Kazakhstan's International trade productivity. She noted that trade has consistently accounted for around 40% of Kazakhstan's GDP from 1999 to 2019 and the country has been a net exporter with exports comprising 60% annually of total trade. Kazakhstan has experienced robust total trade growth over the 20 years of the study characterized by some volatility. She mentioned that Kazakhstan has successfully posted a moderate to high degree of trade partner diversification, while Russia remains one of its important partners and the country has become less dependent on this major market over time.

Dr. Alday stated that in 1999, Kazakhstan was part of a global trade network that was already highly connected. Over the 20 years of study, the country has remained one of the most connected but loosely impeded in the network. She noted that Kazakhstan has a moderately diversified economic base, that remains dominated by its mining, foreign and utility sectors. In addition, the sector has consistently accounted for the highest present contribution to the countries' gross value-added output for the 20 years of study. By contrast, the agriculture, hunting and forestry sector exhibited the fastest decline from 1999 to 2019. The percentage contribution of the value-added manufacturing sector and the transport, storage and communication sector also exhibited a slight decline over time. Given the strategic importance of these sectors to increasing and sustaining the national trade connectivity and competitiveness of Kazakhstan, this signals an urgent need to put in place strategic initiatives and policies to support their development.

Dr. Alday mentioned that there is a significant opportunity for Kazakhstan to diversify its economic base, particularly in the key value-added manufacturing sector. She added, that to support its diversification the country needs to attract both domestic and foreign investment, the country also needs to develop and enhance the private sector's innovation and entrepreneurship capabilities. She noted the accelerated implementation of the WTO TFA provisions will also help the country rapidly wrap up trade activity with its wide trade partner base and maximize gains from economic diversification.

Dr. Alday stated that Kazakhstan needs to take advantage of its membership in EAEU, for this will enhance the country's access to economic diversification resources and international markets. She concluded by stating that harnessing the opportunities will also lead Kazakhstan to deeper regional network embeddedness, a stronger position in global economic networks and ultimately sustainable long-term economic growth and competitiveness.

Transport Connectivity for LLDCs: Dry ports and Intermodal linkages, Mr. Fedor Kormilitsyn, Economic Affairs Officer, Transport Division, UNESCAP

Mr. Kormilitsyn began by stating that dry ports are important intermodal linkages along transport corridors and to some extent they substitute sea-ports for LLDCs. He mentioned that some of the LLDCs, such as Lao PDR, Azerbaijan and Mongolia are interested in Dry-Ports and need more detailed national assessments, and identification of best activities on dry ports, because they have several facilities that have been nominated as dry ports, and it is very important to do a quality check of the facility, thus, updating a list of dry ports of top priority. He said that after the assessment of the Mongolia Ports, the results will be reported to the national workshop. He commended the cooperation of the Sub-region Office for East and North-East Asia and for taking the lead in funding and developing and designing the activities.

Mr. Kormilitsyn noted that the UNESCAP plan for Mongolia in 2022, is also to assess the further needs for the country to upgrade the dry ports to make them more efficient even during pandemics. UNESCAP also has a program for LLDCs in the Asian dry ports to ensure quality control of dry ports for compliance with the objectives. He emphasized that dry ports are inter-modal linkages that are designed, and the concept is designed to make them intermodal hubs on transport corridors. He went on to state that dry ports should be emphasized as key elements for transport corridors, especially intermodal transport corridors.

Mr. Kormilitsyn mentioned that China- Mongolia- Russia economic corridor is a big project which embraces not only transport but also economic aspects. He mentioned that UNESCAP takes part in developing some roads on the corridor which is the inter-governmental agreement on international road transport along the highway network concluded between China, Mongolia and Russian Federation. He highlighted the support that UNESCAP had provided towards implementation of the agreement. He mentioned that due to COVID-19 pandemic, transport operations under the Agreement were disrupted and remain inactive, however, Parties remain interested.

He noted that UNESCAP stands dedicated to offering any support and assistance on road and rail transport for better connectivity. He ended by expressing hope that Mongolia will be able to develop inland transport facilities such as dry ports and transport corridors which will be efficient transport modes even during pandemics.

Smart Connectivity along the Asian Highway Network, Mr. Edouard Chong, Economic Affairs Officer, Transport Division, UNESCAP transport corridors.

Mr. Chong began his presentation by stating, that the presentation is based on three topics which are, Digitalization and smart transport solutions to enhance international road connectivity, supporting Automated Road Freight Vehicles through Artificial Intelligence, and Operational challenges connecting North and Central to South-East Asia along International Corridors. Mr. Chong mentioned that international transport connectivity in the ESCAP region faces several challenges, which impede seamless international road freight transport, and some of them pertain the border crossing requirements, for example, manual processing of administrative papers that

may include human errors, lack of information sharing, and similar checks within the road which can create inefficiency along the supply chain.

Mr. Chong noted that in addition to border crossing challenges stated, that in the past two years many countries imposed further restrictions to mitigate the spread of the COVID-19 pandemic, such as, conducting medical checks on drivers at the border, while vehicles and drivers must remain in special parking lots at the border until the test results are announced; admission to the territory of the country of drivers who have visited certain countries only after being quarantined for 14 days; requirements for foreign drivers to issue medical certificates with a limited validity period, e.g. no more than 3 days from the date of issue; that they do not have COVID-19 disease, which must be issued in a limited list of medical institutions; tightening requirements for registration issuance of visas and increase in terms of their registration; restrictions on the route and mode of movement, the period of stay on the territory of foreign drivers, vehicles; reducing the number of vehicles allowed through at border checkpoints; reducing the number of checkpoints on the border; forced reloading of goods at the border from foreign vehicles to national ones; and a complete ban on all vehicles, drivers, and cargo crossing the country's border. All of these had severe impacts on international road transport by creating bottlenecks along transport corridors and disrupting the supply chain and logistics network, and these led to an urgent need for digitalization.

Mr. Chong indicated that these challenges can be mitigated, by the use of information and communication technologies as well as other smart solutions. He underscored, that digitalization plays an increasing role in enhancing and ensuring a continual seamless international transport connectivity, and a long-term sustainable and resilient road transport sector. In support of the digitalization initiative, the secretariat has published a network technical note on seamless and smart connectivity along the Asian Highway in the times of COVID-19. He stated that the technical note aims to offer policy recommendations for policy responses using new technologies, such as smart transport solutions to preserve the regional transport connectivity in a time of the pandemics and other similar distractions. A series of technologies and ICT solutions that can ensure continuous cross-border road transport and minimize delays during future crises and their aftermath are made available in the technical note.

He noted that some of the digitalization initiatives include: "Electronic queues" and "fast lanes" for freight at border-crossing points; Green corridors" to facilitate uninterrupted freight movement through border-crossing points; Applications for real-time updates on the route operational conditions; Remote approval and registration of permits for large, heavy and dangerous goods; Automated real-time en-route remote monitoring and control of parameters of vehicles; Electronic permit system for international freight road transport; Remote electronic customs control with navigation seals and smart containers; Smart tachographs; and Information systems for the interactions at transport terminals, e.g. single windows, logistics information systems platform.

Mr. Chong emphasized that the use of highly and fully automated vehicles has significantly reduced the economy, social, and environment-course of passenger and freight transport while enhancing its resilience. Mr. Chong provided highlights of a smart solution project on "Facilitating the deployment of highly and fully automated vehicles in road traffic along with the Asian Highway Network". He noted that the project aims to assist countries in increasing the common

understanding and awareness of the use of highly or fully automated vehicles along the Asian Highway Network; collect data and information of existing technologies; assess infrastructure availability and requirements; provide policy recommendations. The project has a focus on AH9 (St Petersburg – Lianyungang through Kazakhstan). He mentioned that connected vehicles to intelligent transport systems offer tremendous promise for major improvements in safety and mobility and for reducing the environmental impact.

Mr. Chong stated that digitalization and smart solutions contribute tremendously to seamless international transport along Asian Highway Network. Fundamental connectivity issues such as road transport permits and traffic rights, visas for professional drivers and crew, insurance of vehicles and vehicle registration and inspection certificates. He gave a list of UNESCAP Transport Facilitation Tools, best practices and recommendations prepared by the secretariat to facilitate the seamless connectivity of international road freight transport.

In conclusion, he stated that digitalization and smart solution can tremendously facilitate the efficiency and effectiveness of international road transport connectivity and logistic network and by means, it is the way forward allowing for sustainable and resilience connectivity, continuous attention also has to be given to the identified fundamental common challenges to achieve a true and a seamless international road transport connectivity.

Corridor connectivity in Mongolia, Mr. Yesukhei Enkhtuvshin, Director of the Investment Research Center of the Ministry of Foreign Affairs of Mongolia

Mr. Enkhtuvshin began by stating there are many economic corridors in the world today that aim at promoting connectivity and regional economic growth of countries, job creation, and regional trade. He stressed that economic corridors in countries are a reason for developing infrastructure projects, to LLDCs and they provide access to the sea.

Mr. Enkhtuvshin mentioned that the Mongolia-Russian-China Economic corridor treaty was signed in 2016 by the three countries. The program includes 32 projects which are spread in different sectors, including transportation and infrastructure, industrial sector, development of border cross-points, facilitation of trade, and inspection. He noted that Mongolia as a landlocked country receives most of the imports from the Chinese Sea Port.

In addition, Mr. Enkhtuvshin noted that UNESCAP with the government of Mongolia are working on research on how to develop international inland transport for Mongolia. He highlighted the priority infrastructural projects. On railway projects he noted that Mongolia, Russia and China had agreed on the Joint Plan on modernization of the central railway line. The parties will jointly conduct feasibility study on modernizing of the Central Railway which includes double railroad lines, electrification of the railway lines, and also fixing and repairing of the existing railway line. The parties will jointly study the possibility of Northern and Western railroad line and will begin construction if economically feasible and the parties will study feasibility for Eastern Railroad line

On road projects: Mongolian national Road construction companies jointly created a consortium to build a highway. Pre-feasibility study has been developed for some projects. He stated that Mongolia wishes to expand the existing current AH3 and AH4 according to the agreement on the

corridor to increase traffic and promote national infrastructure projects in particular, tollway connecting China-Russia. In terms of sea access, the country was working on sea access program 1 – Corridor line to Russian Far East, and sea access program 2 – Corridor line to Chinese Eastern Sea Ports.

On energy the gas pipeline project "Power of Siberia-2" through territory of Mongolia is under consideration.

Mr. Enkhtuvshin mentioned that COVID-19 pandemic had brought some challenges including: bottlenecks in seaports and border ports – especially from China, which has led to an increase in cost of shipments and also longer timings between the transfer of containers which affect the cost of goods; supply chain disruptions; also COVID restrictions from China, which is restricting the benefits of the Asian Highway agreement between the three countries, shortage of certain goods including medical products, raw materials resulting to production industry disruptions.

Mr. Enkhtuvshin stated that the railway in Mongolia is functioning from Russia to Mongolia despite what is going on in Russia. The Economic corridor functions because of the legal framework, Inter-governmental agreement on Asian Highway, Trilateral treaty between Mongolia and Russia and China. He noted that opportunities included utilizing new markets in the region and the need to strengthen regional connectivity, increased efforts from countries in the Asia Pacific to keep economic flow to overcome supply chain disruption, strengthening Mongolia's transport sector in particular supporting local truckers and drivers competitiveness and development of dry ports.

Mr. Enkhtuvshin mentioned that UNESCAP is researching dry- ports in Mongolia, which consists of two parts, one is making the assessment for the identified four dry port locations, second is to identify the means of the seamless interconnection, between neighbouring countries' sea ports and the Mongolian Inland dry ports. He stressed that having dry ports in Mongolia will increase the possibilities to participate in regional trade through operational highway and Trans-Asian railway network, provide a base for promoting regional trade, increase capacity for international shipping and storage, decrease to cost of transport and logistics, decrease the price for import commodities, increased exports, create more employment and contribute to local development goals.

Mr. Enkhtuvshin stated that Mongolia is looking at building dry ports in free economic zones, which will have certain advantages such as correlating dry ports with existing economic free zone laws and regulations, which will enable the country to enjoy simplified customs procedures, eliminate bureaucracy and corruption, foreign and local investors can enjoy tax benefits by economic free zone regulations which will promote investment, promotion of industrial sector which will lead to the potential creation of the industrial cluster. All these advantages are in line with the Government's goal to create logistics centres in free economic zones.

Mr. Enkhtuvshin mentioned the gas pipeline project, which is included in the economic corridor within the three countries. He stated that Russian gas company Gazprom has opened its branch in Mongolia, and Russia has conducted a feasibility study for this project at its expense. He stressed that the project will only advance after a commercial agreement between the purchaser and seller.

He went on to say that the gas pipeline is projected to be around 965 kilometres and it will supposedly transfer 50 million cubic meters of gas each year from North to south.

Mr. Enkhtuvshin concluded by pointing out the importance of more intensified connectivity in the region, expansion and creation of more economic corridors, especially the expansion of the regional highway route and also the need to enhance existing trilateral Programme with more smart connectivity components like AI, Green corridor transportation, and more digitalization sector.

Building Digital Infrastructure to shape the Artificial Intelligence Landscape: the Asia and Pacific, Dr. Chang Yong Son, Expert on ICT and Development UNESCAP

Dr. Son firstly thanked the organizer for organizing the event. He emphasized that technology and the Internet are the key and important to the 21st Century in terms of smart cities, transportation, and air pollution. Dr. Son presented a graph trend of mobile broadband from 2010-2021 and fixed broadbands from 2005-2021 subscriptions per 100 persons of inhabitants by regions in the world. He stated that subscriptions increased over time in the Asia-Pacific region. He stated that according to the graph the mobile broadband subscription is consistently higher than the fixed broadband subscription in the Asia Pacific region.

Dr. Son presented on the AI survey in the year 2022, mentioning private investment in AI increased while investment concentration intensified. The U.S and China dominated cross-country collaborations on AI. He stated that AI ethics are globally discussed, and AI is becoming more affordable and higher performing, though, it is sometimes criticized for its biased problems.

Dr. Son emphasized on status of LLDCs, according to the UN, the countries are facing hardship because of lack of territorial access to the sea, isolation from the world market and high trading costs. He mentioned that COVID-19 has resulted in urgent demand for health care services, an increase in fiscal balance of the payment crisis, and a food and death crisis as well. In addition, LLDCs have lower internet access, calculation using the UN records, only 26% in 2017, and mobile cellular subscriptions per 100 persons was 78% in 2018.

Dr. Song stated that the future of AI seems to be promising and have a great potential to advance the SDGs and help solve our greatest challenges, also AI can generate significant benefits for users, businesses, and economies lifting productivity and economic growth. However, without robust broadband connectivity, the development and expansion of the digital components of AI would be much more difficult. He mentioned that AI calls for better algorithms, products, applications and implementations in diverse linguistic and socio-economic environments. Public policy should construct strong mechanisms for multi-stakeholder cooperation and collaboration.

Dr. Son recognized the benefit of Artificial Intelligence, all countries have been working on developing and implementing the AI initiative. The combination of the data, network and AI (D.N.A) strategy 2020 will amass a vast number of data generated through public and private networks, including 5G, IoT and cloud computing. The data will be processed and consolidated according to the purposes, then AI can use them to develop innovative digital services and products. He noted that in 2019 countries came up with a National AI strategy composing 3 pillars which are, the AI ecosystem, AI utilization and people-centred.

Dr. Song mentioned, that the 2021 UN Secretary-General's Roadmap for Digital Cooperation, provides concrete pathways to global cooperation (2020). He also discussed the three pillars of the AP-IS Action Plan (2022-2026), which are connectivity for all, digital tech and digital data, under UNESCAP which aims to serve as a blueprint to facilitate cooperative actions to accelerate sustainable ICT development in the Asia and the Pacific region.

Closing remarks, H.E. Mr. Tumur Amarsanaa, Ambassador to the Kingdom of Thailand and Permanent Representative of Mongolia to the UNESCAP

Mr. Amarsanaa thanked and congratulated all for organizing and attending the side event. Mr. Amarsanaa gave a background of the Bangkok time App that calculates the time in different time zones. He emphasized the time app in relation to the use of digitalization in the follow-up of goods, considering how the COVID pandemic had caused disruptions in the flow of goods in the international trade. He finally underscored the use and importance of AI in the future. He recommended inviting more stakeholders and ICT Companies to the next year's event.

Partial List of Participants

	NAME
1	Mr. Dulguun Damdin-Od, Executive Director of the International Think Tank for Landlocked Developing Countries
2	H.E. Mr. Collen Vixen Kelapile, President of the United Nations Economic and Social Council
3	H.E. Mr. Tumur Amarsanaa, Ambassador to the Kingdom of Thailand and Permanent Representative of Mongolia to the UNESCAP
4	Mr. Weimin Ren, Director, Transport Division, UNESCAP
5	Dr. Sandra Seno Alday, Lead Researcher, International Think Tank for Landlocked Developing Countries
6	Mr. Fedor Kormilitsyn, Economic Affairs Officer, Transport Division, UNESCAP
7	Mr. Edouard Chong, Economic Affairs Officer, Transport Division, UNESCAP
8	Mr. Yesukhei Enkhtuvshin, Director of the Investment Research Center of Ministry of Foreign Affairs of Mongolia
9	Dr. Chang Yong Son, Expert on ICT and Development, UNESCAP
10	H.E. Mr. Tumur Amarsanaa, Ambassador to the Kingdom Thailand and Permanent Representative of Mongolia to the UNESCAP
11	Mr. Sandagdorj Erdenebileg, Chief, Policy Coordination, Monitoring and Reporting Service, UN-OHRLLS
12	Ms. Gladys Mutangadura, Senior Programme Management Officer, UN-OHRLLS
13	Mr. Abdul Alim, Senior Economic Affairs Officer, UN-OHRLLS
14	Ms. Nnana Pheto, Economic Affairs Officer, UN-OHRLLS
15	Mr. Nicholas Ceolin, Public Information Officer, UN-OHRLLS
16	Mr. Arslan Mushtaq Chaudhary, Economic Affairs Officer, UN-OHRLLS
17	Ms. Stacy Ludwaro, Economic Affairs Intern, UN-OHRLLS
18	Ms. Mikiko Tanaka, UNESCAP
19	Mr. Sandeep Jain, UNESCAP
20	Mr. Bekhzod Rakhmatov, UNESCAP
21	Ms. Fadiah Achmadi, UNESCAP
22	Ms. Hyangsuk Seong, UNESCAP
23	Mr. Yoonkeun Shin, UNESCAP
24	Ms. Thanattaporn Rasamit, UNESCAP
25	Ms. Oyunchimeg Tseden-Ish, International Think Tank for LLDCs
26	Ms. Enkhtuul Jantsankhorol, International Think Tank for LLDCs
27	Ms. Sodbolor Enkhsaikhan, International Think Tank for LLDCs
28	H.E. Mr. Odbayar Erdenetsogt, Foreign Policy Advisor to President of Mongolia
29	Delegate of Tajikistan
30	Delegate of Lao PDR
31	Delegate of Kuwait