United States of America: draft resolution

The Security Council,


Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Expressing its gravest concern at the intercontinental ballistic missile launch by the Democratic People’s Republic of Korea (“the DPRK”) on 24 March 2022, as well as the series of other recent ballistic missile launches by the DPRK, all in violation of the DPRK’s international obligations in resolutions 1718 (2006), 1874 (2009), and 2094 (2013), which were reaffirmed in resolutions 2270 (2016) 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), and 2397 (2017) and at the challenge such a test constitutes to the Treaty on Non-Proliferation of Nuclear Weapons (“the NPT”) and to international efforts aimed at strengthening the global regime of non-proliferation of nuclear weapons, and the danger it poses to regional and international peace and stability,

Underlining the importance that the DPRK respond to other security and humanitarian concerns of the international community and expressing great concern that the DPRK continues to develop nuclear weapons and ballistic missiles by diverting critically needed resources away from the people in the DPRK who have great unmet needs, regretting that the DPRK has prevented vitally needed humanitarian aid from reaching its most vulnerable populations, especially during the COVID-19 pandemic, further regretting that the DPRK seeks to divert resources from its agricultural and medical sectors for its unlawful nuclear weapons and ballistic missile programs, thereby depriving the people in the DPRK of adequate food, medicine, and medical treatments, and emphasizing the importance that the DPRK return to unconditional and meaningful dialogue toward a peaceful, diplomatic and political solution to the situation,

Expressing its gravest concern that the DPRK’s ongoing nuclear- and ballistic missile-related activities have destabilized the region and beyond, and determining that there continues to exist a clear threat to international peace and security,
Reaffirming the need for all Member States to take concrete actions aimed at fully and effectively implementing the measures under resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013) 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017) and this resolution,

Acting under Chapter VII of the Charter of the United Nations, and taking measures under its Article 41,

1. Condemns in the strongest terms the intercontinental ballistic missile launch conducted by the DPRK on 24 March 2022, as well as the series of other recent ballistic missile launches by the DPRK, all in violation and flagrant disregard of the Security Council’s resolutions;

2. Reaffirms its decisions that the DPRK shall not conduct any further launches that use ballistic missile technology, nuclear tests, or any other provocation; shall immediately suspend all activities related to its ballistic missile program and in this context re-establish its pre-existing commitments to a moratorium on all missile launches; shall immediately abandon all nuclear weapons and existing nuclear programs in a complete, verifiable and irreversible manner, and immediately cease all related activities; and shall abandon any other existing weapons of mass destruction and ballistic missile programs in a complete, verifiable and irreversible manner;

3. Calls upon the DPRK to fully implement and respect all UN Security Council resolutions related to its WMD and ballistic missile programmes;

4. Decides that the DPRK shall not launch cruise missiles or any other delivery system capable of delivering nuclear weapons;

Designations and Control Lists

5. Decides that the measures specified in paragraph 8 (d) of resolution 1718 (2006) shall apply also to the individuals and entities listed in Annex I and II of this resolution and to any individuals or entities acting on their behalf or at their direction, and to entities owned or controlled by them, including through illicit means, and decides further that the measures specified in paragraph 8 (e) of resolution 1718 (2006) shall also apply to the individuals listed in Annex I of this resolution and to individuals acting on their behalf or at their direction;

6. Decides that the Committee may designate individuals for measures under paragraphs 8 (d) and 8 (e) of resolution 1718 (2006) and entities for measures under paragraph 8 (d) of resolution 1718 (2006) that have engaged in or provided support for, including through other illicit means, activities prohibited by resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), and this resolution, and clarifies that if a vessel has engaged in activities prohibited by the above-list resolutions, any entity providing insurance services to such vessel could be designated for measures under paragraph 8 (d) of resolution 1718 (2006);

7. Decides that the measures in paragraph 8 (b) of resolution 1718 (2006) shall also apply to financial transactions, technical training, advice, services or assistance related to the provision, manufacture, maintenance or use of the items covered in paragraphs 8 (a) (i) and 8 (a) (ii) of resolution 1718 (2006);

8. Decides that the measures imposed in paragraph 8 (a), 8 (b) and 8 (c) of resolution 1718 (2006) shall apply to the items in INFCIRC/254/Rev.14/Part 1 and INFCIRC/254/Rev.11/Part 2, or the most recent versions of these documents, as updated by the Nuclear Suppliers Group;
9. Decides that the measures imposed in paragraph 8 (a), 8 (b) and 8 (c) of resolution 1718 (2006) shall apply to the items in S/2022/429, or the most recent versions of this document, as updated by the Committee;

10. Decides that the measures imposed in paragraph 8 (a), 8 (b) and 8 (c) of resolution 1718 (2006) shall apply to the items in S/2022/430, or the most recent versions of this document, as updated by the Committee;

11. Decides that the measures imposed in paragraph 8 (a), 8 (b) and 8 (c) of resolution 1718 (2006) shall also apply to the items, materials, equipment, goods and technology listed in annex III of this resolution;

12. Decides that paragraph 12 of resolution 2321 (2016), paragraph 6 of resolution 2371 (2017), and paragraph 6 of resolution 2375 (2017) shall be replaced by the following:

Decides that the Committee, if it has information indicating that vessels are, or have been, related to nuclear- or ballistic missile-related programmes, or activities (including the transport of items) prohibited by resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016) 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), or this resolution, or the evasion of sanctions, may designate the vessels for any of the following measures: (a) the Flag State of a designated vessel shall de-flag the vessel; (b) the Flag State of designated vessel shall direct the vessel to a port identified by the Committee, in coordination with the port State; (c) all Member States shall prohibit a designated vessel from entering their ports, unless in case of emergency, in case of return to the vessel’s last port of call, port in the vessel’s flag state or home port, in case of entry for inspection of the vessel, or unless the Committee determines in advance that such entry is required for humanitarian purposes or any other purposes consistent with the objectives of resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), or this resolution; (d) a vessel designated by the Committee shall be subject to the asset freeze imposed in paragraph 8 (d) of resolution 1718 (2006);

13. Decides that:

(a) All vessels currently designated for de-flagging under paragraph 12 (a) of resolution 2321 (2016) shall henceforth be designated under paragraph 12 (a) of this resolution;

(b) All vessels currently designated for a port entry ban under paragraph 12 (c) of resolution 2321 (2016), paragraph 6 of resolution 2371 (2016), or paragraph 6 of resolution 2375 (2016) shall henceforth be designated under paragraph 12 (c) of this resolution;

(c) All vessels currently designated for an asset freeze under paragraph 12 (d) of resolution 2321 (2016) shall henceforth be designated under paragraph 12 (d) of this resolution;

14. Requests the Secretary-General to create, maintain, make accessible, and update as appropriate a consolidated list that includes: (a) vessels designated under paragraph 12 of this resolution, and (b) vessels designated for an asset freeze under paragraph 8 (d) of resolution 1718 (2006), as clarified by paragraph 12 of resolution 2270 (2016), including vessels designated under paragraph 23 of resolution 2270 (2016);

15. Decides that the measures specified in subsections (a) and (c) of paragraph 12 of this resolution shall also apply to the vessels listed in Annex IV of this resolution;
16. *Recalls* paragraph 28 of resolution 2397 (2017), and *decides* to decrease the aggregate amount of crude oil to which the measures imposed by paragraph 4 of resolution 2397 (2017) shall not apply from 4 million barrels or 525,000 tons to 3 million barrels or 393,750 tons, and *reaffirms* that all other provisions of that paragraph continue to apply;

17. *Recalls* paragraph 28 of resolution 2397 (2017), and *decides* to decrease the aggregate amount of refined petroleum to which the measures imposed by paragraph 5 of resolution 2397 (2017) shall not apply from 500,000 barrels to 375,000 barrels or 46,875 tons, and *reaffirms* that all other provisions of that paragraph continue to apply;

18. *Decides* that the DPRK shall cease the export of mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (HS Code Chapter 27) and clocks and watches and parts thereof (HS Code Chapter 91) and that all Member States shall prohibit the procurement of the above-mentioned items from the DPRK by their nationals, or using their flag vessels or aircraft, whether or not originating in the territory of the DPRK, and *further decides* that for sales of and transactions involving all commodities and products from the DPRK whose transfer, supply, or sale by the DPRK are prohibited by this paragraph and for which written contracts have been finalized prior to the adoption of this resolution, all States may only allow those shipments to be imported into their territories up to 30 days from the date of adoption of this resolution, and that for sales of and transactions involving all commodities and products from the DPRK whose transfer, supply, or sale by the DPRK are prohibited by this paragraph and for which written contracts have been finalized prior to the adoption of this resolution, all States may only allow those shipments to be imported into their territories up to 30 days from the date of adoption of this resolution, and

19. *Decides* that all Member States shall prohibit the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, whether or not originating in their territories, of all tobacco and manufactured tobacco substitutes (HS Code Chapter 24);

20. *Decides* that all Member States shall prohibit their nationals, persons subject to their jurisdiction, and entities incorporated in their territory or subject to their jurisdiction from procuring or facilitating the procurement of information and communication (ICT) technology-related services from the DPRK;

### Malicious Cyber Activity

21. *Expresses deep concern* over the DPRK’s pattern of malicious activity using ICT against other Member States and individuals and entities subject to their jurisdiction, including financial institutions, for the purpose of evading sanctions and contributing to its nuclear and ballistic missile programs, and *calls upon* all Member States to take appropriate measures within their own jurisdictions, and in accordance with their respective legal processes, to prevent the DPRK and its nationals from using their territories to conduct or facilitate such malicious ICT activity, and *clarifies* that such measures could include but are not limited to, repatriating to the DPRK any DPRK national conducting malicious activities using ICT-enabled devices or networks and closing businesses associated with any such DPRK national;

22. *Decides* that the DPRK shall immediately halt the use of ICT to gain unauthorized access to United Nations ICT systems, including but not limited to unreleased Panel of Experts communications and investigations, Council and Committee Member communications, and United Nations Secretariat communications and confidential data, and *calls upon* the DPRK to fully adhere to the UN General Assembly-affirmed framework of responsible State behaviour in cyberspace and its
set of voluntary norms, and *reconfirms* and *underscores* the applicability of
international law in cyberspace;

**Sanctions Implementation**

23. *Recalls* paragraph 9 of resolution 2397 (2017), and *decides* that the final
clause of the paragraph (beginning with “and *further decides*”) shall be replaced by
the following:

and *further decides* that, after three months from the date such vessels were
frozen (impounded), this provision shall not apply if the Member State
(following consultation with any relevant flag States) notifies the Committee
that adequate arrangements have been made to prevent the vessel from
contributing to future violations of these resolutions and explains such
arrangements in detail, and *directs* the Committee to designate the vessel under
subsections (a) and (c) of paragraph 12 of this resolution if the vessel
subsequently contributes to violations of these resolutions;

24. *Notes with great concern* that the DPRK continues to evade sanctions
through deceptive maritime practices, *reaffirms* the maritime measures aimed at
stopping such deceptive practices imposed in paragraph 17 of resolution 1874 (2009),
paragraph 17 of resolution 2094 (2013), paragraphs 18, 19, 20, and 22 of resolution
2270 (2016), paragraphs 9, 22, 23, 24, and 30 of resolution 2321 (2016), paragraphs
8 and 11 of resolution 2375 (2017), and paragraphs 9, 10, 11, 12, 14, and 15 of
resolution 2397 (2017), and *calls upon* all Member States to redouble efforts to
implement these measures;

25. *Reaffirms* the measures imposed in paragraph 8 of resolution 2397 (2017),
and *clarifies* that such measures apply to all DPRK nationals earning income in a
Member State’s jurisdiction, irrespective of whether they have a valid work
authorization or other type of visa status;

26. *Decides* that Member States shall report to the Security Council within
ninety days of the adoption of this resolution, and thereafter upon request by the
Committee, on concrete measures they have taken in order to implement effectively
the provisions of this resolution, *requests* the Panel of Experts, in cooperation with
other UN sanctions monitoring groups, to continue its efforts to assist Member States
in preparing and submitting such reports in a timely manner;

27. *Calls upon* all Member States to redouble efforts to implement in full the
resolution and to cooperate with each other in doing so, particularly with respect to
inspecting, detecting and seizing items the transfer of which is prohibited by these
resolutions;

28. *Decides* that the mandate of the Committee, as set out in paragraph 12 of
resolution 1718 (2006), shall apply with respect to the measures imposed in this
resolution and *further decides* that the mandate of the Panel of Experts, as specified
in paragraph 26 of resolution 1874 (2009) and modified in paragraph 1 of resolution
2345 (2017), shall also apply with respect to the measures imposed in this resolution;

29. *Decides* to authorize all Member States to, and that all Member States
shall, seize and dispose (such as through destruction, rendering inoperable or
unusable, storage, or transferring to a State other than the originating or destination
States for disposal) of items the supply, sale, transfer, or export of which is prohibited
2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), or this resolution
that are identified in inspections, in a manner that is not inconsistent with their
obligations under applicable Security Council resolutions, including resolution 1540 (2004), as well as any obligations of parties to the NPT, the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Development of 29 April 1997, and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction of 10 April 1972;

30. Emphasizes the importance of all States, including the DPRK, taking the necessary measures to ensure that no claim shall lie at the instance of the DPRK, or of any person or entity in the DPRK, or of persons or entities designated for measures set forth in resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), or this resolution, or any person claiming through or for the benefit of any such person or entity, in connection with any contract or other transaction where its performance was prevented by reason of the measures imposed by this resolution or previous resolutions;

31. Emphasizes that the measures set forth in resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017) and this resolution shall in no way impede the activities of diplomatic or consular missions in the DPRK pursuant to the Vienna Conventions on Diplomatic and Consular Relations;

Political

32. Reiterates its deep concern at the grave hardship that the people in the DPRK are subjected to, condemns the DPRK for pursuing nuclear weapons and ballistic missiles instead of the welfare of its people while people in the DPRK have great unmet needs, and emphasizes the necessity of the DPRK respecting and ensuring the welfare, inherent dignity and rights of people in the DPRK; and affirms its commitment to addressing the COVID-19 pandemic in the DPRK;

33. Regrets the DPRK’s massive diversion of its scarce resources toward its development of nuclear weapons and a number of expensive ballistic missile programs, notes the findings of the United Nations Office for the Coordination of Humanitarian Assistance that over forty percent of people in the DPRK are under-nourished and that seventy percent of the population suffers from food insecurity, including a very large number of pregnant and lactating women and under-five children who are at risk of malnutrition and nearly a quarter of its total population suffering from chronic malnutrition, and, in this context, expresses deep concern at the grave hardship to which the people in the DPRK are subjected; calls on the DPRK to facilitate full, safe, and unimpeded humanitarian access;

34. Reaffirms that the measures imposed by resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017) and this resolution are not intended to have adverse humanitarian consequences for the civilian population of the DPRK or to affect negatively or restrict those activities, including economic activities and cooperation, food aid and humanitarian assistance, that are not prohibited by resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), 2397 (2017), and this resolution, and the work of international and non-governmental organizations carrying out assistance and relief activities in the DPRK for the benefit of the civilian population of the DPRK, stresses the DPRK’s primary responsibility and need to fully provide for the livelihood needs of people in the DPRK, decides that the Committee may, on a case-by-case basis, exempt any activity from the measures imposed by these resolutions if the committee determines that such an exemption is necessary to facilitate the work of such
organizations in the DPRK or for any other purpose consistent with the objectives of these resolutions, further decides that the Committee may exempt humanitarian assistance activities relating to the COVID-19 pandemic and its impact on the civilian population of the DPRK that are undertaken by, or in coordination with, the United Nations as a package rather than on a case-by-case basis, and directs the Committee to continue reviewing exemption requests and extensions thereto for activities relating to the COVID-19 pandemic and its impact on the civilian population of the DPRK on an expedited basis;

35. Decides that a list of well-defined categories of items, to include as appropriate items related to the COVID-19 pandemic and its impact on the civilian population of the DPRK, shall be exempt from relevant sectoral measures under resolution 2270 (2016), 2321 (2016), 2371 (2017), 2375 (2017), 2397 (2017), and this resolution, on the condition (1) that such items will be used solely by international and non-governmental organizations for the purpose of carrying out assistance and relief activities in the DPRK for the benefit of the civilian population of the DPRK, (2) that such items do not have applications to the DPRK’s nuclear-related, ballistic-missile related, or other WMD-related programs or activities, and (3) that the supply, sale, or transfer to the DPRK of any item on the list has been notified to the Committee in advance, along with information on the routing and shipping information for such items, directs the Committee established pursuant to resolution 1718 (2006) to issue such a list no later than 10 months from the adoption of this resolution, encourages the Committee to consult with the UN Office for the Coordination of Humanitarian Affairs and the UN Resident Coordinator in formulating this list, directs the Committee to conduct a review of the list 180 days following its issuance and every 180 days thereafter, decides that if the Committee does not approve the renewal of the list within any 180-day review period, the list of categories of items exempt from relevant sectoral measures shall cease to apply, and further decides that if the supply, sale, or transfer of an item has been properly notified to the Committee pursuant to this paragraph, but is subsequently removed from the list, the exemption from relevant sectoral measures shall continue to apply to that item or category of items for up to 90 days from the date the item or category of items was removed from the list, after which it will be subject to relevant sectoral measures and the case-by-case exemption process set forth in paragraph 34 of this resolution;

36. Directs the Panel of Experts to include in its midterm and final reports reporting on incidents of the diversion of any items on the list set forth in paragraph 35 of this resolution for the benefit of the DPRK’s nuclear-related, ballistic-missile related, or other WMD-related programs or activities;

37. Expresses its commitment to a peaceful, diplomatic, and political solution to the situation and to achieving the complete, verifiable and irreversible denuclearization of the Korean Peninsula, welcomes and encourages efforts by the Council members as well as other concerned States to facilitate a peaceful and comprehensive solution through dialogue, and urges the DPRK to engage in meaningful discussions with all relevant parties to build a basis for sustainable peace and security;

38. Affirms that it shall keep the DPRK’s actions under continuous review and is prepared to strengthen, modify, suspend or lift the measures as may be needed in light of the DPRK’s compliance;

39. Expresses its determination to take further significant measures in the event of a further DPRK intercontinental ballistic missile launch or any other launch contributing to the development of a ballistic missile system or technology capable of such ranges or nuclear test;

40. Decides to remain seized of the matter.
Annex I

Travel Ban/Asset Freeze (Individuals)

KIM SU IL

a. *Description:* Kim Su Il has been a Vietnam-based representative of the Munitions Industry Department [KPe.028], which is responsible for overseeing the development of the DPRK’s ballistic missiles. As of early 2019, he was responsible for exporting from the DPRK commodities subject to UN restrictions such as anthracite coal and titanium ore concentrate. This trade activity earned foreign currency for the DPRK regime.

b. *AKA:* 김수일

c. *Identifiers:* Date of Birth: 04 Mar 1985; Passport number: 108220348 (DPRK) Expires: May 18, 2023; Passport number: 745220480 (DPRK) Expires: June 2, 2020; Location: Vietnam; Gender: Male
Annex II

Asset Freeze (Entities)

1. KOREA NAMGANG TRADING CORPORATION
   a. **Description**: Korea Namgang Trading Corporation (NTC) is a Pyongyang-based company that has engaged in, facilitated, and has been responsible for the exportation of workers from the Democratic Republic of Korea (DPRK), including exportation to generate revenue for the Government of the DPRK or the Workers’ Party of Korea. Since at least 2018, NTC has maintained laborers in multiple countries, including the Russian Federation, Nigeria, and numerous countries in the Middle East. It has been involved in the logistics cycle of exporting DPRK workers overseas and handling the visas, passports, departures, and overseas employment for DPRK personnel, prior to repatriating funds back to the DPRK.
   b. **AKA**: DPRK Namgang Trading Company
   c. **Location**: Pyongyang, DPRK

2. LAZARUS GROUP
   a. **Description**: The Lazarus Group targets institutions such as government, military, financial, manufacturing, publishing, media, entertainment, and international shipping companies, as well as critical infrastructure, using tactics such as cyberespionage, data theft, monetary heists, and destructive malware operations. Created by the Democratic People’s Republic of Korea (DPRK) as early as 2007, this malicious cyber group is subordinate to the 110th Research Center, 3rd Bureau of the Reconnaissance General Bureau (RGB) \[KPe031\]. The 3rd Bureau is also known as the 3rd Technical Surveillance Bureau and is responsible for many of the DPRK’s cyber operations. In addition to the RGB’s role as the main entity responsible for DPRK’s malicious cyber activities, the RGB also continues to be the principal DPRK intelligence agency and is involved in the trade of DPRK arms. Lazarus Group actors use social engineering tactics against employees of target entities, deploy a variety of custom and commonly known malware for espionage and destructive purposes, and conduct financially motivated operations. One of the Lazarus Group’s objectives is to gain access to sensitive military and government networks, and private sector networks across a range of industries. Information gleaned through these accesses inform the DPRK’s ability to circumvent sanctions and violate relevant Security Council resolutions. In 2020, the Lazarus group targeted critical infrastructure in India, a part of targeting aeronautics and defence sectors using “DTrack” malware. Furthermore in 2020, the Lazarus Group conducted cyber operations against German and Russian defence companies as well as Russian energy and information technology sectors, which was a part of a cybercampaign called “ThreatNeedle”. In March 2021 the Lazarus group conducted cyber activity from the DPRK against Japanese organizations. The group primarily used spear phishing tactics and perpetrated 350 individual attacks against one Japanese government institution alone during 2021. In April 2021, the Lazarus group used backdoor malware called “Vyveva” against a South African Freight and logistics firm. The malware, “Vyveva” is capable of exfiltrating files and modifying file stamps through the utilization of the dark web TOR platform for command and control. The access on the movement of goods enables the DPRK to navigate sanctions effectively and the information enables other hackers to deploy ransomware to generate revenue.
   b. **AKA**: APPLEWORM; APT-C-26; GROUP 77; GUARDIANS OF PEACE; HIDDEN COBRA; OFFICE 91; RED DOT; TEMP.HERMIT; THE NEW ROMANTIC CYBER ARMY TEAM; WHOIS HACKING TEAM; ZINC
   c. **Location**: Potonggang District, Pyongyang, Korea, North
3. HAEGUMGANG TRADING CORPORATION

a. Description: Haegumgang Trading Corporation falls under the Military Cooperation General Bureau of the UN-designated Ministry of People’s Armed Forces [KPe.054] and has worked with the Mozambique Company “Monte Binga” under a $6 million contract that included surface-to-air missiles, P12 air defense radar, tank refurbishment, and man-portable air defense systems. Additionally, the company entered into a €10.5 million contract to repair and upgrade surface-to-air missile Pechora systems and P-12 air defense radar for the United Republic of Tanzania and the DPRK military technicians were residing at a Tanzanian military facility at Nyumbu, and had been engaged in the upgrade of the P-12 radars since February 2017.

b. AKA: Name (International): Haegumgang

c. Location: Democratic People’s Republic of Korea
Annex III

Items, Materials, Equipment, Goods and Technology

Additional Missile-Related Items

1. Electronic Items
   a. Digital signal processors with a 40 Mhz or greater clock rate
   b. Digital-to-analog converter chips with a 12 bit or greater resolution
   c. Hybrid Synchro/Resolver-to-digital converter chips with 14 bit or greater resolution.
   d. Radiation hardened microcircuits to protect against nuclear effects (e.g. Electromagnetic Pulse (EMP), X-rays combined blast and thermal effects)
   e. Systems on Chip (SoC) with embedded FPGA.

2. Guidance, Navigation and Control usable in rocket systems
   a. Micro-electro-Mechanical Fiber Optic Gyroscopes capable of withstanding 10 g or more
   b. Gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites.
   c. Radar and laser radar systems, including altimeters.
   d. Telemetry or telecontrol equipment including tracking systems and range instrumentation radars.
   e. Inclinometers

3. Materials for rocket systems
   a. AlMg6 aluminum alloy or equivalent.
   b. Hastelloy, Inconel and, Incoloy superalloys with at least 50% nickel in either solid or powder form.
   c. Brazing foils containing Mn: 17% Ni: 14% Sn : 6% Cu: remainder
   d. High silica fiber, cloth or fabric (suitable for heat shielding in hot zones)

4. Production Equipment
   a. Hydraulic presses with a 40 ton or greater capacity.
   b. Vacuum pressure casting machines.

Additional Nuclear-Related Items

1. Gloves suitable for use with radioactive materials
2. Tanks, vessels, dewars, and other storage containers made from corrosion resistant materials, less than 175mm in diameter or otherwise engineered for criticality safety
3. Fast-reacting anion or cation exchange resins and absorbents used in mining, milling and other mineral and ore extraction processes
4. Tantalum sheets with a thickness of 2.5 mm or greater from which a circle of 200 mm diameter can be obtained
5. Bulk Lithium – all isotopes
6. e-beam welders with a chamber size of 0.5 m³ or greater
7. Plasma spray systems, atmospheric or vacuum, for the deposition, processing and in-process control of inorganic overlays, coatings and surface modification
8. Oxidation furnaces having a radiant heater to uniformly heat the retort to a temperature of 673 K (400 C) or more
9. Explosive lenses designed to uniformly initiate the detonation of the surface of a high explosive charge
10. Oscilloscopes having a bandwidth of 1 GHz or greater
11. Insulated gate bipolar transistors (IGBTs) and IGBT modules
12. Programmable logic controllers (PLCs)
13. Rotary vane vacuum pumps capable of an inlet volume flow rate of 15 m³/h or greater and capable of producing an ultimate vacuum better than 13 kPa
14. Roots vacuum pumps capable of an inlet volume flow rate of 200 m³/h or greater and capable of working with PerFluoroPolyEther (PFPE) lubricant
15. Absolute Pressure transducers capable of measuring absolute pressures with better than 1% accuracy
16. Fluorine resistant epoxy resins and associated hardeners for use with carbon and glass fibers to produce composite structures
17. Monel welding rods
Annex IV

SIN PHYONG 2 (formerly TIANYOU)  IMO: 8817007

The DPRK-flagged SIN PHYONG 2 (formerly TIANYOU) delivered refined petroleum to the DPRK at least four times between July and October 2019 and continued to deliver refined petroleum to DPRK ports in 2020 and 2021. These volumes were not timely reported to the 1718 Committee as required by UNSCR 2397 OP5.

UNICA  IMO: 8514306

The presumed stateless UNICA delivered refined petroleum to the DPRK at least five times between July and October 2019 and continued to deliver refined petroleum to the DPRK in 2020 and 2021. These volumes were not timely reported to the 1718 Committee as required by UNSCR 2397 OP5.

UN HUNG (formerly VIFINE)  IMO: 9045962

The formerly Sierra Leone-flagged VIFINE delivered refined petroleum to the DPRK at least five times between May and July 2019 and continued to deliver refined petroleum to the DPRK in 2020 and 2021. These volumes were not timely reported to the 1718 Committee as required by UNSCR 2397 OP5.

BONVOY 3  IMO: 8714085

The presumed stateless BONVOY 3 delivered refined petroleum to the DPRK at least twice between August and September 2019 and continued to deliver refined petroleum to the DPRK in 2020 and 2021. These volumes were not timely reported to the 1718 Committee as required by UNSCR 2397 OP5.

DIAMOND 8  IMO: 9132612

The presumed stateless DIAMOND 8 delivered refined petroleum to the DPRK on 27 October 2019, and continued to deliver petroleum to the DPRK in 2020 and 2021. These volumes were not timely reported to the 1718 Committee as required by UNSCR 2397 OP5.