**Address to the United Nations Security Council, 28 June 2024**
**By Jonah Leff, Executive Director, Conflict Armament Research**

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**Excellencies, ladies and gentlemen, I'd like to begin by thanking the Permanent Mission of the Republic of Korea to the United Nations for giving me the opportunity to brief the UN Security Council today, and I congratulate the Republic of Korea for its accomplishments during its current membership.**

**For decades, the international community has sought to control the conventional arms trade in order to minimise weapon diversion, which is the loss, theft, or intentional retransfer of legally acquired arms to unauthorised users.**

**A lack of concrete data and detailed reporting has consistently hampered these efforts—with most reports failing to record unique weapon-identifying information, providing little indication of weapon provenance, and consequently offering few avenues for further and effective investigation.**

**Ungrounded and incomplete reporting has thwarted arms control policymaking efforts to understand the dynamics it seeks to control and mitigate.**

**Mr. President, this is precisely the gap that my organisation, Conflict Armament Research or CAR, seeks to fill. CAR's independent approach recognises that the most effective way to determine the origins of diverted weapons, ammunition, and related materiel is to document them firsthand on the battlefield—or as close as possible to the point of capture, seizure, or recovery.**

**CAR places the physical item at the centre of its investigations. Deploying field investigation teams on the ground in conflicts, CAR recovers unique, traceable information from weapons, ammunition, and related materiel such as serial, lot, and batch numbers, which identify an item individually from the point of production and enable it to be traced through the supply chain. With the cooperation of governments and industry, CAR traces each item's transfer history through sales and transfer records.**

**To date, CAR has documented nearly one million weapons, ammunition, and their components. By aggregating data on thousands of traced items recovered on the battlefield, CAR provides a dynamic, picture of global supply chains—indicating precisely where weaknesses in these chains result in diversion.**

**CAR has been operational in Ukraine since 2018, documenting and tracing weapons used in attacks on its territory. Since the current conflict commenced in February 2022, CAR has documented more than 270 advanced conventional weapons, namely uncrewed aerial vehicles, or UAVs, and missiles that have been used in attacks in Ukraine. Throughout this year, we've uncovered a new trend in the conflict: the use of conventional weapons manufactured by the Democratic People's Republic of Korea.**

**In January 2024, a CAR field investigation team physically documented the remnants [PHOTO] of a ballistic missile that struck Kharkiv, Ukraine's second-largest city, on January 2nd 2024. CAR documented the missile's rocket motor, its tail section, and almost 300 internal components, manufactured by 26 companies from eight countries and**

**territories. Based on several unique features observed during the documentation, CAR determined that this missile was either a KN-23 or KN-24, manufactured in the DPRK in 2023. Following the initial documentation, our teams inspected three additional identical DPRK missiles that struck Kyiv and Zaporizhzhia earlier this year.**

**Security Council resolutions 1718, 1874, and 2270 prohibit UN member states from procuring arms or related materiel from the DPRK and prohibit the DPRK from exporting this materiel.**

**Our reporting on the matter was the first public analysis of such weapons fired outside the DPRK and in the war in Ukraine.**

**CAR has reached the conclusion that the missile was manufactured in the DPRK, based on the following unique characteristics:**

- **Its diameter;**
- **its distinct jet vane actuators;**
- **the bolt pattern around the igniter;**
- **the presence of Korean characters on some of the rocket's components; and**
- **the repeated presence of marks that likely refer to the year 2023 in the Juche calendar, coupled with the presence of electronic components dating back to 2023.**

**As part of our assessment, CAR investigators compared the characteristics of the missile documented in Ukraine against features of official photos of missiles published by the DPRK and another similar system manufactured by another Member State. Our investigators found that the missile recovered in Ukraine on the 2nd of January 2024 had a tail section measuring 110 cm in diameter, while the other missile's tail section only measured 95 cm.**

**Furthermore, the tail section of the missile documented by CAR investigators featured four jet vane actuators [PHOTO], which are components that direct a missile's thrust and thus influence its trajectory. The missile that we attributed to the DPRK had jet vane actuators that were unique and clearly differed in size, shape, and construction from those of the other missile system of different origin.**

**CAR also documented a bolt pattern on the front section of the rocket motor that strongly resembles that of the identical missile manufactured by the DPRK and shown in official state photos. In both CAR's documentation and in factory images, the missile's rocket motor exhibits a central disc featuring 20 bolts evenly distributed around its circumference.**

**On several internal components of the DPRK missile, CAR investigators documented the presence of Korean characters [PHOTO].**

**Finally, CAR investigators documented the presence of the mark '112' on several different components found in the missile wreckage [PHOTO]. This mark likely refers to the year 2023 in the Juche calendar, the official calendar of the DPRK. This hypothesis is corroborated by CAR's documentation of electronic components found in the missile's wreckage, featuring date marks indicating manufacture in 2023. In fact, a significant number of the missile's internal components were produced within the last three years, and twenty per cent of the components that bore date marks were produced in 2023 [PHOTO].**

**Mr. President, the aforementioned evidence that my organisation observed and thoroughly documented first hand irrefutably establishes that the missile fired on Kharkiv was indeed of DPRK origin.**

**On a subsequent visit, in which I myself travelled with a team to Ukraine for further documentation, we observed additional conventional weapons manufactured by the DPRK that had been seized on the front lines and had not been observed on the battlefield previously, including an artillery rocket produced in 1977, which reports suggest may have been part of a recent larger consignment of rockets. CAR will continue to monitor this new and emerging trend in the Ukraine conflict and report on any new identifiable developments.**

**The proliferation and use of DPRK missiles leads to further erosion of global nonproliferation regimes. Specifically, any exports of ballistic missiles from the DPRK carried out following the introduction of UN embargoes on the country in 2006 represent violations of the sanctions regime. Security Council resolutions also forbid the DPRK from developing its ballistic missile programme, meaning that individuals and entities involved in the facilitation of transfers of key components and materials may also have committed sanctions violations.**

**CAR's discovery of recently produced, non-domestic electronic components in the missile highlights the significant challenges currently facing global non-proliferation regimes. It shows that the DPRK has been able to produce advanced weapons, integrating components produced as recently as 2023, despite UN Security Council sanctions that prohibit the production of ballistic missiles by the DPRK. It also suggests that the country has developed a robust acquisition network capable of circumventing, without detection, a sanctions regime that has been in place for nearly two decades.**

**Mr. President, CAR's findings highlight once again how field documentation and monitoring are critical to the effectiveness of any export control and sanctions mechanism. CAR's findings also demonstrate the challenges associated with effective regulation and control of the export of commercial components.**

**CAR is currently tracing the supply chains of components documented in the missile. None of these components were manufactured in the DPRK, highlighting the reliance by the DPRK on external acquisition networks to sustain its domestic missile programme. Preliminary findings show that the global nature of the semiconductor industry, in particular, and its reliance on third-country distribution channels should also raise concerns for the export control and sanctions compliance of other Member States responsible for implementing these regimes.**

**Since January this year, CAR has received responses to its trace requests identifying the intermediaries and last known custodians based in third countries that have acquired some of the electronic components found in the missile documented in Ukraine. In one instance, CAR recently received information from a company regarding a microprocessor that was supplied to a Member State in late 2017 and then retransferred to DPRK thereafter. This shows that, although the transfer chain is complex and layered in nature, CAR's boots-on-the-ground approach characterised by field documentation, collaborative tracing with industry, triangulation, and targeted trade mapping allows for the effective identification of entities of concern.**

**CAR's field investigation teams will continue to document weapon systems used in the conflict in Ukraine and will endeavour to highlight developments as they occur, including the continued use of weapons that violate UN Security Council sanctions on DPRK.**

**Mr. President, ladies and gentlemen, I thank you for your time.**