INTRODUCTION

The outbreak of the Russian-Ukrainian war on 24 February 2022 marked the return of high-intensity conflict to European territory. In order to cope with the large numerical and technical superiority of the Russian forces, the Ukrainian authorities requested foreign assistance in the supply of military equipment to be able to defend their territory. In response to this request, member states of the North Atlantic Treaty Organisation (NATO), the European Union (EU) as well as other European and non-European states have implemented individual and collective programmes of arms supply to Ukraine.

While the exact volume of arms delivered within these programmes remains uncertain, it is possible to identify open-source information on arms deliveries to the Ukrainian armed forces. This fact sheet analyses raw data on arms deliveries to Ukraine during the period from 1st January to 30th November 2022. It is the result of an analysis of the data contained in the compilation sheet produced by GRIP and available in Excel format on its website. GRIP’s review begins on 1st January 2022, almost two months before the Russian invasion, thus covering a period when the American authorities were already convinced of Russia’s warlike intentions.

This fact sheet provides a synthesis of the main trends observed over the period. It helps to monitor the armaments delivered to Ukraine with the aim, in the medium and long term, of limiting the risks of diversion. While far from being exhaustive, the work carried out should help to strengthen the capacities of a public that is already aware of, or interested in, additional independent information on arms deliveries to Ukraine.

The data collected is presented in three different ways.

KEY FACTS

- The total estimated value of global military equipment deliveries is USD 33.2 billion, of which USD 32.3 billion would come from NATO member countries.
- Approximately USD 3.2 billion (EUR 3.1 billion) has been mobilised by the EU through the European Peace Facility to finance the provision of military equipment and supplies to the Ukrainian armed forces.
- 22 EU Member States participated in the delivery of arms and military equipment to Ukraine. These included equipment on lists ML1, ML2, ML3 and ML4 (according to the EU nomenclature). The total value of these deliveries is estimated at USD 9.66 billion.
- Thirteen other states, including NATO members (non-EU) and other third countries, made deliveries of military equipment to the Ukrainian armed forces with an estimated total value of USD 23.5 billion. The type of equipment sent by these countries also includes equipment on lists ML1, ML2, ML3 and ML4.
- 27 NATO member countries have participated in the delivery of weapons and military equipment to Ukraine.
- The United States has been the most active in reporting on its deliveries of weapons and military equipment to Ukraine. With an estimated total value of USD 18.1 billion, it is the largest arms exporter to Ukraine.

1 [https://www.grip.org/wp-content/uploads/2022/12/Base-de-donnees-armes-Ukraine.xlsx](https://www.grip.org/wp-content/uploads/2022/12/Base-de-donnees-armes-Ukraine.xlsx)
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- The first is an analysis of the data collected on arms delivered to Ukraine by EU member states.
- The second focuses on NATO member states that are not otherwise members of the EU and on other third countries that have delivered arms to Ukraine in the context of the conflict with Russia.
- The third section focuses on arms deliveries made exclusively by NATO member states.

In the final section, this fact sheet outlines the main trends to monitor in the coming months.

1. DELIVERIES MADE BY EU MEMBER STATES

Between 1st January and 30 November 2022, 22 EU Member States participated in the delivery of arms and military equipment to Ukraine in the context of the war with Russia. These are Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. Up to 30 November 2022, Austria, Cyprus, Hungary, Ireland and Malta have not sent any weapons to Ukraine. Of these five countries, only one (Hungary) is a member of NATO.

In the context of the war in Ukraine, the EU has agreed to finance the transfer of lethal weapons to a third country at war for the first time since its creation. Indeed, on 28 February 2022, it announced the activation of the European Peace Facility (EPF) to finance the supply of military equipment and material to the Ukrainian armed forces (see Box 1). In October 2022, the EPF budget for Ukraine was approximately USD 3.2 billion (EUR 3.1 billion). However, arms deliveries under the EPF must be authorised by the Member States, who remain the competent authorities in this area.

The total estimated value of exports from EU Member States to Ukraine between 1st January and 30 November 2022 is USD 9.66 billion. It should be noted that the exact value of these deliveries is not available, as the authorities of the Member States have not always disclosed the financial information on their arms deliveries to Ukraine. The authorities of some countries - such as Germany, the Netherlands or Poland - have communicated more information about their arms shipments to Ukraine and the associated amounts. This is also partly why they appear as the main exporters of arms to Ukraine (Figure 1). In contrast, the authorities of states such as Bulgaria, Spain and Luxembourg have provided no financial information, which means that no data is available for these actors on the value of their arms shipments to Ukraine by 30 November 2022.

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2 Canada, the United States, Northern Macedonia, Norway, the United Kingdom and Turkey.
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According to available information, the type of equipment sent by EU Member States includes the following:

- **ML1** (smooth-bore weapons with a calibre of less than 20 mm, other weapons and automatic weapons with a calibre of 12.7 mm [calibre 0.50 inch] or less and accessories and specially designed components therefor),
- **ML2** (smooth-bore weapons of 20 mm calibre or more, other weapons or armament of a calibre greater than 12.7 mm [calibre 0.50 inches], projectile launchers specially designed or modified for military use and accessories and specially designed components therefor). More specifically, small arms ammunition, explosive charges, small arms and light weapons (SALW) and rocket launchers.
- **ML3** (ammunition and rocket control devices and specially designed components therefor), and
- **ML4** (bombs, torpedoes, rockets, missiles, other explosive devices and charges and related equipment and accessories and specially designed components therefor).

The most frequently sent weapons include ML3s, followed by ML4s, ML1s and then ML2s. The type of equipment sent shows that the war between Ukraine and Russia is mainly an artillery and ground vehicle war, where equipment losses are high and wear and tear on the front line is a major factor. This type of conflict requires large supplies of armoured vehicles, artillery and ammunition as well as portable anti-tank and anti-aircraft systems. Having already drawn on their stocks, European armies, who have not prepared or sized up for this scenario, will face financial and logistical difficulties to simultaneously resupply Ukrainian forces and replenish their own stocks.
Box 1: The European Peace Facility

The European Peace Facility (EPF) was established in March 2021 by a Council decision as an extra-budgetary instrument to finance military activities of an operational nature that the EU intends to undertake "either directly or indirectly in support of the action and capabilities of its partners"6. It originally provided for a financial envelope of EUR 5,692 million for the period 2021-20277. However, on 12 December 2022, the Council decided to increase the overall financial cap by EUR 2 billion in 2023, with the possibility of a further increase at a later stage8. With regard to military assistance, the EPF does not give the EU the competence to grant export licences for arms and military equipment itself. This decision remains with the Member States. However, the EPF can finance transfers of such goods, which will have to be carried out by the Member States in accordance with their national legislation and the rules of control and transparency established by the EU.

In October 2022, the EU announced an increase of the EPF budget dedicated to supporting Ukraine to EUR 3.1 billion9. The original reimbursement formula via the EPF is based on the principle of "flat-rate sharing", which means that all Member States should receive the same percentage of the value claimed for deliveries made in a given period10. However, it is estimated that the value of military equipment delivered by EU countries between January and November 2022 is already three times higher than this figure. With growing demand, the reimbursement rate has fallen from an initial 85% to around 46% of the claims11. The way in which the EU will in future allocate the EPF funds to the countries concerned and the criteria it will follow in doing so remains to be clarified.

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7 European Council and Council of the European Union, 3 October 2022, op. cit.
9 European Council and Council of the European Union, 6 December 2022, op. cit.
11 Ibid.
2. DELIVERIES FROM NON-EU NATO MEMBERS AND OTHER COUNTRIES

During the period under review, twelve other countries made military deliveries worth an estimated USD 23.5 billion to the Ukrainian armed forces. These include non-EU NATO member states such as Canada, the United States, Northern Macedonia, Norway, the United Kingdom and Turkey, as well as other third countries such as Australia, Bosnia, Israel, Jordan, Pakistan and Taiwan.

Among these countries, the United States has been the most active in reporting on its deliveries of weapons and military equipment to Ukraine. With a total value of USD 18.1 billion, it is the largest exporter of arms to Ukraine in the context of the war against Russia (Figure 2). It is worth noting that the United States had already accelerated arms deliveries to Ukraine before the conflict broke out; US authorities were convinced of Russia's belligerent intentions well before 24 February 2022.12

In the ranking of arms suppliers to Ukraine, the United States is followed by the United Kingdom and Canada, with estimated delivery values of USD 3.5 billion and USD 1.2 billion respectively (Figure 2). Turkey, which is also playing a significant role in the peace negotiations between Ukraine and Russia, is fourth in this ranking. Among the equipment sent by Turkey are several Bayraktar TB2 drones which, according to the official account, were delivered through private donations. Russia has already complained to Turkey about these shipments, but the Turkish authorities reportedly replied that they came from a private company and "were not state-to-state transactions."13 It should be noted, however, that even though the shipments were financed by private donations, a licence from the country's authorities is required for their export to Ukraine.

It is estimated that non-EU NATO member states and other third countries have mainly sent:

- ML1 (smooth-bore weapons with a calibre of less than 20 mm, other weapons and automatic weapons with a calibre of 12.7 mm [calibre 0.50 inch] or less and accessories and specially designed components therefor). Specifically, small arms ammunition, explosive charges, rifles and machine guns and rocket launchers,
- ML2 (smooth-bore weapons of 20 mm calibre or more, other weapons or armament of a calibre greater than 12.7 mm [calibre 0.50 inches], projectile launchers specially designed or modified for military use and accessories and specially designed components therefor),
- ML3 (ammunition and rocket controllers and specially designed components therefor) and
- ML4 (bombs, torpedoes, rockets, missiles, other explosive devices and charges and related equipment and accessories and specially designed components therefor).

Among the weapons most frequently shipped by this group of countries are ML3s, followed by ML4s, ML2s and then ML1s. The analysis of these data confirms the observations already made for the EU Member States.

13 “Turkey's Baykar to donate three UAVs to Ukraine after crowdfunding campaign”, Reuters, 27 June 2022.
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Figure 2. Estimated deliveries by other states between January and November 2022 (in millions USD)

* No data are available for the other countries in this group.

3. DELIVERIES FROM NATO MEMBER COUNTRIES

Again, it should be emphasised that the rankings in this research are based on official announcements. More detailed knowledge of the actual commercial value of the equipment and whether or not some deliveries have actually taken place would likely lead to movements in the ranking proposed here.

Of the 30 NATO member countries, 27 participated in the delivery of weapons and military equipment to Ukraine between 1st January and 30 November 2022. These are Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Italy, Latvia, Lithuania, Luxembourg, Northern Macedonia, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey, United Kingdom and United States.

Estimates indicate that these countries contributed USD 32.3 billion of the USD 33.2 billion total deliveries. The United States remains the country that has supplied the largest amount of military equipment to Ukraine. It is followed by Germany, the United Kingdom and Poland (Figure 3).
Up until 30 November 2022, Montenegro, Iceland and Hungary, although NATO members, have not sent arms to Ukraine. The absence of an Icelandic army and Montenegro’s limited military capabilities do not allow them to export arms to other countries. In the Hungarian case, Prime Minister Viktor Orbán announced at the beginning of the conflict that his country would not send arms to Ukraine. He allowed the transfer of military equipment and weapons to other NATO member states for the Ukrainian armed forces via Hungary, but no direct transfer to that country. He argues that sending weapons to Ukraine makes European and NATO countries a party to the conflict and therefore potential targets. Neither does the Hungarian Prime Minister support the economic sanctions established by the European institutions against Russia. Although he initially supported the first set

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15 Ibid.
16 “Orban labels EU sanctions on Russia ‘a step towards war’”, The Brussels Times, 18 November 2022.
of sanctions, he now opposes them, claiming that they have and will have a very negative impact on his country’s economy.

The observations on the categories of arms supplied by NATO member states are consistent with those made in the previous sections.

MAIN TRENDS TO BE MONITORED

The figures provided by Member States on arms deliveries to Ukraine should be treated with caution, as they are not fully verifiable, particularly as the unit value of each exported item is not known. It should also be noted that, in most cases, the information available on these deliveries is based on announcements made by the Member States’ authorities. During the period under review, less data is available on their actual receipt, use or observation in the field.

By the end of the first half of 2023, annual reports should be published on arms and military equipment exports, whether under the Arms Trade Treaty (ATT), the EU or at national level, that could provide more information on deliveries in the context of the war in Ukraine. It may then be possible to confirm, refute or refine the trends observed and analysed in this fact sheet. However, again, we will have to live with the level of transparency consented to by arms-exporting states.

Should the conflict between Ukraine and Russia persist, the Ukrainian armed forces and the countries supplying them with weapons will face significant challenges. After months of engagement, some of the equipment used by the Ukrainian forces is likely to show signs of wear and tear. In order to keep them in operational condition, maintenance and replacement of essential parts will be necessary. The challenge here is to be able to perform these tasks, probably from abroad, without adversely affecting the situation on the front line and while Ukraine’s infrastructure is being targeted, especially the electricity infrastructure.

This will increase the pressure on countries supporting Ukraine. It will require sensitive choices given that arms deliveries to Ukraine have reduced the stocks of exporting countries to levels that are sometimes considered critical. The ability of supplier countries to continue to deliver arms to Ukraine at the same rhythm, and at the same time to replenish their national stocks, will be a challenge both industrially and budgetarily, and there is no guarantee that all of these challenges can be met. The supply chains of the arms producers of the main states supporting Ukraine are not currently sized for fast double replenishment.

At the beginning of December 2022, Kiev announced that it would undertake the reconstruction of its military industry. However, since the country is in the midst of a conflict, the real capacity of the authorities to carry out this project can only be limited.

Addressing the logistical and industrial challenges posed from Ukrainian territory is not feasible, if only because of the need to master the range of skills required to keep NATO-made equipment in condition.

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Another challenge deserves the utmost attention: it is the risk of diversion of the weapons delivered to Ukraine in the near or distant future. It is to be feared that the conditions under which the massive and rapid delivery of weapons to Ukraine took place did not allow for adequate anticipation of the risks of arms diversion. Countries such as the United States and regional organisations such as the EU are only just beginning to take steps to mitigate the potential risks of sending such a large quantity and variety of weapons to a country at war, a country which in peacetime is already characterised by high levels of corruption and questionable practices in the arms trade. This recognition is tardy and it is uncertain how effective the proposed arrangements will be in mitigating the risks of these weapons getting into the wrong hands.