

## Global Militarisation Index 2022

Bayer, Markus; Rohleder, Paul

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# GLOBAL MILITARISATION INDEX 2022

Markus Bayer, Paul Rohleder \ BICC



## SUMMARY

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Every year, BICC's Global Militarisation Index (GMI) maps the relative weight and importance of a country's military apparatus in relation to its society as a whole. The Index is financially supported by Germany's Federal Ministry for Economic Cooperation and Development.

Its first part reflects current developments and trends based on the latest available data. It covers 154 states and is based on the latest available figures (in most cases, data for 2021). The **ten countries with the highest level of militarisation in the GMI 2022** are Israel, Kuwait, Armenia, Singapore, Oman, Bahrain, Greece, Russia, Brunei and Saudi Arabia. These countries allocate particularly large amounts of resources to their military compared to other areas of society. As far as the general militarisation trend is concerned, the GMI 2022 offers a seemingly contradictory picture. It appears that the general upward trend of the previous years is not continuing. This is mainly due to the drop in *relative* military expenditure, which, measured as a share of GDP (gross domestic product), fell on average from 2.3 to 2.2 per cent, which, in turn, is mainly due to the economic recovery after the Covid-19 pandemic. At the same time, despite a positive population trend, the number of heavy weapons increased in relative and absolute terms, reaching 396,914 this year, a figure last measured in 2012.

The second part of the GMI focuses on two regional aspects. For one, we will investigate the planned **enlargement of NATO** to include Sweden and Finland as member states. Using the three GMI parameters of personnel, financial resources and heavy weapons, we **compare NATO with Russia** and the Collective Security Treaty Organisation (CSTO). In addition, we take up the **100 billion special fund for the Bundeswehr** and sketch out two different scenarios for the militarisation of Germany for the next five years.

This year, the conflict between China, Taiwan and the so-called AUKUS countries (Australia, United Kingdom and United States) in the China Sea and the Pacific Ocean continued to escalate. The second regional focus is, therefore, on **East Asia** and **Oceania**. Here, we contrast the military potential of the **AUKUS countries** with that of **China**. We **estimate the degree of militarisation of North Korea and Taiwan**, two key countries in the regional conflict. However, as this estimate is based on divergent or older data sources, it is not included in the GMI dataset or the official ranking.

This year, the GMI has also evolved methodologically: We complemented the **Heavy Weapons Index** by including **unmanned combat aerial vehicles (UCAVs)** and **loitering munitions** (so-called kamikaze drones) as well as satellites.

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## THE METHODOLOGY OF THE GLOBAL MILITARISATION INDEX (GMI)

The Global Militarisation Index (GMI) depicts the relative weight and importance of the military apparatus of one state in relation to its society as a whole. For this, the GMI records a number of indicators to represent the level of militarisation of a country:

- \ the comparison of military expenditures with its gross domestic product (GDP) and its health expenditure (as share of its GDP);
- \ the contrast between the total number of (para)military forces and the number of physicians and the overall population;
- \ the ratio of the number of heavy weapons systems available and the number of the overall population.

The GMI is based on data from the Stockholm Peace Research Institute (SIPRI), the International Monetary Fund (IMF), the World Health Organization (WHO), the International Institute for Strategic Studies (IISS) and BICC. It shows the levels of militarisation of more than 150 states since 1990. BICC provides yearly updates. As soon as new data is available, BICC corrects the GMI values retroactively for previous years (corrected data on [gmi.bicc.de](http://gmi.bicc.de)). This may have the effect that current ranks may differ in comparison to previous GMI publications.

In order to increase the compatibility between different indicators and to prevent extreme values from creating distortions when normalising data, in a first step every indicator has been represented in a logarithm with the factor 10. Second, all data have been normalised using the formula  $x = (y - \min) / (\max - \min)$ , with min and max representing, respectively, the lowest and the highest value of the logarithm. In a third step, every indicator has been weighted in accordance to a subjective factor, reflecting the relative importance attributed to it by BICC researchers (see Figure). In order to calculate the final score, the weighted indicators have been added up and then normalised one last time on a scale ranging from 0 to 1,000.

The GMI conducts a detailed analysis of specific regional or national developments. By doing so, BICC wants to contribute to the debate on militarisation and point to the often contradictory distribution of resources.

### GMI indicators and weighing factors

Sub-index / Indicator	Factor
 <b>Expenditures</b> Military expenditures as percentage of GDP <b>5</b> Military expenditures in relation to health spending <b>3</b>	
 <b>Personnel</b> Military and paramilitary personnel in relation to population. * <b>4</b> Military reserves in relation to population <b>2</b> Military and paramilitary personnel in relation to physicians <b>2</b>	
 <b>Weapons</b> Heavy weapons in relation to population <b>4</b>	



#### Expenditures

Military expenditures as percentage of GDP **5**

Military expenditures in relation to health spending **3**



#### Personnel

Military and paramilitary personnel in relation to population. \* **4**

Military reserves in relation to population **2**

Military and paramilitary personnel in relation to physicians **2**



#### Weapons

Heavy weapons in relation to population **4**

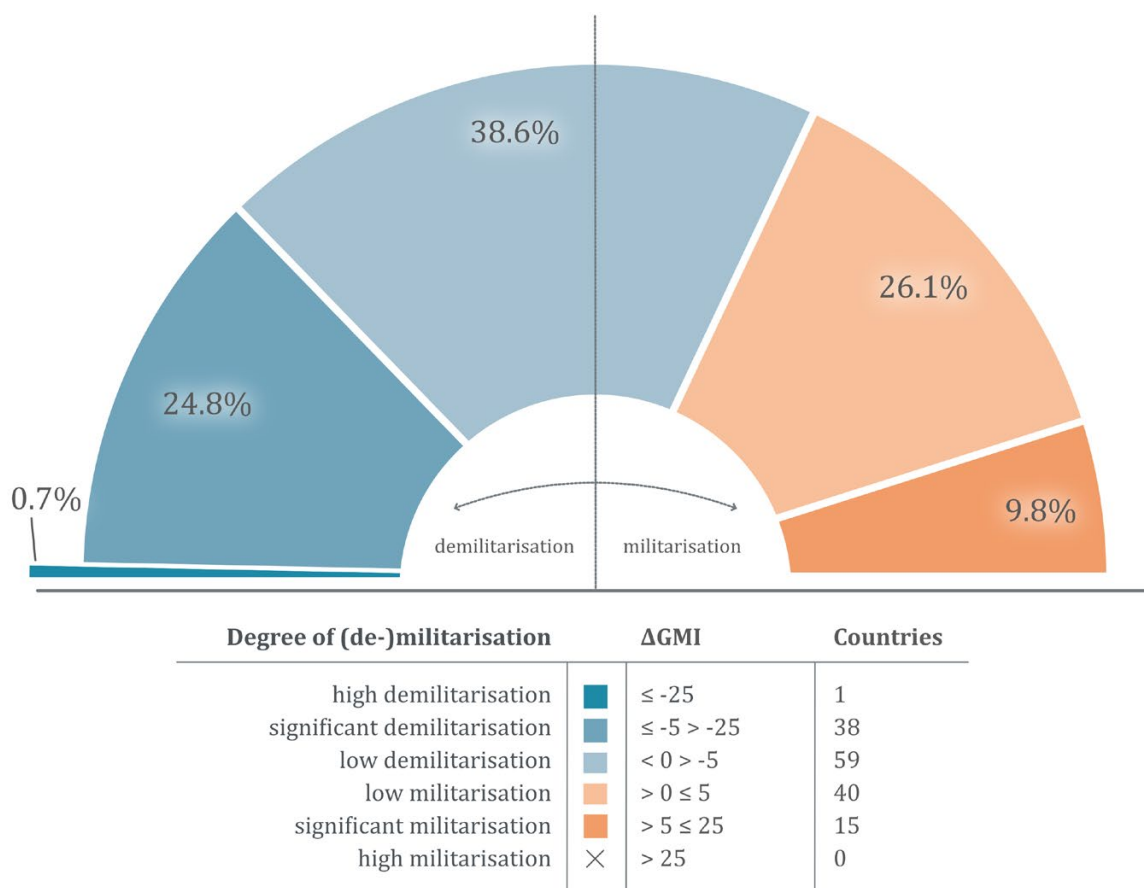
\* \ The main criterion for coding an organisational entity as either military or paramilitary is that the forces in question are under the direct control of the government in addition to being armed, uniformed and garrisoned.

## BICC GMI in 2022

Global militarisation decreased slightly compared to the previous year. The upward trend of previous years described in our historical analysis last year thus is not continuing for the time being— even though absolute global military expenditure exceeded the two trillion (10<sup>12</sup>) US dollar mark for the first time in 2022.

This is mainly due to the decline in relative military spending. Measured as a percentage of GDP (gross domestic product), military expenditure fell on average from 2.3 to 2.2 per cent<sup>2</sup>, mainly due to the economic recovery after the Covid-19 pandemic. The ratio of (para)military personnel (including reserves) to civilians also decreased given the global

**Figure 1:**  
*Global trends in (de)militarisation<sup>1</sup>*



1 \ Due to lacking data from the previous year, one country, Qatar, has not been listed.

2 \ SIPRI, World military expenditure passes \$2 trillion for first time, 25 April 2022, available at \ > <https://www.sipri.org/media/press-release/2022/world-military-expenditure-passes-2-trillion-first-time>

population trend: While the number of soldiers per 1,000 civilians was 9.7 for the countries represented in the GMI in 2001, it is now 6.1. Contrary to this trend, the number of heavy weapons has been growing since 2019 despite positive population trends, reaching a value of 0.519 per 100,000 inhabitants this year. In absolute terms, the number of 396,914 heavy weapon systems this year was last reached in 2012. In view of growing tensions worldwide, it can be assumed that this decline in militarisation will be short-lived.

For example, tensions between Russia and NATO increased significantly due to the Russian invasion of Ukraine. Finland and Sweden applied for NATO membership after years of neutrality, and various countries announced rearmament or modernisation programmes. This was also the case in Germany, where Chancellor Scholz launched a special fund for the *Bundeswehr*'s rearmament on 27 February this year and at the same time promised that more than two per cent of Germany's GDP would be spent on the *Bundeswehr* from now on.

We, therefore, use the report's regional focus to take a closer look at these developments. With regard to NATO's enlargement, for example, we ask what this means in terms of personnel, financial resources and heavy weapons, and NATO's positioning towards Russia and the Collective Security Treaty Organisation (CSTO).

Since the GMI 2022 is based on data from 2021 and therefore does not yet reflect the impact of the special fund, we will present two scenarios for the next five years to assess its significance for Germany's militarisation. The first suggests a significant militarisation dynamic compared to this year and sees Germany ranked 89th in the GMI in 2027 (i.e. 14 positions higher than in 2022). The second records only a slight militarisation dynamic, in which the Federal Republic climbs only five places in the global ranking (position 98).

Moreover, this year's escalating conflict between China, Taiwan and the so-called AUKUS countries (Australia, United Kingdom and United States) in the China Sea and the Pacific Ocean suggests that this region should also be examined more closely. Thus, in the second regional focus, we will concentrate on East Asia and Oceania and contrast the military potential of the AUKUS countries with that of China.

Because of this regional focus, we have estimated the degree of militarisation of North Korea and Taiwan, two key countries in the regional conflict, in this GMI. Both countries are usually not covered by the GMI. In the global ranking, North Korea would be ranked first and Taiwan 21st. As the estimate is based on divergent or older data sources, it was not included in the GMI dataset or the official ranking.

This year, the GMI has also evolved methodologically: We complemented the Heavy Weapons Index by including unmanned combat aerial vehicles (UCAVs) and loitering munitions (so-called kamikaze drones) as well as satellites.

## The Top 10

The GMI 2022 covers 154 of the 195 countries recognised by the United Nations.<sup>3</sup> The ten countries with the highest level of militarisation in the GMI 2022 are Israel, Kuwait, Armenia, Singapore, Oman, Bahrain, Greece, Russia, Brunei and Saudi Arabia. These countries allocate particularly large amounts of resources to their military compared to other areas of society. The trend towards demilitarisation described at the beginning is also evident among these countries. Seven of these ten countries show demilitarisation trends<sup>4</sup>, some significant, compared to the previous year (Saudi Arabia, Brunei and Oman). However, as already described, these are mainly due to the economic recovery or increases in these countries' GDP.

3 \ It does not cover territories that are not universally recognised, such as Taiwan or the republics of Abkhazia and South Ossetia. Moreover, no reliable data is available for some countries to analyse the distribution of resources between the military and overall society. We assume that some among them have a very high degree of militarisation and would even hold a top position in the GMI ranking.

4 \ We define increases of more than 25 points in the GMI ranking as high levels of militarisation; increases of more than five to 25 points as significant, and increases of up to five points as low levels of militarisation. Similarly, we refer to a scaling-down of 25 points and above as high levels of demilitarisation, a reduction of up to 25 points as significant and up to five points as low levels of demilitarisation.

**Table 1**  
**Top 10<sup>5</sup>**

Country	\$	👤	🛡️	GMI	ΔGMI	Rank
Israel	2.3	1.8	3.1	359	-3.8	1 (+0)
Kuwait	2.8	0.6	2.6	303	3.6	2 (+5)
Armenia	2.0	1.7	2.2	297	-11.5	3 (+0)
Singapore	1.9	1.3	2.7	296	3.5	4 (+4)
Oman	3.1	0.9	1.9	293	-23.2	5 (-3)
Bahrain	2.1	0.5	2.6	289	-18.1	6 (-2)
Greece	2.0	1.1	2.6	287	17.1	7 (+6)
Russia	2.2	0.9	2.6	286	-3.1	8 (+1)
Brunei	2.3	1.5	1.9	285	-15.7	9 (-3)
Saudi-Arabia	2.8	0.7	2.1	282	-20.4	10 (-5)

As in previous years, **Israel** takes first place in our militarisation ranking. In 2021, it spent about US \$22.5 billion on its military, which comprises 169,500 soldiers and a reserve of 465,000 personnel. This corresponds to some 5.2 per cent of GDP. The country nevertheless showed a low level of demilitarisation ( $\Delta$ GMI -3.8) compared to the previous year.

**Kuwait** takes second place in this year's ranking. The country recorded a low level of militarisation ( $\Delta$ GMI +3.6) compared to the previous year, moving up five places in the ranking, not least because of the described demilitarisation trends among other highly militarised countries. With US \$8.7 billion or 6.7 per cent of GDP, it spends a great deal on its armed forces, which comprise 17,500 active soldiers, 7,100 paramilitary forces and a reserve of 23,700 soldiers.

In third place, unchanged and despite significant demilitarisation compared to the previous year ( $\Delta$ GMI -11.5), is **Armenia**. This demilitarisation is due, on the one hand, to falling military spending (from US \$634 million in 2020 to around US \$601 million in 2021) and, on the other, to a reduction in active military personnel (from 44,800 to 42,900). Nevertheless, the ratio of military personnel to civilian population is still very high at 14.5 soldiers per 1,000 inhabitants.

**Singapore** climbed four ranks compared to last year and is now in fourth place. Its militarisation dynamics are only slight compared to the previous year ( $\Delta$ GMI + 3.5). However, at US \$10.7 billion, or about three per cent of GDP, the country spent rather a lot on its 51,000-strong army. The reserve of 252,500 soldiers is enormous, considering the size of the state.

**Oman** has been in the top 10 for the last five years and ranks fifth this year. Compared to the previous year, the country experienced significant demilitarisation ( $\Delta$ GMI -23.2), mainly due to decreased military expenditures. Nevertheless, the country still spent around 7.3 per cent of GDP, or US \$5.51 billion, on its 42,600-soldier-strong military in 2021.

The supposedly significant demilitarisation ( $\Delta$ GMI -18.1 points) of **Bahrain**, which ranks sixth, is largely due to a lack of data on the number of physicians in the country. This leads to a distorted calculation and does not represent demilitarisation in real terms. In absolute terms, military expenditure fell only very moderately from US \$1.40 billion to US \$1.37 billion, and in relative terms from 4.1 to 3.6 per cent of GDP. The Heavy Weapons Index also remained relatively constant.

**Greece** rose six ranks to seventh place compared to the previous year. Compared to the previous year, its militarisation is significant ( $\Delta$ GMI +17.1). This is largely due to increased spending (from 2.8 to 3.9 per cent of GDP, or from US \$5.3 to US \$7.7 billion) and a slight increase in military personnel by 600 soldiers.

**Russia**, ranked eighth, experienced low demilitarisation compared to the previous year ( $\Delta$ GMI -3.1). In absolute terms, however, spending grew from US \$61.7 billion to US \$63.5 billion. However, as the country experienced an increase in GDP of around 7.5 percentage points, it devoted fewer financial resources to its military in relative terms, so that relative military expenditure fell from 4.3 to 4.1 per cent of GDP.

5 \ The changes in the ranking indicated here refer to data recalculated in 2021. This may differ from the data in the last printed version of the Index. This is due to the fact that in the course of the calculation, data is always added for the previous years and, therefore, rankings may also change in retrospect. The re-calculated data can be found on our homepage at: \ > <https://gmi.bicc.de/ranking-table>



**Brunei** (9th) as well as **Saudi Arabia** (10th) each recorded significant demilitarisation compared to the previous year ( $\Delta$ GMI -15.7 and -20.4 respectively). In the case of Saudi Arabia, an increase in personnel by 30,000 soldiers (from 227,000 to 257,000) contrasts with falling military expenditure (from 9.2 to 6.6 per cent of GDP or from US \$64.6 billion to US \$53.8 billion). In Brunei, too, demilitarisation is due to falling relative expenditure (from 4.1 to 3.3 per cent of GDP). Military expenditures in absolute terms, however, hardly changed.

## Countries with the Highest or Lowest Trend in Militarisation Worldwide

**Croatia** has the highest trend in militarisation, with a  $\Delta$ GMI value of 22.7. Its military spending jumped from US \$1 billion to US \$1.6 billion, or from 1.8 per cent to 2.7 per cent of GDP, compared to the previous year. This is mainly due to the purchase of 12 second-hand French Dassault Rafale aircraft at a reported cost of US \$1.2 billion to replace the MIG-21s still in service with the air force. In addition, military personnel also increased from 15,200 soldiers in 2020 to 16,700 in 2021. The reserve also grew from 18,350 to 21,000, thus reaching the target size agreed in 2013. A further increase is thus not expected in the near future—the country climbed from 49th to 32nd place.

The country with the highest trend in demilitarisation in 2021 was **Afghanistan**, with a  $\Delta$ GMI value of minus 50.6. This was mainly due to the implosion of the Afghan armed forces when the Taliban came to power. A large number of soldiers deserted. At the same time, a large number of heavy weapons were taken abroad or destroyed.

## Focus on Regional Militarisation

### Outlook: NATO in 2023

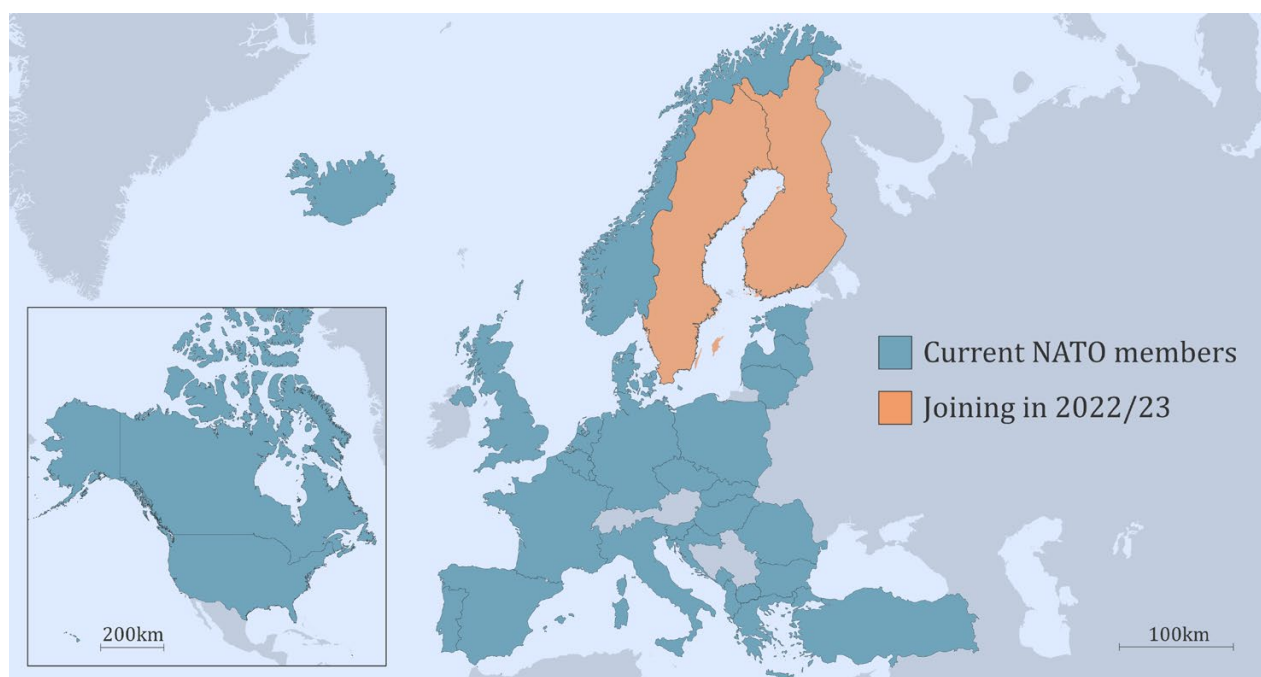
As a result of the Russian war of aggression against Ukraine, Sweden and Finland applied for NATO membership on 18 May 2022. Their accession is not only relevant in terms of their defence capabilities but also has implications for NATO's ability to control geostrategically important regions such as the Baltic Sea region or the Arctic. As the map below illustrates, the accession of both countries would make the Baltic Sea, for example, a de facto NATO-controlled Sea.

Below, we will look at their accession in terms of the conventional balance of power in Europe. To this end, we will first take a brief look at the two accession candidates and their military before analysing NATO's conventional forces after the probable accession in a second step.

### Sweden

The first candidate, Sweden, is a country with an average level of militarisation, currently ranked 68th in the GMI. Sweden's armed forces comprise about 14,600 personnel and are thus not particularly large; its reserve consists of 10,000 soldiers. This translates into a ratio of 1.4 soldiers per 1,000 inhabitants. The country spent an average of 1.1 per cent of its GDP on the military over the past ten years. Most recently (2021), about 1.3 per cent of GDP was spent on the military, at US \$7.2 billion. In terms of absolute military spending, this puts Sweden in 24th position among NATO countries. However, a defence act from October 2020 plans to increase military spending by 2025 and establish another five regiments and a seventh air squadron. Further militarisation of the country is therefore to be expected

**Fig. 2:**  
**NATO in Europe**



in the coming years. Currently, it owns 96 fighter aircraft, among other things, but these will have to be decommissioned or overhauled by 2026. This is why the country already joined the British Tempest programme in 2019. Similar to the Future Combat Air System (FCAS), the programme aims to develop a sixth-generation fighter aircraft. It is to replace the Saab 39 from 2035 onward. Besides this, the air force primarily has 62 transport aircraft and -helicopters at its disposal, as well as 67 training and five other aircraft and eight reconnaissance drones. In terms of land systems, Sweden has 120 battle tanks, 1,475 armoured personnel carriers and infantry vehicles, 35 heavy artillery systems as well as a number of other vehicles not covered by the GMI (engineering and maintenance) as well as smaller artillery and air defence systems. Its navy is primarily equipped with 150 coastal and patrol boats as well as altogether 33 minesweepers, landing and logistics vessels. Also, there are five Gotland or Västergötland-class submarines, all of which have been in service since the late 1980s or mid-1990s. All in all, Sweden would be joining NATO as a country with a small but modern military and a broad national defence-industrial base. For example, some of the systems used, like the fighter aircraft of the manufacturer Saab and the submarines of the SAAB Kockums shipyard, are produced locally. Between 2017 and 2021, Sweden ranked 13th among global arms exporters.

## Finland

The second candidate country, Finland, is already highly militarised, ranking 25th in the current GMI ranking. The country spent an average of 1.5 per cent of its GDP on its military over the past ten years, about 0.4 percentage points more than Sweden. In absolute terms, however, the military budget of US \$5.6 billion (2021) is lower than that of Sweden. With 19,250 active members of the armed forces, which mainly consist of conscripts, there are about 3.5 soldiers per 1,000 inhabitants. Their number is to be further increased in the coming years. With a reserve of 238,000 the country ensures a huge mobilizing potential. In terms of land systems, the Finnish armed forces have 200 tanks, 831 troop carriers and infantry vehicles, 288 towed and 49 self-propelled guns and 56 multiple rocket launchers. The Finnish Navy is significantly less armed than the Swedish Navy: It has about 20 patrol and coastal vessels, eight minesweepers and 51 amphibious and landing craft, as well as seven support ships. However, the patrol boats and minesweepers are to be replaced by corvette-sized vessels under the Squadron 2020 programme. Its air force is equipped with 107 combat-capable aircraft. Like the Swedish ones, these will also have to be replaced or overhauled at great costs in the foreseeable future. In 2021, it was, therefore, decided under the HX programme to replace 62 F18 Hornet combat aircraft with 64 US F-35s, to be delivered between 2026 and 2030. The air force further has 99 partially armed training aircraft and 12 transport and reconnaissance aircraft in stock. With the planned increase in the size of the armed forces, these procurements are likely to lead to a further militarisation of the country in the foreseeable future. The Finnish military is already a modern army with great mobilisation potential. Finland also has its national defence industry and uses systems developed by it in its armed forces. Between 2017 and 2021, it ranked 28th among global arms exporters.

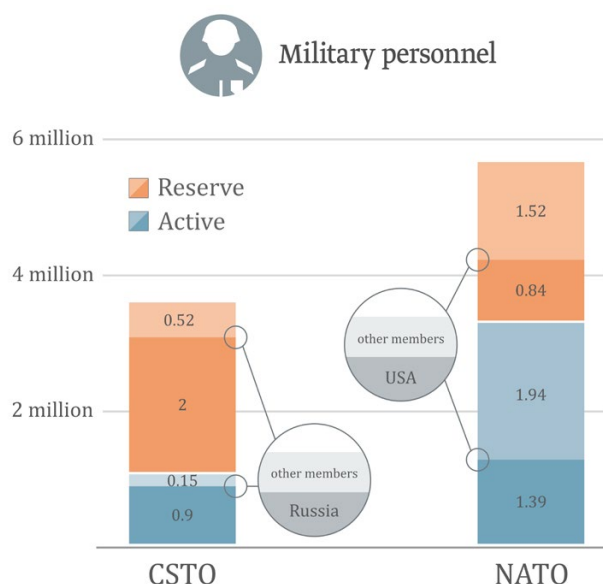
### What Does the Accession of Both Countries Mean for NATO?

First, for NATO, the accession of Sweden and Finland would mean an **increase in personnel** of 1.03 per cent **in active forces** (a total of 3,326,660 soldiers). However, the increase in reserve forces would be much more significant: The Alliance would have 11.8 per cent more reservists at its disposal. Similarly, accession would increase the Alliance’s total military expenditure by 1.15 per cent, from US \$1,102 billion to US \$1,116 billion. The increase in heavy weapon systems ranges from 1.85 per cent (e.g. self-propelled gun carriages) to 5.73 per cent (towed artillery).

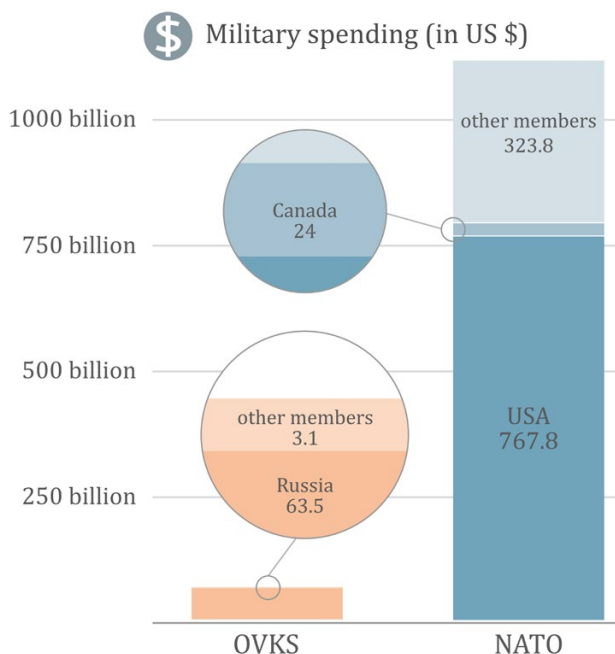
Moreover, NATO accession would mean that the length of the NATO-Russia border would more than double—from the current 1,209 to 2,549 kilometres). Comparatively speaking, 900,000 active Russian soldiers would be facing 3.3 million active NATO soldiers. In terms of reserve forces, NATO would have an advantage of 356,000 reservists over Russia. Changes that could arise with regard to the Ukraine war are not yet shown here.

Russia’s **military spending** of around US \$63.5 billion in 2021 is contrasted by a total of US \$1.1 trillion (10<sup>12</sup>) in military expenditure by the future 32 NATO countries. NATO thus spends significantly more on its military than Russia does. Even without the expenditure of the United States and Canada, the military budgets of the European NATO countries, at 323.8 billion, exceed those of Russia. This is also true if one looks at spending adjusted for purchasing power—even then, current European NATO countries alone spend twice as much on their military as Russia.<sup>6</sup>

**Figure 3:**  
*Military personnel: NATO, Russia and Collective Security Treaty Organization (CSTO)*

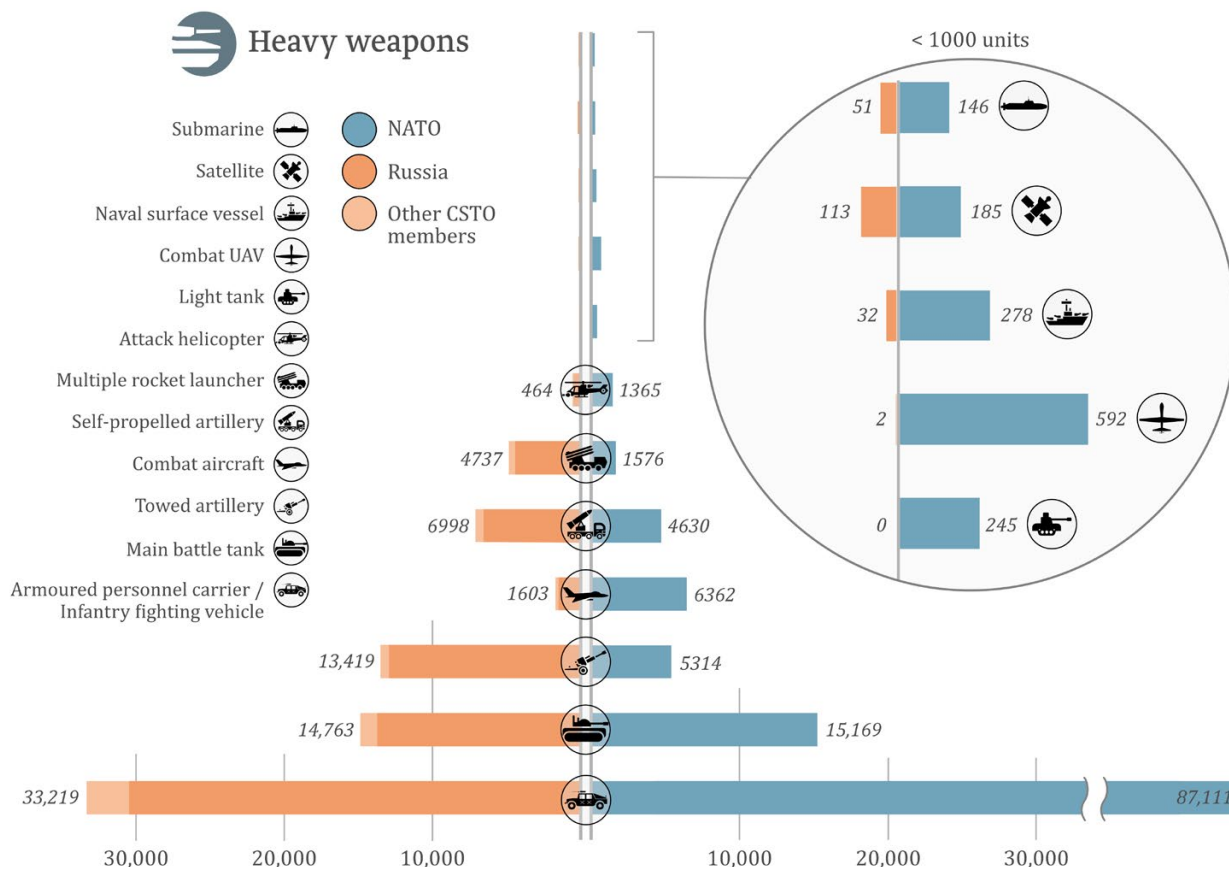


**Figure 4:**  
*Military spending: NATO, Russia and CSTO*



6 \ Bayer M. & Mutschler M. (2022): Aufrüstung der Bundeswehr. Bedarfsorientierte Sicherheitspolitik oder Zwei-Prozent-Fetischismus? Greenpeace. Available at \ > <https://www.greenpeace.de/publikationen/aufruestung-bundeswehr>

**Figure 5:**  
*Heavy weaponry: NATO, Russia and CSTO*



In terms of the number of **heavy weapons**, the 32 NATO countries with 120,000 systems also clearly surpass Russia, which has 69,000 heavy weapons in its arsenals. Russia has a numerical advantage in the field of artillery and a clear disadvantage regarding its air and naval forces. Russian losses in the Ukraine war are not taken into account here either.

If NATO were contrasted with the Collective Security Treaty Organisation (CSTO), the members of which are Russia, Belarus, Armenia, Kazakhstan, Kyrgyzstan and Tajikistan, the divided border between the alliances would be 4,113 kilometres long. The CSTO, too, has a much smaller conventional military capability than NATO in all aspects. Thus, including the reserve forces, the CSTO achieves a potential operational readiness with approximately 3.6 million soldiers, which is significantly lower than the total number of soldiers in NATO, which would achieve a potential operational readiness with

5.7 million soldiers after the accession of Sweden and Finland. Within the CSTO, Russia provides about 86 per cent of the active and about 79 per cent of the reserve forces. While the expanded NATO spends an average of 1.7 per cent of GDP, the CSTO spends an average of 2.2 per cent. Nonetheless, the absolute alliance expenditure of the CSTO is only six per cent of NATO's expenditure. In terms of heavy weapon systems, too, there is little change in NATO's superiority in comparison, since the other CSTO countries only contribute about 6,000 heavy weapons to the alliance. While the CSTO has a numerical advantage in artillery, it has clear disadvantages in naval and air forces.

Our comparison of the two blocs is by no means intended to present arguments and pave the way for a new Cold War. Moreover, this list only states little about the armed forces' operational readiness or combat capability. Nor does it say anything about

whether they are logistically well supplied and tactically and strategically well led. The comparison of the two alliances rather follows the basic idea of the GMI: The Index wants to encourage discussion about the use of socially available resources and provide a fact-based basis for this discussion. This will also be the approach in the following chapter.

## The Special Fund and the Militarisation of Germany—Two Scenarios for the Future

In response to the Russian attack on Ukraine, German Chancellor Olaf Scholz announced the introduction of a special fund of €100 billion for the *Bundeswehr* and an increase in defence spending to more than two per cent of GDP annually. The special fund aims to strengthen the alliance- and defence capability and ensure that necessary investments can be made. For this purpose, the Basic Law was amended on 3 June 2022, and an exception was added to the balanced budget provision (*Schuldenbremse*) (Addition a. to Article 87). Since then, the special fund has been the subject of controversial debate, described by some as a drop in the ocean and by others as a massive rearmament programme. Against the background of this debate, we will examine the *Bundeswehr*'s planned projects in personnel, expenditure and procurement and their possible impact on Germany's degree of militarisation, and develop two scenarios on this basis. Since the funds of the special fund are to be spent<sup>7</sup> and the goals of the medium-term personnel planning are to be implemented by 2026, this year forms the time horizon for our following forecast. Based on



extrapolated data for 2026, we will estimate Germany's degree of militarisation for the year 2027. The exact data - and/or calculation basis can be found in the  
 \ > Online Appendix.

Since the implementation of various plans for the *Bundeswehr* is subject to a number of imponderables—such as whether the planned personnel can actually be recruited and certain weapons systems can be procured on time—we anticipate the following two scenarios in all areas (personnel, expenditure and heavy weapons):

- I A scenario of **target achievement**, in which all development goals can be reached and all procurements can be realised, and
- I a scenario of **missed targets**, in which not all targets can be fully achieved.

In addition, reference values such as the population, health expenditure and the number of physicians are relevant for the calculation.<sup>8</sup> To estimate these for 2026, we calculate a regression line for 2017 to 2021, which we project into the future.

To position Germany in the global ranking, developments in other countries must also be taken into account. Here—in contrast to Germany—, however, we do not recalculate the GMI score entirely on the basis of estimated values. Instead, we estimate their GMI score based on its development over the last five years (also using linear regression). Planned increases in expenditure, procurement- and any staffing plans of the other countries are disregarded, as an informed estimate for all 154 countries is impossible.

7 \ Formally, funds can also be spent beyond that year.

8 \ The gross domestic product is also an important reference value. In the section on expenditures, we will explain our approach to this value in detail.

**Personnel:** The **medium-term personnel planning** of the *Bundeswehr* foresees an increase in the armed forces from 183,400 to 203,000 soldiers by 2027. The **status report on the state of affairs** presented in July 2022 envisages focusing the armed forces on the core task of national and Alliance defence and, in addition, increasing the size of the reserve (which currently comprises 30,050 soldiers). For example, the 30 regional security and support companies formed since 2021 are to be merged into four homeland security regiments (Berlin, Hesse, North Rhine-Westphalia and Mecklenburg-Western Pomerania) by 2025. In addition to the existing 30 companies, twelve more are to be established and ready for deployment from March 2023. This would correspond to an increase in the reserve by about 1,850 soldiers. A further increase in the reserve by another 3,000 soldiers is planned, but the report does not specify an exact target date for this.

**Achieved target scenario:** Due to the war in Ukraine and the focus on national and alliance defence, the *Bundeswehr* can recruit enough soldiers to fulfil all personnel plans: The *Bundeswehr* will therefore comprise 203,000 soldiers in 2027. The reserve has grown to 34,900 soldiers.

**Missed target scenario:** Even after the decision on medium-term personnel planning, the *Bundeswehr* has not increased in size between 2021 and 2022 but has actually decreased by 100 soldiers. In view of this development, we conservatively assume that the *Bundeswehr* will be able to recruit a maximum of ten per cent of the planned 20,000 additional soldiers in the next four years. In 2027, the *Bundeswehr* would therefore comprise around 185,000 soldiers. In this scenario, it was possible to establish the twelve planned regional security and support companies for the reserve but not to recruit an additional 3,000 soldiers. The reserve would therefore consist of 31,900 soldiers.

**Military expenditure:** The special fund will have a very direct impact on Germany's military expenditure. For 2022, €50.5 billion have been earmarked in the budget for the *Bundeswehr*. The same amount is planned until 2026, according to the benchmark resolution for the financial plan. The additional €100 billion from the special fund should, according to the economic plan for the special fund, enable the German government to achieve the NATO target of two per cent "in a multi-year average of a maximum of five years". Based on the GDP of 2021, this corresponds to about €70 billion.

In the **achieved target scenario**, we are taking the federal government at its word and assume that it will achieve the target of spending two per cent of GDP on the *Bundeswehr* in 2026 with the additional funds from the special fund.

For the **missed target scenario**, we extrapolate the development of GDP in a linear fashion based on the values of the last five years.<sup>9</sup> In this scenario, the German government spends €70 billion on the *Bundeswehr* in 2026, but only 1.5 per cent of GDP.

9 \ Given increasing energy prices, this approach is associated with great uncertainty in relation to the GDP. However, our calculated figure for the 2026 German GDP of US \$4,578 billion comes quite close to the figure of €4,674 billion estimated by the Projektgruppe Gemeinschaftsdiagnose for 2027, which includes leading economic research institutes in German-speaking countries, in its Autumn Report 2022.

**Heavy weapons:** The objective of the special fund is to enable necessary investments and procurements and, in addition, put the *Bundeswehr* in a position to fulfil its core mission of national and Alliance defence. The economic plan of the special fund provides €100 billion for procurements and roughly assigns these to four dimensions (land, sea, air, cyber). In our Online Appendix , we have examined the already known and circulated procurement projects to see whether and, if so, when, they could contribute to a change in the number of heavy weapons in the Global Militarisation Index.

**GMI-ranking:** Based on these changes, according to the **achieved target scenario**, Germany is likely to have a level of militarisation of 131 in 2027 and thus show a significant militarisation dynamic compared to this year. In 2027, it would thus probably rank 89th in the GMI; 14 positions higher than this year. If we apply the **missed target scenario**, Germany would reach a level of militarisation of 120 in 2027 and would only show a low militarisation dynamic compared to 2022. With this, Germany would only climb five positions in the global ranking to 98th place.

For the **achieved target scenario**, we assume an increase in the number of heavy weapons by 180 systems. This is mainly due to the fact that newly procured vehicles replacing obsolete ones have more powerful weapons and are thus recorded in a different category. Added to this are, among others, armed drones and additional vessels for the German Navy. Many of the announced procurements (such as F-35 or CH-47) are intended to replace existing weapon systems but do not increase the total number.

In the **missed target scenario**, the number of heavy weapons increases by only 49 systems, as it is unlikely that many can be delivered by 2026. The higher number of heavy weapons is largely due to armed drones, new armed utility military helicopters and additional naval vessels.



## East Asia and Oceania

The announcement of a new trilateral security partnership between Australia, the United Kingdom and the United States (AUKUS) in September 2021, offering Australia technology to develop nuclear-powered submarines as well as cooperation in quantum technology, artificial intelligence and cybersecurity, further exacerbated the conflict between China and the United States in the region. But there are also tensions over China’s claims to Taiwan and large parts of the South China Sea, which the littoral states and ASEAN countries perceive as a threat. Both processes are encouraging the formation of blocs.

Since the GMI deals with the conflict-relevant countries in its two, actually separate regions, namely East Asia and Oceania, for the purpose of this regional focus, we look at them together and establish the top 15 (instead of top 10) in the regional GMI ranking.

**Figure 6:**  
*Alliances in the East Asia and Oceania region*



**Table 2:**  
*Top 15 in East Asia and Oceania*

Country	\$	👤	🚢	GMI	ΔGMI	Rank
Singapore	1.9	1.3	2.7	296	3.5	4 (+4)
Brunei	2.3	1.5	1.9	285	-15.7	9 (-3)
South Korea	1.6	1.4	2.2	261	-2.4	15 (-1)
Vietnam	1.5	1.2	1.4	205	-0.5	31 (-2)
Mongolia	0.7	0.8	2.5	199	-5.3	35 (-4)
Myanmar	2.0	1.1	0.8	192	2.6	38 (+2)
Cambodia	1.5	0.5	1.3	186	-2.0	46 (-4)
Thailand	1.1	0.9	1.1	155	-6.4	63 (-6)
Australia	1.3	0.2	1.5	152	-0.3	67 (+1)
Malaysia	1.0	0.5	1.0	124	3.2	91 (+9)
China	1.3	0.2	0.8	119	1.5	98 (+5)
Fiji	1.3	0.3	0.5	116	-14.9	102 (-16)
New Zealand	1.0	0.2	0.8	103	-2.1	112 (-2)
Japan	0.8	0.3	0.8	94	1.3	119 (+3)
Indonesia	0.7	0.5	0.4	84	-7.1	130 (-7)

In the following, we will look at the current militarisation dynamics and those to be expected in the near future, as well as the involvement of the countries most important for these developments. In particular, we will look at the two blocs and highly militarised neutral states in the region.

## AUKUS states and their allies

**Singapore** (GMI rank 4; regional position 1): Singapore is the smallest but most highly militarised state within the East Asia region. Due to its perceived vulnerability as a city-state and its doctrine of *Total Defence*, Singapore has been allocating increasing resources to its military for years. At US \$10.7 billion, the country recently spent three per cent of its GDP on its military. The military comprises 51,000 active and 252,500 reserve forces and is considered very modern. Again, this year, the country has recorded a low increase in militarisation ( $\Delta$ GMI +3.5). To secure its territorial integrity, it maintains military partnerships with the United States and Great Britain and thus belongs to the extended AUKUS bloc. With SAF 2040, a modernisation programme is currently underway, in the course of which, among other things, a fourth component force (cyber security) is to be established. In addition, the city-state has strengthened its navy and air force in recent years. Further militarisation is, therefore, to be expected. In the last ten years, the United States has been the largest arms supplier.

**Major arms imports:** Most recently, the country received two 218-type submarines from Germany (two more are on order), a frigate from France (four more are being built under licence), 40 F-15E *Strike Eagle* from the United States and 15 drones from Israel. Four F-35B *Lightning-2s* multirole combat aircraft have also been ordered from the United States, which will be deployed together with a planned joint multi-mission ship.

**Brunei** (GMI rank 9; regional position 2): Located in the north of the island of Borneo, the Sultanate of Brunei is one of the most highly militarised countries in the world. With 7,200 active soldiers, Brunei's armed forces are numerically small compared to its neighbour Malaysia (113,000 soldiers); in view of the small size of the population, however, militarisation in terms of personnel is exceptionally high at 16.5 armed forces per 1,000 inhabitants and is an absolute top figure, not only in regional terms. Although military expenditure increased by US \$2 million in absolute

terms (to US \$438 million), the country shows a significant demilitarisation trend ( $\Delta$ GMI -15.7). The reason for this is a marked increase in GDP. To the north, Brunei borders the South China Sea. Here, its exclusive economic zone, which extends 200 miles into the open sea, overlaps with sea areas also claimed by other states—first and foremost China. Due to the gas and oil deposits located there, the conflict has come to a head in recent years. Due to China's dominance, Brunei sought support from the ASEAN countries, the United States and Great Britain. It is thus part of the extended AUKUS bloc. It can be assumed that the country's militarisation will settle at a high level. Germany has been the main arms supplier for the last ten years.

**Major arms imports:** Most recently, the country strengthened its maritime forces, in particular, importing four corvettes (OPV-80) from Germany between 2011 and 2014 and five drones for maritime surveillance from the United States in 2021.

**South Korea** (GMI rank 15, regional position 3): Given the permanent conflict with its neighbour, North Korea, South Korea has long been one of the most highly militarised countries. At the same time, the country is also increasingly responding to tensions in the region. In 2021, the country spent US \$47.7 billion, or 2.8 per cent of its GDP, on its 555,000-strong military personnel. It recorded a low level of demilitarisation ( $\Delta$ GMI -2.4). With its long-standing military-political ties to the United States, it is part of the closer AUKUS circle. A trend towards increased militarisation is expected again in the future. For example, an aircraft carrier is planned to be built and put into service by 2033. Since 2018, the country already has two helicopter carriers. The United States is the largest arms supplier.

**Major arms imports:** South Korea purchased 40 F-35As from the United States for US \$7 billion by the end of 2020; six aircraft and 12 helicopters for anti-submarine defence (*Poseidon* and *Seahawk*) are also to be delivered by 2025.

**Thailand** (GMI rank 63, regional position 8): The Kingdom of Thailand recorded a significant demilitarisation trend this year ( $\Delta$ GMI -6.4). It spent US \$6.6 billion on its military in 2021, equivalent to 1.3 per cent of GDP. This represents a decrease of US \$600 million compared to the previous year, which is the reason for the recorded demilitarisation. The country is considered an important ally of the United States in the region, which is why it is to be counted among the extended AUKUs circle despite its arms imports from China. In recent years, the country has mainly modernised its land forces. No further modernisation programmes are currently on the agenda. Thailand is expected to remain at a high level of militarisation in the future. The largest suppliers of weapons are Ukraine and China.

**Major arms imports:** Thailand purchased a large number of tanks and infantry fighting vehicles from Ukraine and China and armoured troop carriers (314 *Mamba* from South Africa and 130 used *Piranha-3* from the United States) in recent years. Also, the Israeli ATMOS-2000 self-propelled howitzer has been manufactured under licence since 2019.

**Australia** (GMI rank 67, regional position 9): The country shows a low demilitarisation trend ( $\Delta$ GMI -0.3) compared to the previous year. In 2021, Australia spent US \$28.4 billion on its military, which currently numbers just under 60,000 soldiers, equivalent to two per cent of GDP. Australia is currently undergoing a large-scale modernisation and enlargement programme that encompasses all branches of the armed forces. The aim is to increase the size of its armed forces by 30 per cent to 80,000 soldiers. This target number is to be reached by 2040 at the latest. Various modernisation programmes are also underway. Many of the systems to be procured in these programmes are to be manufactured under licence in Australia from now on. The country is a long-term ally of the United States and the United Kingdom and plays a central part in the AUKUS bloc.

The country also obtains the majority of its weapons from the United States. Due to the ongoing modernisation and enlargement, Australia's level of militarisation is expected to increase further.

**Major arms imports:** In 2018, as part of the so-called Land 400 programme, it was decided to procure 211 8x8 *Boxer* reconnaissance vehicles worth US \$3.5 billion to be produced by Rheinmetall in Queensland. In the same year, as part of the SEA-5000 programme, it was decided to procure nine *Hunter*-class frigates, which are to be delivered by 2040. Already in 2009, 72 F-35A *Lightning II* multirole combat aircraft were ordered from the United States for US \$13.4 billion as part of Project Air-6000. In May 2022, the Australian government also announced the procurement of ten MQ-28A *Ghost Bats*, which are to enter service by 2025. These unmanned aerial vehicles can fly alongside manned aircraft such as the F-35 for support and perform autonomous missions independently ('loyal wingman').

**Japan** (GMI rank 119, regional position 14): The country, which imposed a constitutional pacifism on itself after 1945 with the so-called Article of Peace (Art. 9), has been debating military rearmament for several years. This trend began with the establishment of a Ministry of Defence in 2007 by Prime Minister Shinzo Abe. Japan's more militarily active role aims, among other things, at the return of the southern Kuril Islands from Russia, greater support for Taiwan and the stationing of US nuclear weapons in the country. 2021, the country recorded a low militarisation trend for the first time since 2012, which continued in 2022 ( $\Delta$ GMI 1.3) and spent just under US \$56 billion (2020 around US \$52 billion) on its 247,150-soldiers-strong military, equivalent to 1.1 per cent of GDP. The Liberal Democratic Party (LDP), which won the 2022 Senate elections, also promised to increase military spending to two per cent. This is intended to strengthen the navy, among

other things. To this end, Japan has already begun converting two *Izuma*-class helicopter carriers into aircraft carriers. A further militarisation trend is therefore to be expected. As a long-standing ally of the United States, we consider the country to be in the inner circle of the AUKUS bloc. The country also obtains the majority of its weapons from the United States.

**Major arms imports:** As of 2012, the Japanese government ordered a total of 105 F-35A *Lightning II* for its Air Force and 42 additional models of the F-35B *Lightning II* variant for its navy. Parts of these are produced under licence in Japan.

## Highly militarised, neutral countries

**Vietnam** (GMI rank 31, regional position 4): The country's relations with its neighbours are historically complicated. For example, it intervened in Cambodia in 1979 and overthrew the Chinese-backed Khmer Rouge regime there. This led to a brief war between Vietnam and China, with border disputes with the latter persisting to this day. Not least because of these tensions, the country has recently moved somewhat closer to the United States after Washington lifted the embargo imposed on Vietnam in 2016. We are treating the country as neutral at the time of writing. If further rapprochement with the United States takes place, the country can soon be considered as part of the wider AUKUS circle. Vietnam maintains a fairly large military of 482,000 soldiers. How much the country spends on this military is currently unclear. Compared to the previous year, however, a low demilitarisation trend can be observed ( $\Delta$ GMI -4.7). Vietnam currently obtains most of its weapons from Russia. At the time of writing, we are not expecting further militarisation.

**Major arms imports:** The most important procurements in recent years aimed to strengthen Vietnam's Navy and Army. Between 2011 and 2019, the country procured four frigates and 64 T-90 S tanks from Russia, and in 2021, four landing ships from the Netherlands.

## China and countries close to China

**Myanmar** (GMI rank 38, regional position 6): In 2021, the country spent US \$3 billion (or 3.3 per cent of GDP) on its 356,000 soldiers-strong military, registering a slight militarisation trend compared to 2020 ( $\Delta$ GMI of 2.6). The high level of militarisation is mainly due to protracted military rule and numerous internal conflicts, for example, between the Rohingya Muslim minority and the central government. Although a democratisation process was initiated in 2011 and the power of the military was curtailed, this was reversed with Min Aung Hlaing's coup in February 2021. In terms of foreign policy, the country is oriented towards China, which has its permission to use the Greater and Lesser Cocos Islands militarily. Due to the central position of the military in society, it can be assumed that the country will continue to be highly militarised in the future. China is the largest arms supplier to the country.

**Major arms imports:** In 2015, for example, Myanmar ordered 16 JF 17 *Thunder/FC-1* fighter aircraft and, in 2020, a second-hand submarine (Type-035G). Two frigates (Type-053H) and 12 armed CH-3 drones, as well as smaller weapons systems, were also among the most recent purchases from China.

**Cambodia** (GMI rank 46, regional position 7): Compared to the previous year, the country experienced low levels of demilitarisation ( $\Delta$  -2.1). It maintains a 124,300 soldiers-strong conscript army, on which it spent US \$628 million in 2021, equivalent to 2.3 per cent of GDP. The armed forces are highly centralised and considered "top-heavy" because they have one of the world's highest per capita numbers of senior officers, with more than 3,000 generals (as of 2018). In terms of foreign policy, the country has been closely tied to China since the Khmer Rouge rule, which isolated it in foreign policy terms. Even though Cambodia's relations with neighbouring Vietnam and Thailand have visibly eased in recent years and the country is also involved regionally, for example in ASEAN, China remains a central partner. Among other things, China financed the expansion of the Ream naval base, and joint troop exercises have increased in recent years. China is also the

largest arms supplier. Because of this close military cooperation and foreign policy ties with China, we position the country in the wider circle of the Chinese bloc.

**Major arms imports:** Most recently, Cambodia received 20 *Tiger* armoured vehicles as a donation from China between 2018 and 2019. Previously, Cambodia received four O62-1G *Lushun* patrol boats in 2007 and 12 AS365/AS565 *Panther* helicopters in 2011 from China.

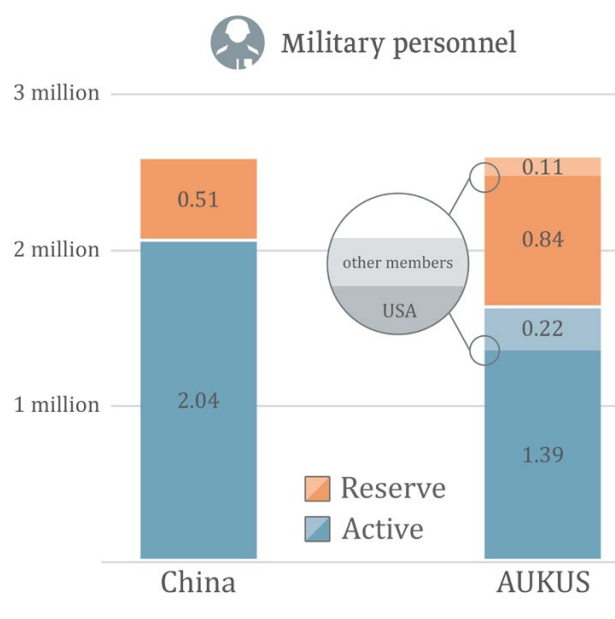
**China** (GMI rank 98, regional position 11): Militarisation is also low this year, with a ΔGMI of 1.5. Despite this, relatively speaking, low militarisation of China, absolute spending and personnel numbers are high: China’s military spending increased by 23 per cent over the last five years (from US \$220 billion to US \$270 billion), but is mathematically put into perspective by its economic growth (the share of GDP was most recently 1.7 per cent). The 2,035,000-strong military is also by far the largest in the world. Here too, however, the size is put into perspective by its high population numbers. China is considered dominant in the region in terms of its increasingly self-confident assertion of national interests. Such interests include national unification with Taiwan, securing maritime claims in the South China Sea and protecting growing foreign interests, for example through the New Silk Road project. China’s dominant position in the region has brought it into conflict not only with various regional powers, but also with the United States. The focus of China’s rearmament is currently on expanding its navy. In June, China launched the first aircraft carrier *Fujian*, which was completely developed and built in the country. This means that the country now has three aircraft carriers. China is also working on strengthening its air force, with its first strategic stealth bomber, the H-20, set to make its maiden flight this year.

**Major arms imports:** Although the country is the fourth-largest arms exporter in the world, in the past, China procured various weapons systems from Russia and France in particular.

### AUKUS–China: A Comparison

Having previously looked at the political-military spheres of influence of AUKUS and China, we will now compare the militarisation of AUKUS and China based on various parameters. Thus, the following figures compare China’s military personnel, military expenditure and number of heavy weapons with those of the AUKUS alliance. As can be seen in Figure 7, China is ahead of the AUKUS alliance in terms of active military personnel. However, when reserve forces are included, this levels out.

**Figure 7:**  
AUKUS and Chinese military personnel

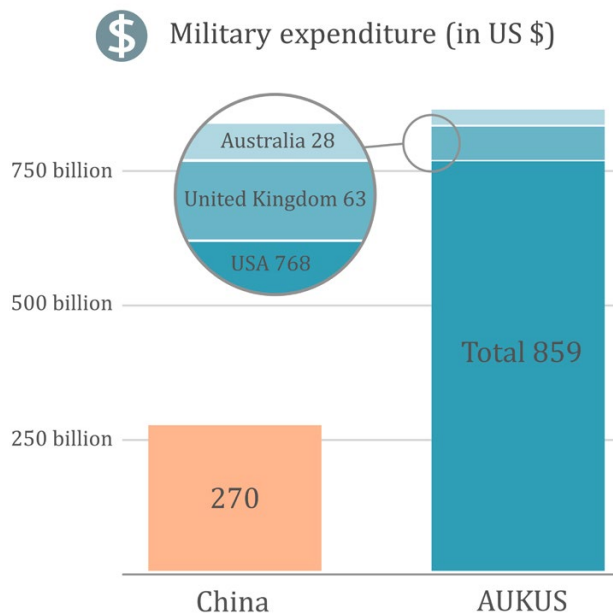




In terms of **expenditure**, we see that the AUKUS countries currently allocate significantly more funding to their military than China does. The United States accounts for a large part of that expenditure. However, since its armed forces are globally distributed and the expenditures, as well as heavy weapons and personnel, cannot be related exclusively to the regions under consideration, this general comparison must be put into perspective. Only about 100,000 US-American soldiers are currently stationed in the region. They are part of the so-called Indo-Pacific Command and are spread over various countries, including Japan, Korea, Australia and the Philippines. In the event of an open conflict with China, however, the United States would be able to deploy more troops and equipment. China also suffers from the same problem, as some troops are stationed on the Mongolian border, for example, or would not be deployed in a conflict that would presumably be fought at sea.

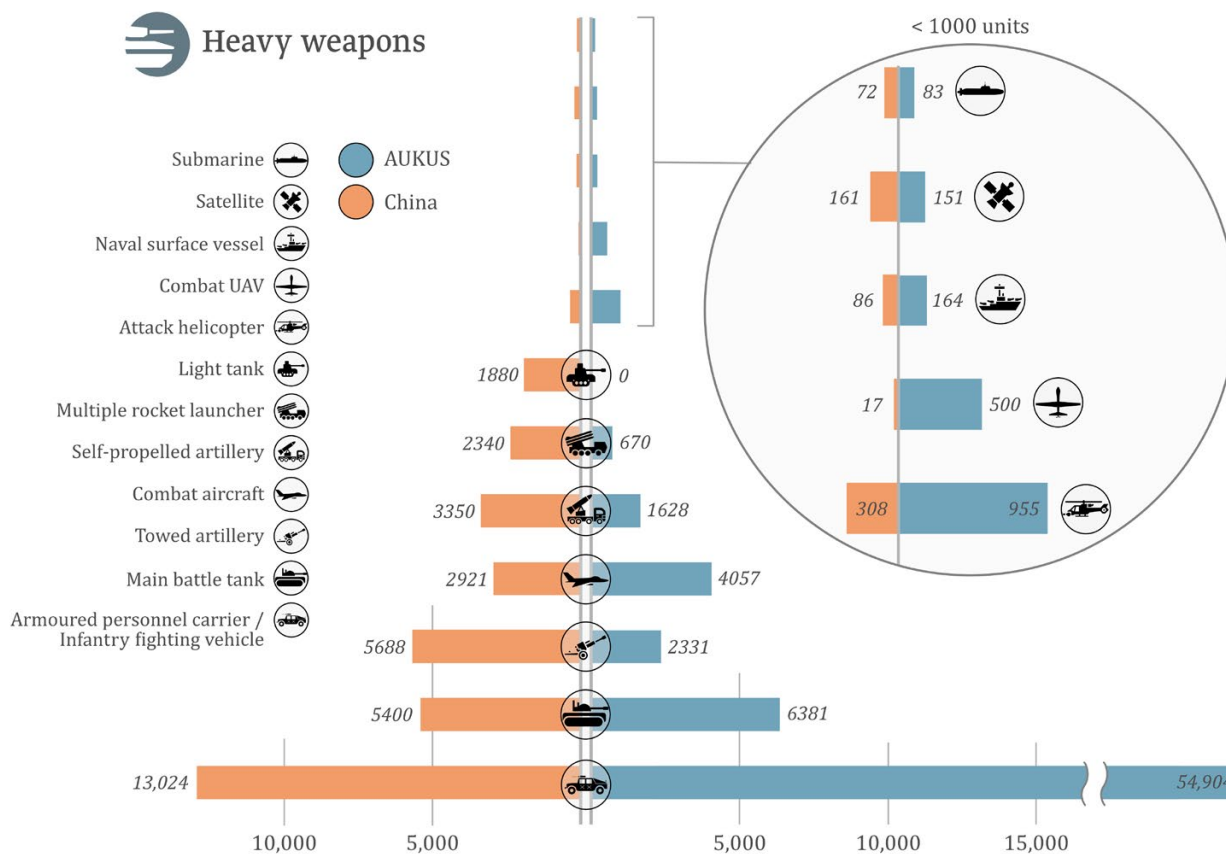
AUKUS is also well ahead of China in terms of **heavy weapons** recorded by the GMI. This is mainly due to the rather high number of armoured troop carriers. While there is near parity in terms of battle tanks, China's land forces have a clear advantage with their artillery systems. In terms of air and naval forces relevant to a possible conflict, however, the AUKUS states are ahead where most equipment is concerned: For example, the three states possess

**Figure 8:**  
*Military expenditure of AUKUS and China*



about 1,130 combat aircraft, almost 650 combat helicopters, 11 submarines, 78 naval surface vessels and significantly more combat drones than China. Only in the area of satellites used for military purposes are they slightly behind.

**Figure 9:**  
*Heavy weapons: AUKUS and China*



On balance, the comparison between AUKUS and China allows only very limited conclusions to be drawn about who would be the stronger party in a bloc confrontation. However, it does show just how much resources the two blocs are devoting to the military and the quantities of conventional weapons they have already accumulated. Their arms race has a military-political impact on the entire region. With Australia, Japan and Singapore, some economically powerful countries in the region have joined in. The increasing automation pursued by both sides through intelligent systems will also be decisive in controlling the large sea areas and will fuel the armaments dynamics.

### North Korea and Taiwan

In the conflict between the AUKUS countries and China outlined above, a state not normally depicted in the GMI—Taiwan—plays an important role. North Korea, another allegedly very highly militarised country in the region, is also not normally covered by the GMI. In this GMI, we have therefore estimated the degree of militarisation for both countries (see Infobox 1). This shows that North Korea is the most militarised country in the world. According to these results, Taiwan ranks 21st in the global ranking. Both countries thus contribute to the region’s already high militarisation and military tensions.

**Infobox 1:**  
**Militarisation estimate North Korea and Taiwan**

For this year’s edition of the GMI, we have made an estimation for North Korea and Taiwan, which have never been represented in the GMI due to a lack of data or international recognition. The data we used for this is partly based on estimates whose quality is questionable. This applies in particular to North Korea, as the country is very opaque in terms of economic and military macro data and is difficult to compare with other countries due to its socialist mode of production. Therefore, we have not included the calculation in the data set or the ranking at the end of the publication but would like to use it merely to provide a hypothetical classification in the GMI ranking. Notes on the data sources used and the basis for the calculation can be found in our Online Appendix. Additional information, such as on the armed forces, their equipment, national arms industries and arms exports can be found in the background information on North Korea and Taiwan.

Country	Expenditure Index	Personnel Index	Heavy Weapons Index	GMI-score	#
North Korea	4.8	3.5	3.0	569	1
Taiwan	1.2	1.3	2.1	230	21

As the table shows, \> **North Korea** would be first in the GMI ranking, making it the most militarised country in the world. The country also ranks first in the Expenditure and Personnel sub-indexes. In terms of the Heavy Weapons Index, it is only slightly behind Israel in second place. The country, therefore, has very high levels of militarisation in all areas.



\> **Taiwan** would be in position 21 in the GMI ranking. This would position it among the countries with a very high level of militarisation.<sup>10</sup> In terms of sub-indexes, the country would have an average, high level of militarisation in the area of expenditure (position 68) and a very high level of militarisation in personnel (position 11) and heavy weapons (position 18) respectively.



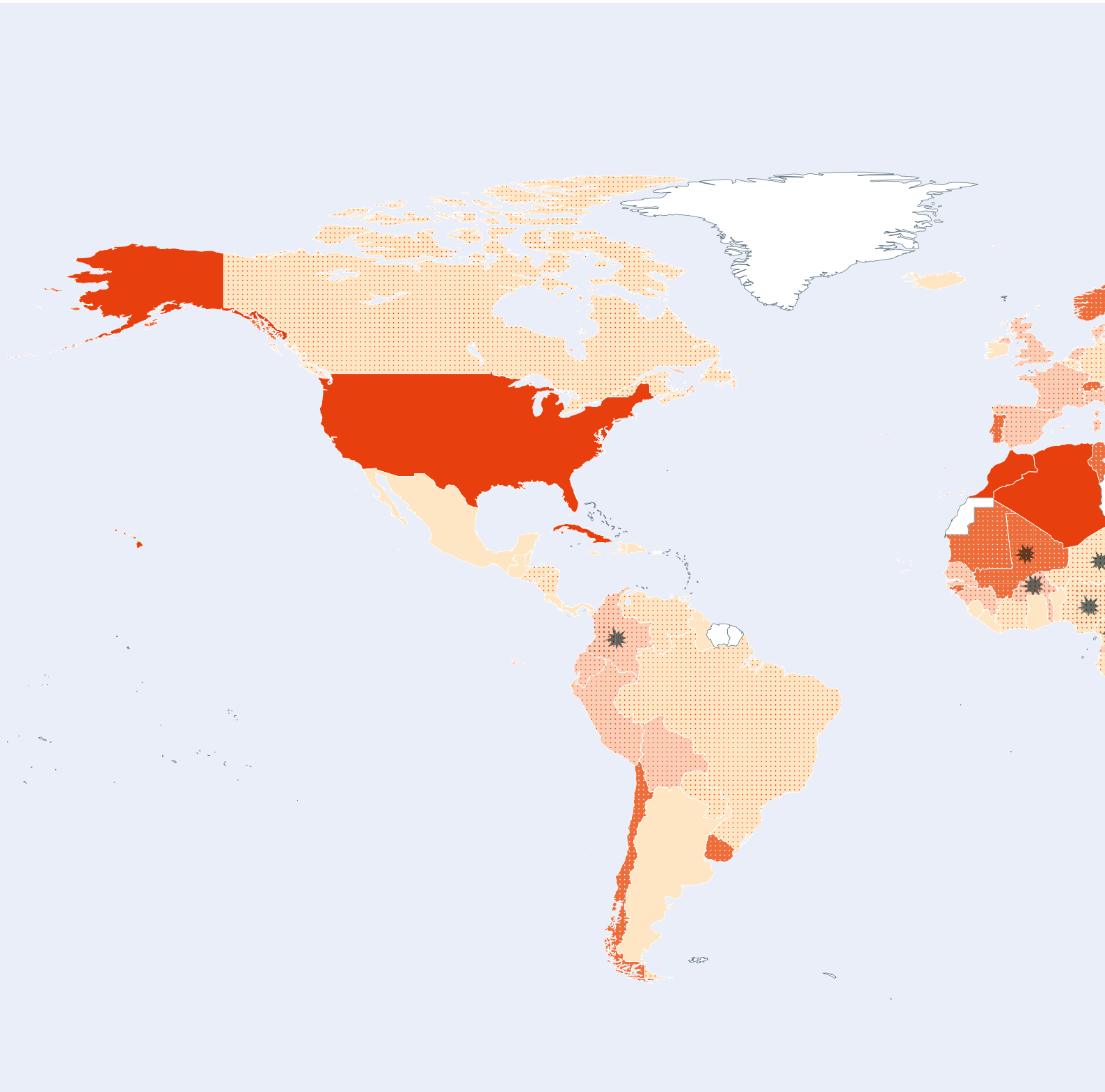
10 very high (first quintile), high (second quintile), average (third quintile), low (fourth quintile), very low (last quintile).



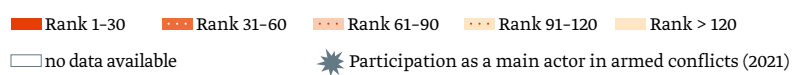
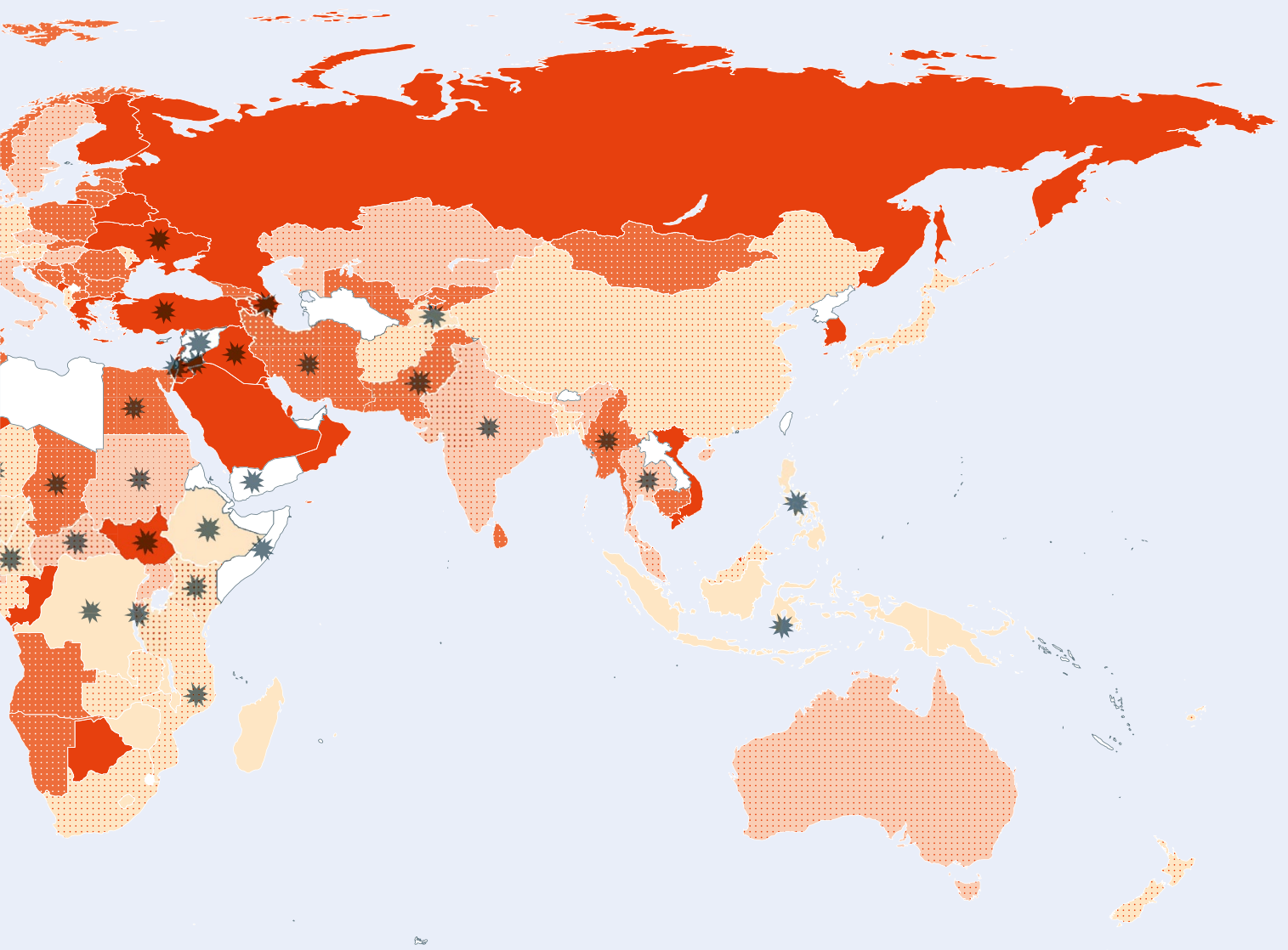
The depiction and use of boundaries or frontiers and geographic names on this map do not necessarily imply official endorsement or acceptance by BICC.

**Map 1**

*Overview GMI-ranking worldwide*



Source conflict data: *UCDP/PRIO Armed Conflict Dataset* Sources of administrative boundaries: *Natural Earth Dataset*



## MILITARISATION INDEX RANKING 2022

Rank	Country	Rank	Country	Rank	Country	Rank	Country
1	Israel	45	Serbia	89	Ecuador	133	Gambia
2	Kuwait	46	Cambodia	90	Bosnia and Herzegovina	134	Zimbabwe
3	Armenia	47	Georgia	91	Malaysia	135	Argentina
4	Singapore	48	Uzbekistan	92	Netherlands	136	Dominican Republic
5	Oman	49	Norway	93	Moldova	137	Mexico
6	Bahrain	50	Tunisia	94	Belgium	138	Liberia
7	Greece	51	Sri Lanka	95	Canada	139	Sierra Leone
8	Russia	52	Poland	96	Venezuela	140	Congo,
9	Brunei	53	Kyrgyzstan	97	El Salvador		Democratic Republic of the
10	Saudi Arabia	54	Gabon	98	China	141	Lesotho
11	Jordan	55	Guinea-Bissau	99	Austria	142	Madagascar
12	Azerbaijan	56	Mali	100	Niger	143	Timor-Leste
13	Qatar	57	Chile	101	Nicaragua	144	Ireland
14	Cyprus	58	Angola	102	Fiji	145	Ghana
15	South Korea	59	Portugal	103	Germany	146	Guatemala
16	Lebanon	60	Switzerland	104	Zambia	147	Trinidad and Tobago
17	Algeria	61	Bulgaria	105	Luxembourg	148	Papua New Guinea
18	Morocco	62	Slovakia	106	Mozambique	149	Cape Verde
19	Belarus	63	Thailand	107	Guinea	150	Mauritius
20	Ukraine	64	France	108	Nepal	151	Panama
21	Botswana	65	Latvia	109	Albania	152	Malta
22	Montenegro	66	Colombia	110	Afghanistan	153	Haiti
23	South Sudan	67	Australia	111	Honduras	154	Costa Rica
24	United States of America	68	Sweden	112	New Zealand		
25	Finland	69	Uganda	113	Cameroon		
26	Iraq	70	Burundi	114	South Africa		
27	Turkey	71	Sudan	115	Bangladesh		
28	Lithuania	72	Denmark	116	Brazil		
29	Congo, Republic of	73	Slovenia	117	Tanzania		
30	Cuba	74	Italy	118	Paraguay		
31	Vietnam	75	Hungary	119	Japan		
32	Croatia	76	United Kingdom	120	Cote D'Ivoire		
33	Estonia	77	Rwanda	121	Jamaica		
34	Pakistan	78	Bolivia	122	Guyana		
35	Mongolia	79	India	123	Kenya		
36	Egypt	80	Kazakhstan	124	Nigeria		
37	Iran	81	Czech Republic	125	Ethiopia		
38	Myanmar	82	Equatorial Guinea	126	Tajikistan		
39	Macedonia	83	Togo	127	Belize		
40	Romania	84	Central African Republic	128	Benin		
41	Mauritania	85	Burkina Faso	129	Malawi		
42	Uruguay	86	Peru	130	Indonesia		
43	Namibia	87	Senegal	131	Philippines		
44	Chad	88	Spain	132	Seychelles		

**bicc \**

Bonn International Centre for Conflict Studies (BICC) gGmbH

Pfarrer-Byns-Straße 1, 53121 Bonn, Germany

+49 (0)228 911 96-0, Fax -22, [bicc@bicc.de](mailto:bicc@bicc.de)

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DIRECTOR

Professor Dr Conrad Schetter

AUTORS

**Dr. Markus Bayer**

Senior Researcher at BICC

**Paul Rohleder**

BICC

EDITOR

Susanne Heinke

TRANSLATION

Heike Webb

SUPPORT

Rolf Alberth, Ben Buchenau

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