Eva Pejsova (ed.), *Guns, Engines and Turbines. The EU's Hard Power in Asia.* (Chaillot Papers). Paris: EU Institute for Security Studies, 2018. 107 pages. ISBN 978-92-9198-76-8 (free online version)

This fascinating study examines authoritatively the EU's arms trade with Asia, which – given the arms race triggered by China, with 42% of global imports – is the world's largest arms market. The volume also finds that the more the EU produces various Asian strategy papers (all focusing on values, governance and soft power), the more incoherent the arms sales of its member states have become. Whoever produces anything sells everything to almost anyone (except for North Korea and Myanmar) with no strategic cohesion towards friends and foes alike. The EU's "value-based" foreign policy mantra, with its focus on human rights, the rule of law and multilateralism, appears not only unconvincing, but decidedly insincere and duplicitous. This is strong stuff to read, coming as it does not from dissident fringe scholars but from the highly reputed official EU defence think tank.

Europe is seen as an attractive alternative to the US hegemon, which is perceived as increasingly unreliable and unpredictable in its erstwhile security guarantees. EU member states deliver high quality arms and dual use technology with no strategic restraints and few conditionalities attached. Yet due to the lack of effective coordination by Brussels, with decisions on arms exports remaining a national competence, Asian partners have been seeking bilateral contacts, notably with France and the UK. For the EU, total arms exports amounted to 26% of the world's total from 2012–2016, making it the world's second largest supplier after the US. EU market shares among recipient countries in Asia are astounding: 82% in Brunei, 58% in Malaysia, 46% in Indonesia, 42% in Singapore, 41% in Thailand, 39% in New Zealand, 30% in Australia, 29% in South Korea and 26% in the Philippines (p. 8 and p. 19). Others such as Vietnam and Taiwan mostly procure from Russia and the US respectively. All of them want to modernise their militaries in view of the build-up in China, which from 2007 to 2017 increased its military spending by 118%, as well as seeking to diversify their procurement. The greatest expenditure goes towards upgrading naval capacities with submarines, frigates, maritime aviation and anti-ship missiles (p. 17). The most prominent example is Australia's decision to modernise its submarine fleet with French-made vessels.

The South China Sea is arguably Asia's most dangerous flashpoint. Here EU member states are the most prominent supplier to all littoral states. Interestingly, or perhaps shockingly, in spite of the 1989 EU arms embargo following the Tiananmen massacres of students and workers, China continues to be supplied with crucial dual use technology. France sold 60 diesel engines for frigates and sonar systems for submarines, Germany 40 engines for destroyers, submarines and self-propelled artillery (the latter by Deutz AG), and the

UK 80 turbofan engines for combat aircraft and six airborne radars for maritime patrol aircraft (p. 36 and p. 91). China also mass-produces military helicopters designed by Airbus France and the Safran Group (p. 33). Member states who remain in charge of export licences obviously choose a very loose interpretation of the EU's non-committal and non-enforceable "common criteria" for arms exports, which were agreed upon in 2008, as Liselotte Odgaard (p. 24) and Chantal Lavallee (p. 45) point out. In 2015 alone EU member states issued export licences for military equipment to China worth €300 million. With declining military spending in Western Europe, East Asia's growing market and arms race became a decisive factor in the survival of European arms makers, writes Felix Heidruk (p. 18). It is a world region where China has proved unwilling to be restrained in its hegemonic ambitions by international law and norms. Also, unlike Europe, Asia – due to Chinese objections – has no arms control agreements or confidence-building institutions such as the OSCE that could put a brake on the ongoing arms race, of which EU companies appear to be major beneficiaries.

Although the EU in 2005 and in 2010 appeared to move towards lifting its arms embargo against China (which remains effective only against lethal weapons), each time there was no unanimity amongst its member states, given China's hard-line stance and continued human rights violations. Given Xi Jingping's personal nationalistic dictatorship since 2012 the embargo is no longer put into question, as lingering illusions about Chinese democratic reforms and a constructive role in international affairs have been thoroughly dispelled amongst Europeans (p. 30), while China, spending between US$ 10 to 20 billion on military R&D per year alone (p. 36), has increased its self-sufficiency in military procurement and acquired the remaining missing hardware mostly from Russia.

As Mathieu Duchatel writes, China is catching up in nuclear-powered aircraft carriers and submarines, in energy and cyber weapons and quantum communication – if necessary by engaging in "technology cooperation" with the acquisition of European high-tech firms, such as the Spanish Aritex (p. 37), the German Thielert Aircraft Engines and the British AIM Altitude, all producing high-tech aircraft materials (p. 39), or through joint ventures with German Rolls Royce Power Systems and Dornier Seawings. The stated objective is to build a world-class military on a par with the US and to compete in arms exports beyond the current cheap standard infantry weapons and missiles sold to Pakistan and Africa.

With Korea, European arms sales increased following US refusals to sell high-tech missiles and precision-guided ammunitions (Zoe Stanley-Lockman, p. 54). European companies are more open to technology transfers for items such as tank engines or for the production of German submarines under licence. Japan has until recently relied exclusively on US weaponry for external

supplies. Since 2017, agreements on defence cooperation have been signed with the UK, France, Italy, Germany and Sweden, with little tangible results thus far, although Tokyo – like Seoul – was hurt by Washington's refusal to sell advanced fighter jets (p. 57).

In contrast, in Indonesia, a country study by Bruno Hellendorff found that military spending is used rather for the upkeep and modernisation of its aging fleet and air force in order to control its waters more effectively. Procurement is subject to turf wars between politicians and the branches of the military, corruption and non-transparent budget decisions (p. 72), with frigates coming from the Netherlands, helicopters and transport planes from Airbus France, Leopard tanks from Germany and Sukhoi fighter jets from Russia. Europe's appeal for Indonesia, as for the rest of the region, is that unlike the US, its arms exports come with little strategic thinking or political controls attached (p. 78). This small, well-researched volume concludes convincingly that in Asia, a very volatile world region, more coherent European strategic thinking – rather than moralisation – should replace the currently irresponsible patchwork of deal-making among national arms traders.

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