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# TRANSATLANTIC PERSPECTIVES ON CHINA'S MILITARY MODERNIZATION:

THE CASE OF EUROPE'S ARMS EMBARGO AGAINST THE PEOPLE'S REPUBLIC OF CHINA

**Hugo MEIJER** 





# TRANSATLANTIC PERSPECTIVES ON CHINA'S MILITARY MODERNIZATION: THE CASE OF EUROPE'S ARMS EMBARGO AGAINST THE PEOPLE'S REPUBLIC OF CHINA

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#### Introduction

This study seeks to provide a comparative analysis of how the United States and the European Union position themselves vis-à-vis China's military modernization by examining and contrasting the diplomatic, military, and economic interests at stake, on the two sides of the Atlantic, in the transfer of defense-related technology to the People's Republic of China (PRC). To do so, it focuses upon the issue of Europe's "China arms embargo" as it has sparked major controversies and frictions between the United States and the European Union (EU) in the post-Cold War era. The combination of China's defense budget increase, foreign technology imports, domestic research and development (R&D), and military-industrial espionage has fueled a major military modernization effort. Between 2004 and 2013 Beijing's officially disclosed military budget grew at an average of 9.4%, reaching \$132 billion in 2014.<sup>2</sup> China's R&D spending rose from \$10.8 to \$168 billion between 2000 and 2012, and its R&D intensity (1.98%) caught up with the European Union (1.97%) in 2012.3 China has also sought to acquire, through both licit and covert means, advanced US and European defense-related technology to fuel its military modernization. Furthermore, since 2009, Beijing's foreign policy vis-àvis its neighbors has become increasingly assertive thereby raising concerns over the risks of accidents over territorial disputes and unintended military escalation with Japan and in the South China Sea.<sup>5</sup> At the same time, China has become the second largest trading partner of both the United States (behind Canada) and of the European Union (behind the US). 6 In 2013, as China became the world's biggest trading nation (sum of exports and imports), EU-China bilateral trade reached €428.1 billion with EU exports to China peaking at €148.1 billion. The EU is indeed the PRC's biggest trading partner and China has become the fastest growing export market for the European Union. Concomitantly, US-China bilateral trade has also dramatically increased from \$5 billion in

<sup>&</sup>lt;sup>1</sup> The author is grateful to Lucie Béraud-Sudreau and Aude Fleurant for their precious comments on previous drafts of this report.

<sup>&</sup>lt;sup>2</sup> US Department of Defense, 2014, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014, Office of the Secretary of Defense, p. 43; and "China defense budget to increase 12.2 pct in 2014: report," Xinhua, March 5, 2014.

<sup>&</sup>lt;sup>3</sup> R&D intensity refers to the ratio of Gross domestic Expenditures on R&D (GERD) to GDP. See Organisation for Economic Cooperation and Development (OECD), *OECD Estimates of R&D Expenditures Growth in 2012*, January 17, 2014, available at www.oecd.org/sti/inno/Note MSTI2013 2.pdf

<sup>&</sup>lt;sup>4</sup> See Dallas Boyd, Jeffrey Lewis, Joshua Pollack, 2010, *Advanced Technology Acquisition Strategies of the People's Republic of China*, Science Application International Corporation, report sponsored by the Defense Threat Reduction Agency of the US Department of Defense; William Hannas, James Mulvenon, Anna Puglisi, 2014, *Chinese Industrial Espionage: Technology Acquisition and Military Modernisation*, Routledge; Office of the National Counterintelligence Executive, 2011, *Report to Congress on Foreign Economic Collection and Industrial Espionnage, 2009-2011*, October; David Wise, 2011, *Tiger Trap: America's Secret Spy War with China*, New York, Houghton Mifflin Harcourt.

<sup>&</sup>lt;sup>5</sup> Jian Zhang, 2013, "China's Growing Assertiveness in the South China Sea: A Strategic Shift?," National Security College, Australian National University; Yasuhiro Matsuda, 2014, "How to Understand China's Assertiveness since 2009: Hypotheses and Policy Implications," *Strategic Japan – CSIS*, April; For a contrarian perspective, see Alastair Iain Johnston, 2013, "How New and Assertive Is China's New Assertiveness?," *International Security*, Vol. 37, No. 4.

<sup>&</sup>lt;sup>6</sup> See US Census Bureau, 2013, "Top Trading Partners - November 2013," available at <a href="http://www.census.gov">http://www.census.gov</a>; and European Commission, 2014, "Countries and Region: China," available at <a href="http://ec.europa.eu/trade/policy/countries-and-regions/countries/china">http://ec.europa.eu/trade/policy/countries-and-regions/countries/china</a>

<sup>&</sup>lt;sup>7</sup> European Commission, 2014, "Facts and Figures on EU-China Trade".

1981 to \$536 billion in 2012.<sup>8</sup> From 1996 to 2011, China was the fasting growing export market for US companies and between 2000 and 2011 American exports to the PRC grew by 542% compared to 80% export growth with the rest of the world.<sup>9</sup>

In this context of growing economic interdependence with China coupled with concerns over the modernization of the People's Liberation Army (PLA), both the US and the EU have sought - to different degrees – to rebalance their foreign policy priorities toward (and within) the Asia Pacific. The American "pivot" (or rebalance) to Asia has often been depicted, in a rather reductive manner, as a US "grand strategy" of military containment of the People's Republic of China (PRC). As shown elsewhere, however, the American pivot to Asia is not a military strategy aimed at containing China but rather a complex, multifaceted, and steadily evolving foreign policy undertaking that relies upon the linkage and articulation of the diplomatic (both bilateral and multilateral), military, and economic dimensions. 10 The United States is redirecting its foreign policy attention, priorities, and resources – in the post-Iraq/Afghanistan wars period - toward the world's most strategically sensitive and economically dynamic region. And while Europe's interests in the Asia Pacific have been driven historically, to a large extent, by economic considerations (e.g. trade as well as stable and open sea lanes of communication), the EU has nonetheless growing interests in Asia in the field of nontraditional security threats as well, including climate change. 11 The European Union has therefore accompanied the US policy shift by realizing its own rebalance to Asia in the diplomatic and economic realms, as well as in the area of non-traditional security. 12

At the same time, from an industrial perspective, while after the 1989 Tiananmen crackdown both the EU and the US imposed an embargo on arms sales toward the PRC, China is nonetheless a highly lucrative potential market in the realm of defense-related exports. In light of the growing international competition in the arms industry and of budgetary austerity – including the "sequestration" process in Washington D.C. and declining defense budget across the EU –, governments on both sides of the Atlantic are required to stimulate and expand defense exports to preserve their defense and technological industrial base (DTIB).<sup>13</sup> As the drivers of growth in military spending are moving towards emerging countries, EU member states have undergone a reduction in

<sup>&</sup>lt;sup>8</sup> Wayne Morrison, 2013, *US-China Trade Issues*, Congressional Research Service, CRS Report for Congress RL33536, p. 2.

<sup>&</sup>lt;sup>9</sup> Charles Freeman, 2013, "The Commercial and Economic Relationship" in Shambaugh, David, (ed), *Tangled Titans: The United States and China*, Royman & Littlefield Publishers, p. 181.

<sup>&</sup>lt;sup>10</sup> Hugo Meijer, 2015, "Introduction: The Reconfiguration of American Primacy in World Politics. Prospects and Challenges for the US Rebalance to Asia", in Hugo Meijer (ed), *Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions*, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.

<sup>&</sup>lt;sup>11</sup> May-Britt Stumbaum, 2015, "Impact of the Rebalance on Europe's Interest in East Asia: Consequences for Europe in Economic, Diplomatic and Military/Security Dimensions," in Hugo Meijer (ed), *Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions*, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.

<sup>&</sup>lt;sup>12</sup> Nicola Casarini, 2013, "The European 'Pivot' in Asia," European Union Institute for Security Studies, Issue Alert, March; Patryk Pawlak (ed), 2012, *Look East, Act East: Transatlantic Agendas in the Asia Pacific*, Paris: European Union Institute for Security Studies; May-Britt Stumbaum, 2015, *op. cit*.

<sup>&</sup>lt;sup>13</sup> This trend is more pronounced in the EU than in the US because of the size of the American domestic market (which represents about two thirds of the turnover of the leading American defense companies). See Aude Fleurant, 2012a, « Moteurs et conséquences des mutations de l'industrie de défense américaine », in Yves Bélanger, Aude Fleurant, Hélène Masson, Yannick Quéau, *Les Mutations de l'industrie de défense : regards croisés sur trois continents*, Cahier de l'IRSEM, n° 10, p. 59.

military spending which might persist in the context of austerity policies. <sup>14</sup> Since the mid-2000s, European defense budgets have decreased steadily, with expenditure shrinking from €201 billion in 2006 (1.77% of GDP) to €194 billion in 2010 (1.61% of GDP), that is a decrease of approximately 2% annually and of 7% in cumulative percentage. <sup>15</sup> In fact, the only region in the world where the purchasing power in military spending has not increased since the 2000s is Western Europe. The "assault to external markets" has therefore become, by necessity, a key adaptation strategy for the arms industry. In this perspective, if the EU arms embargo were to be lifted, China could become a vital customer for major European defense companies such as Thales or EADS – among others. <sup>16</sup>

In light of the US – and to some extent European – rebalance toward the Asia Pacific, of thickening economic interdependencies with China, and of the growing export-reliance of the arms industry, the question arises of how the US and the EU have managed and balanced the potentially competing diplomatic, national security, and economic interests in their relationship with Beijing and how they have assessed the desired degree of defense-related exports to China. In order to address this question, this study investigates two interrelated dimensions of the transatlantic debates on China's military modernization and on defense-related transfers to the PRC. First, it aims at comprehending how the American and European perspectives on the EU "China arms embargo" have changed since the early 2000s – when a major though unsuccessful impetus for lifting the embargo took place (the period examined in this study is 2000-2013). In particular, it contrasts the evolving political, military and economic interests at stake on the two sides of the Atlantic. Secondly, it characterizes the transatlantic controversies and disagreements on the issue of sensitive dual-use exports to China – that are not covered by the American and European arms embargoes.<sup>17</sup>

Ever since the imposition of the European embargo, France has been the most vocal EU member state advocating and pushing for the lifting of the arms embargo on China. Also, as explained in more detail below, Paris has been by far the largest European exporter of defense-related articles to the PRC in the post-Cold War era. Specifically examining the evolution of France's position on this issue therefore allows bringing in sharpest contrast the transatlantic approaches to China's military build-up and the related dimension of defense-related exports to the PRC. Accordingly, although taking into account and analyzing the overall European debates on defense-related sales to China, this study examines and compares the evolution of these debates in the United States and in France on the basis of a broad range of written and oral primary sources.

<sup>&</sup>lt;sup>14</sup> See Aude-Emmanuelle Fleurant, 2012b, « Mutations industrielles de défense, entre léthargie européenne et activisme mondial ? », Lettre de l'IRSEM – Dossier stratégique: État des lieux du marché et de l'industrie de défense mondiale, n° 5; Yves Bélanger, 2012, « Économie de défense et industrie militaire, la mondialisation à l'heure du repli budgétaire », in Yves Bélanger, Aude-Emmanuelle Fleurant, Hélène Masson, Yannick Quéau, Les mutations de l'industrie de défense. Regards croisés sur trois continents, Cahier de l'Irsem, No. 10, mai.

<sup>&</sup>lt;sup>15</sup> Hélène Masson, 2012, « L'industrie de défense européenne et les marchés d'Amérique du Nord et d'Amérique latine : entre attractivité et maîtrise des risques », in Yves Bélanger, Aude-Emmanuelle Fleurant, Hélène Masson, Yannick Quéau, *op. cit.* 

<sup>&</sup>lt;sup>16</sup> Eugene Kogan, 2005, *The European Union Defence Industry and the Appeal of the Chinese Market*, Studien und Berichte zur Sicherheitspolitik, Schriftenreihe der Landesverteidigungsakademie, p. 32.

<sup>&</sup>lt;sup>17</sup> "Dual-use" refers to goods and technologies that have both commercial and military applications. They may be developed for military purposes and then be applied commercially or vice versa.

#### **KEY FINDINGS**

#### Finding 1: The Death Knell for the Lifting of the EU Arms Embargo on China

It will be shown that, over the time period examined, continued US pressures coupled with shifting political, strategic, and economic considerations within the EU itself, have contributed to "killing" the prospects of lifting the EU arms embargo on China – including in France, the country historically more active in pushing this issue on the EU agenda. Specifically, the lifting of the "China arms embargo" has become a dead letter in the EU foreign and security policy-making process under the combined impact of four interrelated dynamics: (a) the growing internal political fragmentation within the European Union; (b) the persistent external pressures and retaliatory threats exerted by the United States; (c) the conflicting interests in the European defense industry itself, in the face of major opportunities of the Chinese market on the one hand, and the continued reliance (and dependence) upon the US domestic market on the other; (d) and the consequent decreased diplomatic pressure from Beijing on this specific issue.

#### Finding 2: Transatlantic Dual-Use Exports to China and the Hopelessness of Containment

If the prospects of lifting the EU embargo have so far vanished from the transatlantic diplomatic agenda with China, highly sensitive dual-use exports (not covered by the American and European embargoes) nonetheless continue to flow to the PRC. Concomitantly, China's defense modernization effort has increasingly relied upon commercial-military integration and on dual-use technologies to enhance its defense industrial capabilities. The sale of dual-use technology to the PRC therefore remains a highly divisive issue in the transatlantic relationship, as the large economic interests involved in exporting to China commercially developed dual-use articles clash with the security implications of their potential contribution to China's military modernization. Accordingly, while purely defense articles are likely to remain restricted on the two sides of the Atlantic (Finding 1), the flow of dual-use technology to a rising China testifies the hopelessness, in the post-Cold War era, of applying a transatlantic strategy of military/technological containment of the PRC in the style of the Cold War containment of the Soviet Union. As former Senior Director for Asia at the National Security Council, Jeffrey Bader, succinctly puts it: "[we do] not seek the containment of China, as was the case with the Soviet Union [...] because of the hopelessness of pursuing such a policy toward a country that [is] much more profoundly integrated into the global system. [...] Containment in the style of US policy toward the Soviet Union after World War II [is] not a plausible option."<sup>18</sup>

#### **CONTRIBUTION TO THE LITERATURE**

On the one hand, although a number of works exist on the European debates on the arms embargo on China, they mostly focus upon the intra-European controversies in the early 2000s period and almost exclusively rely upon secondary sources. <sup>19</sup> Despite the diplomatic attempts by a number of

<sup>&</sup>lt;sup>18</sup> Jeffrey Bader, 2012, *Obama and China's Rise: An Insider's Account of America's Asia Strategy*, Washington DC: Brookings Institution Press, pp. 3 and 69.

<sup>&</sup>lt;sup>19</sup> Nicola Casarini, 2007, "The International Politics of the Chinese Arms Embargo Issue," *The International Spectator*, Vol. 42, No. 3, pp. 371-389; Nicola Casarini, 2009, *Remaking Global Order: The Evolution of Europe*-

European governments and by the EU High Representative for Foreign Affairs and Security Policy to revive these debates in the early 2010s, and despite the growing pressures of the defense industry to export to emerging markets in times of budgetary austerity, very few publications have examined the evolution of EU defense-related sales to China in the 2010s. <sup>20</sup> Furthermore, except for rare exceptions, very little inquiry has been made into European dual-use exports to China. <sup>21</sup> On the other hand, while several studies exist on US export control policy toward the PRC during the Cold War, <sup>22</sup> despite the rise of China as a major world power since the collapse of the Soviet Union, Washington's restrictions on defense-related exports to China in the post-Cold War period remain largely under-explored. <sup>23</sup> Although some academic articles have analyzed specific and limited areas of US restrictions on trade with China (such as the controversies over the controls on communications satellites in the late 1990s), no monograph has provided an in-depth study of the evolution of US export control policy toward the PRC in the post-Cold War era. <sup>24</sup> This study seeks to enrich and bridge these two strands in the literature through a focused comparison of the transatlantic approaches to defense-related exports to the PRC and, more broadly, to China's military build-up.

In addition, it also hopes to enrich the existing literature – which too often is almost exclusively based upon secondary sources – by relying on a large body of previously undisclosed written and oral

China Relations and its Implications for East Asia and the United States, Oxford University Press, Chapter 6; Sébastien Decreton, 2009, « La question de la levée de l'embargo sur les ventes d'armes à la Chine », Critique internationale, No. 43 (April/June); Jennifer Erickson, 2013, "Market Imperative Meets Normative Power: Human rights European arms transfer policy", European Journal of International Relations 19 (2), pp. 209-234; Mathieu Rémond, 2009, « Ventes d'armes à la Chine: la fin de l'embargo européen ? », Politique étrangère, 2008/2; May-Britt Stumbaum, 2009b, The European Union and China: Decision-making in EU foreign and security policy towards the People's Republic of China, Baden-Baden: Nomos; Frans Paul van der Putten, 2009, "The EU Arms Embargo against China: Should Europe Play a Role in East Asian Security," Clingdael Asia Studies, Occasional Paper No. 7; Pascal Vennesson, 2007, "Lifting the EU Arms Embargo on China: Symbols and Strategy," Institute of European and American Studies, Vol. 37, No. 3, pp. 417-444. See also Oliver Bräuner, Mark Bromley, Mathieu Duchâtel, 2013, "Arms Exports to China," SIPRI Policy Paper No. 42 (forthcoming).

<sup>20</sup> The US-China Economic and Security Review Commission (USCC) held a hearing on EU-China relations in 2012 in which the issue of the EU arms embargo was discussed at lenght. See *China-Europe Relationship and Transatlantic Implications*, Hearing before the US-China USCC, 112th Congress, Second Session, April 19, 2012.

<sup>&</sup>lt;sup>21</sup> See Oliver Bräuner, 2013, "Beyond the Arms Embargo: EU Transfers of Defense and Dual-Use Technologies to China," *Journal of East Asian Studies*, Vol. 13, pp. 457-482; Hugo Meijer, 2014b, "Globalisation, transferts technologiques américains et modernisation militaire de la République populaire de Chine," in Pierre Journoud (ed), *Stratégie*, *puissance et influence chinoises depuis la Guerre froide*, l'Harmattan, Collections Internnational, forthcoming; May-Britt Stumbaum, 2009a, "Risky Business? The EU, China and Dual-Use Technology", European Union Institute for Security Studies (EUISS) Occasional Paper No. 80; May-Britt Stumbaum, 2010, "How to Deal with China's Military Rise? Differing Responses of the European Union and the United States and the Case of Dual-use Technology Transfer," in Münevver Cebeci, *Issues in European Union and US Foreign Policy*, Rowman & Littlefield Publishers.

<sup>&</sup>lt;sup>22</sup> See among others, Hugo Meijer, 2014a "Balancing Conflicting Security Interests: US Defense Exports to China in the Last Decade of the Cold War," *Journal of Cold War Studies* (Fall); Robert Ross, 1995, *Negotiating Cooperation. The United States and China.* 1969-1989. Stanford: Stanford University Press; Shu Guang Zhang, 2001, *Economic Cold War: America's Embargo against China and the Sino-Soviet Alliance,* 1949-1963. Stanford: Stanford University Press.

<sup>&</sup>lt;sup>23</sup> This study partly builds upon the author's Ph.D. dissertation on US export control policy toward China from 1979 to 2009 (Hugo Meijer, 2013, *Trading with the Enemy: The Making of US Export Control Policy toward the People's Republic of China*, Ph.D. Dissertation, Sciences Po, Paris).

<sup>&</sup>lt;sup>24</sup> See Duncan Clarke, Robert Johnston, 1999 "US Dual-Use Exports to China, Chinese Behavior, and the Israel Factor: Effective Controls?," *Asian Survey* 39 (2); Joan Johnson-Freese, 2000 "Alice in Licenseland: US Satellite Export Controls since 1990," *Space Policy* 16 (3); Jing-Dong Yuan (1996) "United States Technology Transfer Policy toward China: Post-Cold War Objectives and Strategies," *International Journal* 51 (2).

primary sources, including 199 interviews conducted in Washington D.C., Paris, Beijing, and Shanghai between 2010 and 2013, as well as several dozens of diplomatic cables leaked by Wikileaks. The interviews in the US and France have focused on: the bureaus in charge of East Asian and Pacific affairs, political-military affairs and export controls, and international trade, in the Ministries of Foreign Affairs, Defense, and Commerce; the US and French national security inter-ministerial organisms (the US National Security Council staff and France's Secretariat-General for National Defense and Security) as well as a former Special Advisor for Strategic and Asian affairs to the French President of the Republic; and representatives of the defense industry. In the PRC, the interviewees have included members of Chinese research centers, university scholars, representatives of the Chinese high tech industry, as well as European officials working in China. Every interviewee has been asked whether the conversation could be recorded: those who declined have been anonymized; those who have required to give their approval prior to any direct citation have been quoted only after their explicit written approval; in case of refusal, they have been anonymized.<sup>25</sup> The Wikileaks diplomatic cables comprise documents to and from the State Department and the US embassies in Beijing, Brussels, Canberra, the Hague, Madrid, Paris, Rome, Stockholm, Tel Aviv, Vienna, the American Institute in Taiwan, and the US Mission to the European Union. Building upon a broad range of new primary sources, this paper aims at partially filling a gap in the literature by investigating this strategically sensitive yet neglected facet of transatlantic relations vis-à-vis a rising China.

#### **ORGANIZATION OF THE STUDY**

This study is organized as follows. After a description of the key features of, and differences between, the 1989 US and EU arms embargoes on China, Section I analyzes the transatlantic clashes on the EU attempts at lifting the "China arms embargo" in the 2000s. It shows how, although the EU – with France acting as a key driver – came quite close to removing the ban on arms sales to China, the conflicting diplomatic, strategic, and economic interests on the two sides of the Atlantic eventually led the EU, in 2005, to shelve (at least temporarily) this controversial issue in the transatlantic relationship.

In the 2010s, a second (though feebler) attempt at lifting the embargo renewed the transatlantic disagreements on this issue. Section II demonstrates that persistent US pressures and shifting political, strategic, and economic considerations within the European Union combined to kill any prospect of lifting the EU arms embargo on China. The intertwining of external and internal pressures marked the "death knell" of the "China arms embargo" issue.

Section III explains how, despite the vanishing of the "China arms embargo" from the transatlantic diplomatic agenda, considerable dual-use technologies exports continue to flow to China. It is argued that, notwithstanding the persistence of arms embargos against the PRC on the two sides of the Atlantic, the diffusion of advanced dual-use technology to China demonstrates that a transatlantic unified strategy of military/technological containment of China has become unviable in the post-Cold War era.

<sup>&</sup>lt;sup>25</sup> The interviews in Paris were conducted in French and have been translated in English by the author.

The *Appendix* provides an overview of the key sources of China's military modernization in the post-Cold War era, namely indigenous innovation, commercial-military integration, and foreign technology acquisition.

# ■ (I) "SNATCHING DEFEAT FROM THE JAWS OF VICTORY": THE FAILED ATTEMPT TO LIFT THE EU EMBARGO ON CHINA IN THE 2000s

Having described the origins of and differences between the American and the European arms embargoes imposed on China in 1989 (I.1), this section investigates the rise and fall of the transatlantic "China Arms Embargo" dispute in the 2000s (I.2). To do so, it examines the key diplomatic, strategic, and economic considerations that underpinned the diverging transatlantic approaches to the arms embargo on the PRC in France and in the United States. It will be shown that while the EU came very close to lifting the ban on arms sales to China in 2003/2004 (I.2.A), by 2005 the intertwining of both external and internal pressures led the European Union to shelve (at least temporarily) this controversial issue for transatlantic relations vis-à-vis China (I.2.B).

## I. 1. FROM TIANANMEN TO THE 2000s: THE ESTABLISHMENT OF THE US AND EU ARMS EMBARGO ON CHINA

Following the repression of demonstrations in Tiananmen Square on June 1989, both the United States and the European Union imposed an embargo on arms sales to the PRC. During the 1980s, the United States and China had enhanced their strategic cooperation in the context of the so-called "strategic triangle" (Washington-Moscow-Beijing). In the aftermath of the normalization of their diplomatic relations and especially after the Soviet invasion of Afghanistan in December 1979, beginning in 1980 the two countries gradually forged a strategic cooperation based upon military exchanges, intelligence sharing, and technology transfers. Throughout the last decade of the Cold War, the US consistently increased the volume and sophistication of defense and dual-use transfers to the PRC so as to affect the Sino-Soviet military balance, increase US leverage in its relationship with the USSR, and induce restraint in Moscow's foreign policy; at the same time, Washington meticulously calibrated the volume and quality of these transfers so as not to increase China's offensive capabilities vis-à-vis US friends and allies in the Asia Pacific.<sup>26</sup>

US-China military cooperation ended abruptly in the aftermath of the June 1989 crackdown by the PLA of students' demonstrations on Tiananmen Square and the subsequent imposition of US sanctions. To express US condemnation of the PRC's actions the George H. Bush administration imposed, on June 5, a first series of sanctions including the suspension of arms sales to the PRC and the postponement of all high-level military-to-military contacts. <sup>27</sup> The President's decision to suspend arms sales to China on June 5, 1989, affected several major Foreign Military Sales (FMS) programs with the PRC. <sup>28</sup> On June 5, the second set of sanctions was announced, which included

<sup>&</sup>lt;sup>26</sup> This section partly draws on Meijer, 2014a, op. cit.

<sup>&</sup>lt;sup>27</sup> Dianne Rennack, 1997, *China: US Economic Sanctions*, Congressional Research Service, CRS Report for Congress 96-272, 1 October, p. 16.

<sup>&</sup>lt;sup>28</sup> The \$27,34 million Large Caliber Ammunition Modernization Program (LCAMP); the \$60,87 million sale of four AN/TPO-27 "Firefinder" radars, support equipment, and training; the \$8,6 million sale of four Mk46-MOD 2 Torpedoes, support equipment, spares, and training; and the \$50,2 million F-8 Peace Pearl modernization program to develop, test, and produce 55 upgrade fire control system kits and deliver them to the PRC to install in its F-8 aircraft. See Hugo Meijer, 2014a, *op. cit*.

postponement of all further lending to China by international financial institutions and suspension of all official exchanges above the level of the Assistant Secretary.<sup>29</sup> Rapidly, however, pressure from Congressional members across the political spectrum mounted for imposing harsher measures. Congress passed a comprehensive sanctions amendment attached to the Foreign Relations Authorization Act for Federal Years 1990 and 1991, introduced on November 21, 1989, and signed by the President on February 16, 1990. As far as sanctions and export controls were concerned, the act required:<sup>30</sup> (a) to continue the suspension of munitions and crime control equipment exports to China, and exports of US satellites intended for launch by a Chinese launch vehicle, unless the President reports to the Congress that it is in US national security interests to terminate such a suspension; (b) to suspend licenses for export to China of goods or technology which could be used for nuclear explosive purposes until the President has certified to the Congress that China is not assisting and will not assist any non-nuclear nation in acquiring nuclear explosive devices or materials;<sup>31</sup> (c) that the President negotiate with governments participating in COCOM to suspend any liberalization and to oppose any further liberalization of controls on exports of goods and technology to China. 32 The Tiananmen sanctions, by imposing an arms embargo on the PRC, reflected the sharpest deterioration in Sino-American relations since the establishment of their diplomatic relations in 1979 and brought to an end US-China military cooperation. As Robert Suettinger puts it, the Tiananmen crackdown and the subsequent US sanctions "dealt an enormous setback to bilateral relations between the United States and China – a setback from which, in some ways, they have never recovered."<sup>33</sup> Indeed, in the aftermath of the Tiananmen crackdown and of the collapse of the Soviet Union, the foundation of Sino-American military cooperation disappeared. In light of its major military modernization effort, China increasingly came to be seen, in some sectors of the American political system, as a potential threat to the United States. As a consequence, ever since 1989, Washington has maintained a highly stringent arms embargo – enshrined in US law – on the People's Republic of China.

In contrast, the European arms embargo on China, published on June 27, 1989, is a legally non-binding political statement condemning the Tiananmen crackdown, demanding the respect for human rights by the Chinese authorities and the interruption by the member states of the EU of military cooperation with China.<sup>34</sup> Specifically, in one sentence of the Declaration of the European Council on June 27, 1989, the then twelve member states of the European Community condemned the Tiananmen repression and required the establishment of "an embargo on trade in arms with China."<sup>35</sup> Under the EU Common and Foreign Security Policy (CFSP), established by the 1992 Treaty

<sup>&</sup>lt;sup>29</sup> Harry Harding, 1992, *A Fragile Relationship. The United States and China since 1972*, Washington, DC: The Brookings Institution Press, p. 226.

<sup>&</sup>lt;sup>30</sup> The Foreign Relations Authorization Act, FY1990 and FY1991, H.R. 1487, P.L. 101-246.

<sup>&</sup>lt;sup>31</sup> This point refers to the prospects of US civilian nuclear exports to the PRC, envisaged by US-China nuclear cooperation agreement signed in 1985 (but implemented only after President Clinton signed, in 1998, the required certifications on China's nuclear nonproliferation behavior).

The Coordinating Committee for Multilateral Export Controls (COCOM) was the multilateral institution governing East-West strategic trade during the Cold War.

<sup>&</sup>lt;sup>33</sup> Robert Suettinger, 2003, *Beyond Tiananmen. The Politics of US-China Relations, 1989-2000,* Washington, DC: The Brookings Institution Press, p. 85.

<sup>&</sup>lt;sup>34</sup> Richard Grimmett, Theresa Papademetriou, 2005, *European Union's Arms Control Regime and Arms Exports to China: Background and Legal Analysis*, Congressional Research Service, CRS Report for Congress RL32785, p. 3.

<sup>&</sup>lt;sup>35</sup> Declaration of European Council, Madrid, June 27, 1989. In 1989, the European Community consisted of

of Maastricht, an arms embargo "may be applied to stop the flow of arms and military equipment to conflict areas or to regimes that are likely to use them for internal repression or aggression against a foreign country" and generally comprises "a prohibition on the sale, supply, transfer or export of arms and related material of all types, including weapons and ammunition, military vehicles and equipment, paramilitary equipment and spare parts."<sup>36</sup> However, unlike other EU embargoes (e.g. on Burma or Zimbabwe), the 1989 eight words provision of the European arms embargo on China predates the CFSP and is therefore only politically but not legally binding. The embargo has become effective by the members states introducing it into national law, thereby leading to different interpretations across Europe. This means that, rather than a EU-wide homogenous and legally binding ban, the EU arms embargo on China is a patchwork of national embargoes - which nonetheless requires an EU-wide consensus to be lifted -, with each country providing a different interpretation of what items fall within the definition of "arms" in the 1989 declaration. Of the EU "big three" countries (France, Germany and the United Kingdom), France interprets the embargo on China as covering only "lethal" military equipment and major weapons platforms, thereby allowing on a case-by-case licensing process – the export of naval and aircraft electronics and platforms, optoelectronics, transmitters, radar and other equipment for non-combat use – among others.<sup>37</sup> The UK interpretation of the embargo applies to lethal weapons that could be used for internal repression and specifically to: "lethal weapons such as machine guns, large caliber weapons, bombs, torpedoes, rockets and missiles; specially designed components of these items and ammunition; military aircraft and helicopters, vessels of war, armored fighting vehicles and other such weapons platforms; any equipment which might be used for internal repression." The ambiguity of having heterogeneous intra-EU interpretations of the arms embargo on China was forcefully stated by a report of the UK Select Committee on Foreign Affairs of the House of Commons:

"We are concerned that differences of interpretation of the EU embargo on China may well lead to misunderstandings between Member States. The Minister was unable to provide us with a comparison of different EU Member States' interpretation of the embargo."<sup>39</sup>

Given these diverging interpretations on what is covered by the European embargo on China, as described in more detail in Section IV, EU member states have approved arms export licenses to China with a total value of more than €217 million in 2010 and France authorized more than 90% of

Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

<sup>38</sup> House of Commons of the United Kingdom, 2012, *Scrutiny of Arms Exports: UK Strategic Export Controls Annual Report 2010*, Quarterly Reports for July to December 2010 and January to September 2011, the Government's Review of arms exports to the Middle East and North Africa, and control issues – Business, Innovation and Skills Committee, available at <a href="http://www.publications.parliament.uk/pa/cm201213/cmselect/cmquad/419/41919.htm">http://www.publications.parliament.uk/pa/cm201213/cmselect/cmquad/419/41919.htm</a>

European Commission, 2008, "Restrictive Measures", available at <a href="http://eeas.europa.eu/cfsp/sanctions/docs/index\_en.pdf#2.1">http://eeas.europa.eu/cfsp/sanctions/docs/index\_en.pdf#2.1</a>

<sup>&</sup>lt;sup>37</sup> May-Britt Stumbaum, 2009b, op. cit., p. 171.

Affairs, available at: <a href="http://www.publications.parliament.uk/pa/cm199900/cmselect/cmfaff/467/467fa08.htm#n47">http://www.publications.parliament.uk/pa/cm199900/cmselect/cmfaff/467/467fa08.htm#n47</a>. Similarly, in the words of Peter Hain, Minister of State at the Foreign and Commonwealth Office (1999-2001) "one of the problems is that we do not know exactly what France and Germany or any one else actually sells to China because their reports are not transparent." House of Commons of the United Kingdom, 2000, Trade and Industry 11th Report – Minutes of Evidence, Trade and Industry Select Committee, July 17.

the total value of these arms export licenses. 40 Accordingly, France is by far the biggest European supplier to China in terms of both the value and the types of exported defense equipment. It is therefore not surprising that Paris has been, throughout the post-Cold War period, the most ardent proponent of lifting the EU arms embargo. To sum up, while the United States has imposed a highly stringent embargo on arms sales to China which is enshrined in US law, the European embargo is a legally non-binding political declaration that has been interpreted and applied inconsistently across the EU and which has resulted in significant licit sales of defense equipment to China since 1989.

#### I. 2. THE RISE AND FALL OF THE "CHINA ARMS EMBARGO" ISSUE IN THE 2000S: TRANSATLANTIC DIPLOMATIC, STRATEGIC, AND ECONOMIC INTERESTS

#### I.2.A. The Growing Momentum toward Lifting the Embargo (2003-2004)

In the early 2000s, and in particular between 2003 and 2005, a major push to lift the arms embargo sparked fierce transatlantic controversies. Among the EU Member States a consensus appeared to emerge - particularly among the EU "big three" countries - on the opportunity and feasibility of lifting the embargo and of replacing it with a revised and strengthened EU Code of Conduct (CoC) on arms exports. The year 2003 had marked the beginning of what has been referred to alternately as a "honeymoon", a "love affair", or an "emerging axis" between the EU and China. 41 In September, the European Commission published the paper China: A Maturing Partnership. Shared Interests and Challenges in EU-China Relations calling for the two sides to cooperate as "strategic partners on the international scene."42 Just before the sixth annual EU-China summit in Beijing, in October 2003, the PRC's Foreign Ministry released its first white paper on relations with the European Union, China's EU Policy Paper, which urged the EU to "lift its ban on arms sales to China at an early date so as to remove barriers to greater bilateral cooperation on defense industry and technologies." <sup>43</sup> At the October Sino-European summit, the two sides launched a "comprehensive strategic partnership" which was accompanied by two key decisions: first, the agreement to allow China to participate to the Galileo Global Navigation Satellite System; and, secondly, the promise to initiate discussions on lifting the EU arms embargo against China.<sup>44</sup>

The EU members states were nonetheless divided on the issue of the arms embargo against China and, during the 2003-2005 timeframe, as shown below, some member states (including the UK

<sup>&</sup>lt;sup>40</sup> Bart van Hezewijk, 2012, "Licensed Exports to China: A Not So Level Playing Field," World Export Controls Review, November (based upon the annual COARM reports). It is worth noting that French figures include exports to Hong Kong.

<sup>&</sup>lt;sup>41</sup> David Murphy, Shada Islam, 2004, "China's Love Affair with Europe," *The Far Eastern Economic Review*, No. 12 February 2004, pp. 26-29; David Shambaugh 2004, "China and Europe: The Emerging Axis," Current History (september).

<sup>&</sup>lt;sup>42</sup> The European Commission published the paper *China: A Maturing Partnership. Shared Interests and* Challenges in EU-China Relations Brussels, COM (2003) 533 Final, September 10.

<sup>43</sup> http://www.fmprc.gov.cn/eng/topics/ceupp/t27708.htm

<sup>&</sup>lt;sup>44</sup> Nicola Casarini, 2011, "The Rise and Fall of EU-China Relations in Space and Defense Technology," in Frans Paul Van Der Putten, Chu Shulong, China, Europe, and International Security: Interests, Roles and Prospects, Routledge, pp. 63-80.

and Germany) changed their minds. American diplomatic cables leaked by Wikileaks report that Denmark was "leading the opposition" to the lifting of the embargo. 45 For Copenhagen – as well as for Sweden and Finland –, "any decision to lift the embargo must be linked to specific Chinese steps on human rights; EU also needs to review Code of Conduct [on arms exports] to ensure that lifting the embargo does not result in increased arms sales to China."46 On the other side of the spectrum, France was seen as leading the charge against the arms ban: "France staked out a 'zero flexibility' position on lifting the embargo, and is opposed to any talk of applying conditionality (i.e. by insisting on further human rights progress by China and/or strengthening the Code of Conduct prior to lifting the embargo). [...] Other EU Member States are lining up somewhere in between [the French and Danish positions], although 'all agree in principle' that the embargo should be lifted if certain conditions are met. The debate [...] will focus on defining conditions and timing."<sup>47</sup> Germany, at least initially (2003-2004), was siding with France in its desire to lift the embargo. As Taiwanese Vice Foreign Minister Michael Kau told US representatives in the American Institute in Taiwan, "French President Jacques Chirac and German Chancellor Gerhard Schröder [are] personally leading the efforts to lift the embargo."<sup>48</sup> Washington was also concerned by the position of the UK government, initially perceived as leaning toward the "pro-lift" camp. As phrased in a diplomatic cable from the US Embassy in Brussels to the State Department, the "UK is fundamentally closer to the French end of the spectrum than the Danish [...]. The UK [is] sitting on the fence."<sup>49</sup> Another cable confirms that the US government was not "comfortable with where the UK is on lifting the arms embargo. [...] The UK is sending ambiguous signals that suggest a preference for hiding behind the EU flag. Asked [...] about the UK's position on lifting the embargo, [the UK government] responded that it was an EU-led issue and the UK wanted EU consensus."50 According to Lincoln Bloomfield, then US Assistant Secretary of State for Political-Military Affairs (2000-2005):

"The Tony Blair government was perceived as wanting to play a role as the bridge between Washington and Europe, and to distinguish itself – that it had the best access to the US leadership and also understood Europe, and protend EU concerns to Washington better than any other EU government. [...] The British view seemed to be wanting to play the role of the country with a foot in both continents, a good bridge between the Americans and the Europeans. [...] This was an issue that [the UK] thought would resolve along the lines that the French desired, and that the Brits could be the ones to accomplish this." <sup>51</sup>

At the same time, Javier Solana, then EU High Representative for Foreign and Security Policy, and his Personal Representative for Weapons of Mass Destruction (WMD) Non-Proliferation, Annalisa Giannella, were strongly supportive of lifting the embargo. In the words of a US State Department official then involved in these debates, "apart a handful of governments — France, Britain and

<sup>&</sup>lt;sup>45</sup> US Embassy in Belgium, 2004, "China Arms Embargo: April 2 PSC Debate and Next Steps for US," Cable from the US Embassy in Brussels, Secret, April 7, Wikileaks Cablegate.

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> Ibid

<sup>&</sup>lt;sup>48</sup> American Institute in Taiwan, 2004, "Taiwan Pessimistic About EU Embargo," Cable from the American Institute in Taiwan, Confidential, November 23, Wikileaks Cablegate.

<sup>&</sup>lt;sup>50</sup> US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo," Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.

<sup>&</sup>lt;sup>51</sup> Lincoln Bloomfield, interview, Washington D.C., March 26, 2012.

Germany – it was the Brussels eurocracy that was pushing this."<sup>52</sup> In a leaked diplomatic cable, American officials in the US Embassy in Brussels unambiguously confirm: "in our view, Solana is part of the problem. He jumped on board the pro-lift train early, and his views have been important in influencing smaller member states."<sup>53</sup> As a consequence of these converging pressures, the growing momentum within the EU favored the lifting of the embargo in 2003-2004. At the December 2004 European Council, the EU member states jointly "reaffirmed the political will to continue to work towards lifting the arms embargo" while also underlying "that the result of any decision should not be an increase of arms exports from EU Member States to China, neither in quantitative nor qualitative terms."<sup>54</sup> It also "invited the next Presidency to finalize the well-advanced work in order to allow for a decision" on the lifting of the embargo by 2005.<sup>55</sup>

On the other side of the Atlantic, Washington fiercely opposed this European initiative and worked assiduously to counter the growing momentum toward the lifting of the embargo. The US President, cabinet-level officials, and numerous members of Congress issued strong statements condemning the attempts at lifting the embargo. Secretary of State Susan Rice, for instance, declared that "the European Union should do nothing to contribute to a circumstance in which Chinese military modernization draws on European technology or even the political decision to suggest that it could draw on European technology when, in fact, it is the United States – not Europe – that has defended the Pacific." As made clear by a 2004 leaked diplomatic cable, the US government developed a multifaceted strategy to "keep the pressure on European governments" which included, besides bilateral government-to-government pressures, the following five steps:

- 1. "Coordinate closely" with US allies in the Asia Pacific most notably Japan (and to a lesser extent South Korea) "so that Europeans recognize that other key players in the region share our regional stability concerns";
- 2. "Engage the European Parliament [EP], and particularly members of its Human Rights Committee. [...] The EP could increase the political heat on member state governments against any decision to lift the embargo";
- 3. "Increasing our public statements and press briefings for European audiences, on the assumption that more scrutiny by European publics would help our views on this issue, especially as regards human rights";
- 4. Increase US engagement with institutional and member state representatives in Brussels (and in particular in the working groups on human rights, Asia, and arms exports (respectively COHUM, COASI, and COARM): "in this way we could ensure that our views on human rights, regional stability and the Code of Conduct are fully understood by those experts who will be supplying recommendations to the political groups for discussion";

<sup>&</sup>lt;sup>52</sup> Former US Department of State official, interview, Washington D.C., September 11, 2013.

<sup>&</sup>lt;sup>53</sup> US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo," Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.

<sup>&</sup>lt;sup>54</sup> Council of the European Union, 2004, Presidency Conclusions of the Brussels European Council, December 16-17, 2004.

<sup>55</sup> Ibid.

<sup>&</sup>lt;sup>56</sup> See for instance Elisabeth Bumiller, 2005, "Bush Says Europe Should Not Lift Its China Arms Embargo," *The New York Times*, February 23.

<sup>&</sup>lt;sup>57</sup> Glenn Kessler, 2005, "Rice Warns Europe Not to Sell Advanced Weaponry to China: Military Balance At Risk, Allies Told," *Washington Post*, March 21.

5. "Additionally, [Washington should] begin considering options for how the EU might strengthen controls on arms exports to China in a post-embargo scenario. The worst case for us would be for the EU to lift its embargo without having in place some sort of new mechanism for controlling the transfer of arms and sensitive technologies to China."58

What factors explain these diverging perspectives on the two sides of the Atlantic and the growing momentum in the EU toward the lifting of the arms embargo on China? In order to address these questions, it is necessary to investigate the underlying political, military, and economic interests at stake in the US and the European Union (and most notably France) in the export of defense technology to the PRC during the 2000s.

#### The French Perspective

During the 2000s, France took the lead in pushing and advocating for the lifting of the European arms embargo against China on the basis of the following considerations.

#### (a) Normalizing Diplomatic Relations with a Rising Power

Firstly, according to French officials involved in the debates over the "China embargo" in the 2003-2005 timeframe, from a political standpoint France aimed at being the "partner of reference" (partenaire de référence) in Europe for China.<sup>59</sup> As one official puts it, "the objective of lifting the embargo was political, it was not to increase arms sales to China. The aim was to 'credibilize' China as a P5 member."60 Specifically, as shown in leaked American diplomatic cables describing meetings between US and French government officials, the latter argued that China, "as an important player in a multipolar world", "should be treated as a responsible partner and not lumped in the same league as Zimbabwe and other countries on the embargo list."61 In the words of a French Ministry of Defense official, with the embargo in place "China [was] being put in the same category of North Korea, Soudan, and Zimbabwe; [this is] an humiliation for a member of the UN Security Council. [...] And then the key question is: can we afford in the next ten-to-twenty years not to sell anything [in terms of defense exports] to the second world power?"62 Maintaining an arms embargo on a rising power such as China was therefore perceived as being both discriminatory and politically counterproductive for the Franco-Chinese bilateral relationship. The French Prime Minister Jean-Pierre Raffarin, during a press event with Chinese Premier Wen Jiabao, called the embargo "anachronistic, wrongfully discriminatory, and in complete contradiction of the current state of the strategic partnership between Europe and China."63 As for human rights concerns, in the words of a Ministry of Defense official, "human rights were certainly the 'original sin' [that led to the establishment of the 1989 embargo], but one cannot base diplomacy exclusively upon this [human

<sup>60</sup> Former French Ministry of Foreign Affairs official, interview, Paris, September 24, 2013.

<sup>&</sup>lt;sup>58</sup> US Embassy in Belgium, 2004, "China Arms Embargo: April 2 PSC Debate and Next Steps for US," Cable from the US Embassy in Brussels, Secret, April 7, Wikileaks Cablegate.

<sup>&</sup>lt;sup>59</sup> French Ministry of Defense official, interview, Paris, July 16, 2013.

<sup>&</sup>lt;sup>61</sup>US Embassy in France, 2005, "MOD Advisor Upbeat on Bilateral Relationship; Sees Rapprochement on Middle East; No Change on EU China Arms Embargo," Cable from the US Embassy in Paris, Confidential, March 18, Wikileaks Cablegate.

<sup>&</sup>lt;sup>62</sup> French Ministry of Defense official, interview, Paris, July 29, 2013.

<sup>&</sup>lt;sup>63</sup> Quoted in Chris Buckley, 2005, "French Leader Signs Chinese Trade Deals and Criticizes Arms Ban," The New York Times, April 22.

rights], as this would risk adversely affecting [Franco-Chinese relations] by creating a political burden on the development of the bilateral relationship." <sup>64</sup> Accordingly, from the French government perspective, lifting the EU arms embargo was a deliverable to be provided to Beijing – as a "symbolic gesture" - in the context of the strategic partnership that France sought to develop with a rising China.65

(b) The Effectiveness of EU Export Controls and Defense Sales to the PRC: No Impact on China's Military Modernization and on Regional Stability

Secondly, from a strategic perspective, in the view of the French government lifting the arms embargo would not result in increased defense exports to the PRC and, accordingly, would have no impact on China's military modernization nor on regional stability in East Asia. In the early 2000s, France argued that even if the embargo were to be lifted, the 1998 EU Code of Conduct on arms exports and the existing export controls systems would prevent increased defense exports to China. 66 In the words of a French Ministry of Defense official, "if we removed the embargo this would not mean that we would sell anything and everything to China. I would argue that the contrary is true, every country would be even more careful in deciding what to export. The lift of the embargo would not change anything in terms of arms sales to China." French President Jacques Chirac went further explaining to a US senator that:

"While France supported the lifting of the EU arms embargo on China, there was no question of France selling high-tech systems to China which could heighten tensions in the Taiwan straits. Lifting the embargo, he claimed, would have no effect on exports – it was not a commercial decision - but was a purely political signal to end the useless humiliation of China which was unjustified and dangerous. [...] Chirac [added] that US exports to Taiwan were dangerous as they sent the signal to Taiwan that it could do anything, believing they would have the support of the US. Taiwan, he said, should not be encouraged in this manner. To do so showed a poor understanding of China and risked a dramatic Chinese military reaction. Asserting that the US was 'playing with fire,' Chirac offered that there should be an embargo on arms sales to Taiwan."68

Indeed, French government officials argued that the existing 1998 Code of Conduct on Conventional Arms Exports (CoC) would guarantee the case-by-case implementation of export control regulations and thereby avoid a post-embargo increase in defense sales to China. Leaked diplomatic cables show French officials repeatedly stressing to the US government that "even after the EU arms embargo is lifted, France would continue to deny the export of sensitive technologies that could have an adverse impact on Japan, US forces in the region or the situation in the Taiwan straits."<sup>69</sup> The 1998 EU Code of Conduct, adopted in 1998 under the Common Foreign and Security Policy, is a document that contains minimum norms for arms exports that EU member states must apply in their export control licensing procedures. The 1998 Code of Conduct on arms exports was a European Council declaration

<sup>&</sup>lt;sup>64</sup> French Ministry of Defense official, interview, Paris, 16 July, 2013.

<sup>&</sup>lt;sup>66</sup> Interviews with officials in the French Ministry of Defense (Paris, December 12, 2013; July 23, 2013; July 29, 2013) and with a former official from the Ministry of Foreign Affairs (Paris, September 24, 2013).

<sup>&</sup>lt;sup>67</sup> French Ministry of Defense official, interview, Paris, July 29, 2013.

<sup>&</sup>lt;sup>68</sup> US Embassy in France, 2005, "Codel Smith Meets Chirac, French Officials," Cable from the US Embassy in Paris, Confidential, January 31, Wikileaks Cablegate.

<sup>&</sup>lt;sup>69</sup> US Embassy in France, 2005, "EU China Arms Embargo: Expanding on French Defense Minister's Financial Times Comments," Cable from the US Embassy in Paris, Confidential, February 18, Wikileaks Cablegate.

containing political commitments but - before its replacement by EU Council Common Position 2008/944/CFSP – it was not legally binding.<sup>70</sup> Under the 1998 Code of Conduct, EU member states accepted to establish "high common standards which should be regarded as the minimum for the management of, and restraint in, conventional arms transfers" and "to reinforce cooperation and to promote convergence in the field of conventional arms exports" within the framework of the CFSP. 71 It contained eight criteria according to which EU member states should assess license applications for the export of military goods. These criteria included, among others, the political commitment of EU member states not to sell military equipment to countries if doing so would, among other things, threaten regional stability, contribute to internal repression, or threaten the interests and security of European allies.<sup>72</sup> As explained in more detail below, the US government was nonetheless highly skeptical of the effectiveness of EU export controls once the arms embargo against China would be lifted. Washington was therefore concerned about the consequent impact of increased postembargo defense technology flows to China on the military capabilities of the People's Liberation Army. Accordingly, in 2004, in order to assuage these concerns and circumvent American pressures, some EU member states - led by France - proposed the establishment of a linkage between the strengthening of the EU Code of Conduct and the lifting the arms embargo on China. As explained by a French official:

"The objective of the French government was to lift the embargo. But we faced the resistance of the United States. So what could we do? What were the ways out? The embargo was humiliating [for China], useless, and obsolete. We therefore made a deal: in exchange for the lift of the embargo we would reinforce the Code of Conduct in two ways. First, by making it legally binding. Secondly, by working on the so-called 'Toolbox' – without explicitly saying that it was 'China-focused' – so that in case the embargo was lifted there would be a five-years thorough scrutiny on sales to post-embargo countries. [...] The strengthened Code of Conduct and the Toolbox were the 'price to be paid' for obtaining the lifting of the embargo."<sup>73</sup>

Within the European Union, member states disagreed on the desirability of establishing a linkage between strengthening the CoC and lifting the arms embargo. As shown by US diplomatic cables, there was "a policy split in the EU between those who want to link the strengthening of the Code of Conduct to a lift of the China Arms Embargo, and those who do not accept such a linkage. [...] France was leading those who supported a link [while others wanted to] strengthen the Code of Conduct and make it legally binding, without lifting the arms embargo."<sup>74</sup> The Austrian government told US officials that "not many members are openly supporting France but [...] France had the weight to block a decision if there were no agreement to lift the embargo."<sup>75</sup> This is why, at the previously mentioned December 2004 European Council in which the EU member states jointly affirmed their

<sup>&</sup>lt;sup>70</sup> For details on the impact of the 1998 CoC on European arms exports, see Mark Bromley, Michael Brzoska, 2008, "Towards a Common, Restrictive EU Arms Export Policy? The Impact of the EU Code of Conduct on Major Conventional Arms Exports," *European Foreign Affairs Review*, Vol. 13, pp. 333–356.

<sup>&</sup>lt;sup>71</sup> Council of the European Union, 'European Union Code of Conduct on Arms Exports', Document 8675/2/98 Rev 2, Brussels, June 5, 1998.

<sup>&</sup>lt;sup>72</sup> It is worth noting that, under the CoC, the final decision on whether or not to export remained at the discretion of the member state to which an application for arms export had been made.

<sup>&</sup>lt;sup>73</sup> French Ministry of Defense official, interview, Paris, July 16, 2013.

<sup>&</sup>lt;sup>74</sup> US Embassy in Austria, 2006, "Austria on the December 11-12 EU Foreign Ministers Meeting (GAERC) and the China Arms Embargo," Cable from the US Embassy in Vienna, Confidential, December 6, Wikileaks Cablegate.
<sup>75</sup> *Ibid*.

political will to work towards lifting the arms embargo, the Council also officially "stressed the importance in this context of the early adoption of the revised Code of Conduct and the new instrument on measures pertaining to arms exports to post-embargo countries ('Toolbox')."<sup>76</sup> The leaked 2005 draft of the "Toolbox", which was intended for inclusion in the EU Code of Conduct, contained seven provisions meant to commit EU governments to a program of enhanced information sharing, consultation, and transparency with regard to arms sales to countries emerging from EU embargo status.<sup>77</sup> Following the lifting of embargoes, there would be information exchanges about defense exports to former embargoed countries for five years as well as quarterly exchanges of details about licensed exports to those recipient countries (including the quantity and type of military equipment, the end-use, and the end-user). As detailed below, the US nonetheless continued to be skeptical about the effectiveness of this strengthened Code of Conduct and of the "Toolbox", considering that they would not inhibit post-embargo defense sales to China. On the other hand, French and European officials, as reported in a US diplomatic cable, "consistently argued that the US simply did not understand either their intent with lifting the embargo or the effectiveness of the regime they intended to adopt in its place (the strengthened Code of Conduct on arms exports and the 'Toolbox' of additional controls)." The revision and strengthening the EU Code of Conduct on arms exports was therefore held hostage (until 2007) to the intra-European debate and the transatlantic controversies over whether to lift the arms embargo against China. 80 By defending the effectiveness of the existing export control system, let alone of a strengthened Code of Conduct/Toolbox, and by arguing that the lift would consequently not translate into enhanced defense trade with China, France – together with the other countries seeking to lift the embargo – was also denying to have commercial interests at stake. Lifting the arms embargo was not a commercially driven decision; it was (allegedly) a purely political and diplomatic decision.

### (c) A Counterproductive Embargo: Encouraging the Development of Chinese Indigenous Defense Industrial Capabilities

Thirdly, in the view of French authorities, the arms embargo on China was actually counterproductive in that it had encouraged the PRC to develop its own indigenous defense industrial capabilities. In the words of a French official, since the establishment of the 1989 American and European embargoes

"China has understood that it would or could not acquire western weapons systems and has therefore decided to develop its own defense industrial capabilities. As soon as you declare an embargo, the [target] country will not wait; it will develop its own autonomous defense industry. Therefore today China will not seek to buy major weapons systems abroad; it has decided that it needs to develop its own indigenous

<sup>77</sup> US Embassy in Belgium, 2005, "EU/China Arms: Text of Draft EU 'Toolbox' for Post-Embargo Countries," Cable from the US Embassy in Brussels, Secret, January 21, Wikileaks Cablegate.

 $<sup>^{76}</sup>$  Council of the European Union, 2004, Presidency Conclusions of the Brussels European Council, December 16-17, 2004.

On this point, see Sara Depauw, 2010, *The Common Position on Arms Exports in the Light of the Emerging European Defence Market*, Flemish Peace Institute, Background Note, January 18, p. 5; and Mark Bromley, 2012, "The Review of the EU Common Position on Arms Exports: Prospects for Strenghtened Controls," EU Non-Proliferation Consortium, Non-Proliferation Papers No. 7, p. 4.

<sup>&</sup>lt;sup>79</sup> US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo," Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.

<sup>&</sup>lt;sup>80</sup> As explained in more detail below, in 2007 France accepted to drop the linkage between strenghtening the CoC and lifting of the arms embargo.

defense capabilities. And China has the money, the Ph.D students, and it has the resolve to do so. [...] Of course, China is currently unable to indigenously produce every weapon system; it has sought to develop niches. But the result of the embargo is clear: we have forced the Chinese into becoming militarily autonomous."<sup>81</sup>

Similarly, Defense Minister Michèle Alliot-Marie publicly declared in 2005: "China is rapidly developing its industry, and today our experts say that in five years China could make exactly the same arms that we have today. And they will do it if they cannot import. So maybe if we can sell them the arms, they will not make them. And in five years' time, they will not have the technology to make them [...]. The lifting of the embargo could be a better protection for us than maintaining it." The underlying rationale is elucidated by American diplomatic cables. They show that, in meetings with their US counterparts, French officials argued that it might be "more useful for the west to sell limited defense products" not on the EU's or France's list of proscribed technologies or weapons "in an effort to limit Chinese efforts to acquire such products/technologies elsewhere or to manufacture what they could. The concept behind the idea is that through such sales we will be able to maintain a measure of control over Chinese acquisitions through licensing and export regulations." A Ministry of Defense official further elaborates on this point:

"If you stop exporting to one country you will not be informed of anything. We have an interest in continued sales [...] in that it allows us to know what is going on in China. If you sell, if our defense industry meets with the Chinese defense industry, you know who wants what for what purposes [in China]. If we cooperated with the Chinese [in defense exports], we would take a risk but one advantage would be to be informed [on their requirements and capabilities]. It would be suicidal to say 'we sell nothing to China'."

Relatedly, French officials consistently reiterated their position that, if the embargo was lifted, China would not "buy major systems from the West but would likely continue to turn to the Russians." French authorities therefore argued that the existing arms embargo on China was counterproductive as it spurred China to develop its indigenous defense and technological industrial base; in contrast, lifting the embargo would provide Europeans with some visibility into and leverage on Chinese defense requirements and foreign technology acquisitions.

To sum up, during the 2003-2005 debates, the French government considered that lifting the arms embargo would end a politically discriminatory measure and an obstacle to the development of Franco-Chinese diplomatically relations; it would have no impact on the flow of defense sales to the PRC, on China's military modernization nor on East Asian regional stability; it would remove a militarily counterproductive ban that had encouraged the development of Chinese indigenous capabilities and that also had hindered the ability to gather intelligence on Chinese requirements. According to French authorities, lifting the EU arms embargo was not a commercially driven decision;

<sup>82</sup> Peter Spiegel, John Thornhill in Paris, 2005, "France Urges End to China Arms Embargo," *Financial Times*, February 15.

<sup>&</sup>lt;sup>81</sup> French Ministry of Defense official, interview, Paris, July 29, 2013.

<sup>&</sup>lt;sup>83</sup> US Embassy in France, 2005, "MOD Advisor Upbeat on Bilateral Relationship; Sees Rapprochement on Middle East; No Change on EU China Arms Embargo," Cable from the US Embassy in Paris, Confidential, March 18, Wikileaks Cablegate

<sup>&</sup>lt;sup>84</sup> French Ministry of Defense official, interview, Paris, July 29, 2013.

<sup>&</sup>lt;sup>85</sup> US Embassy in France, 2005, "EU China Arms Embargo: Expanding on French Defense Minister's Financial Times Comments," Cable from the US Embassy in Paris, Confidential, February 18, Wikileaks Cablegate.

it was a purely political and diplomatic decision that would have no significant strategic implications on China's military modernization or on regional stability in the Asia Pacific.

#### The American Perspective

On the other side of the Atlantic, the US government forcefully opposed the attempts at lifting the EU arms embargo on China. Based on a different threat assessment of China's military modernization, the Americans vehemently disagreed with their transatlantic counterparts on the political, military, and economic interests at stake in the sale of defense systems to the PRC.

#### (a) American Threat Assessment and Europe's Commercial Interests

The US perspective on China's military build-up and on the issue of defense sales to China was shaped by a profoundly different threat assessment than in the EU. A number of interviews with US government officials deserve being quoted at length as they bring to light in sharp contrast the diverging threat assessments on the two sides of the Atlantic, as well as Washington's perspective on the EU rationale for lifting the embargo. On the one hand, as explained by Stephen Rademaker, then Assistant Secretary of State for International Security and Nonproliferation (2002-2006):

"As we looked into the new century, it seemed like the grand strategic, military challenge to the United States would come from China, and so for all the same reasons during the Cold War we coordinated multilateral export controls to minimize the threat posed by the Soviet Union and its allies, in the 21<sup>st</sup> century it would be important to restrict the transfer to China of equipment and technologies that would enable it to more effectively threaten US national security interests and particularly in the event of a military conflict, which was not inconceivable."

#### On the other hand, as he puts it:

"The belief [in Washington] was that some European countries were seeking commercial advantages in their relations with China; and let's be clear, commercial advantages over the United States. In terms of national security, there were different threat perceptions between the US and Europe. No EU country is worried about entering into military conflict with China. There is no EU country that has security commitments to South Korea, Japan, or Taiwan. For Europe, China is a lucrative and remote market. [...] Pentagon planners plan for China contingencies; there is no general staff in Europe that spends time in thinking what are we going to do if we find ourselves shooting at the Chinese or the Chinese shooting at us; they do not have security commitments in that part of the world."<sup>87</sup>

The Assistant Secretary of State for Political-Military Affairs (2000-2005) Lincoln Bloomfield specifies that:

"The US government took a different view from the government of France which was very keen on lifting the embargo before China hosted the Olympics as a gesture, and the US understood that. [...] The perception was that the French government had very significant commercial benefits it was seeking from China if it could deliver the removal

<sup>&</sup>lt;sup>86</sup> Stephen Rademaker, interview, July 31, Washington D.C., 2013.

<sup>&</sup>lt;sup>87</sup> Ibid.

of the arms embargo prior to the Olympics [...]. We also understood that several EU governments were more interested in advancing commercial ties with China that might result from lifting the embargo. [...] The US was not against commercial ties between the EU and China but felt that allowing China to have access to military technology was risky and, beyond that, the political conditions which gave rise to suppressing the protests in Tiananmen Square had not changed. [...] The other consideration was that the US has substantial responsibilities as it has five treaty allies in the Asia Pacific (Japan, South Korea, Philippines, Thailand, and Australia) and has significant forces stationed in the Pacific Rim. Therefore, a more advanced Chinese military capability might impact US military far more than any military organization in Europe. [...] And we knew that China was acquiring long-range relay systems so that they could command forces far from their shores, anti-ship missiles, blue water navy and there were many new areas of concern, such as new generations of fighter aircraft. [Washington was] concerned about China's anti-access/area-denial capabilities [that might] at some point prevent freedom of navigation on what has been always been treated as international waters. These are all legitimate concerns for the US, which plays such a strong role in maintaining freedom of navigation in the Pacific. [Accordingly,] from the US side there was a deep and abiding concern not to raise the level of lethality of the Chinese military in any possible scenario where their forces may be aligned against us; the US is not looking for war, but under American law the US has also obligations under the Taiwan Relations Act. [In contrast,] I don't know that the European military had a particularly strong sense of danger from the Chinese military because they were not exposed, they were thousands of miles away unlike the US military [...]. So there was a certain unrealism and lack of national security policy embedded inside the European model which did not vote very well for the possibility of a convergence [on the issue of the EU arms embargo on China]."88

As another State Department official sardonically puts it, "if there is a European threat perception of China, I am not aware of it." <sup>89</sup> Accordingly, while Washington acknowledged the political considerations underlying the attempts at lifting the EU embargo (e.g. normalizing diplomatic relations with China), it had a profoundly different threat perception of China's military modernization and of the likely consequence of removing the ban on arms sales to the PRC. As the world's preeminent military power, the United States considered that its national security interests as well as those of its allies and partners across the Asia Pacific – and, more broadly, East Asian regional stability – were potentially threatened by China's military build-up and its growing ability to contest US preeminence across the global commons (i.e. the high seas, air, space and cyberspace) through anti-access/area-denial capabilities. <sup>90</sup> Washington therefore vehemently opposed the lifting of Europe's arms embargo on China, fearing that this would steadily increase the flow of advanced European defense technology to the People's Republic of China, thereby affecting its security interests in the region as well as those of its East Asian allies and partners.

<sup>&</sup>lt;sup>88</sup> Lincoln Bloomfield, interview, Washington D.C., March 12, 2012.

 $<sup>^{89}</sup>$  US Department of State official, interview, Washington D.C., September 11, 2013.

<sup>&</sup>lt;sup>90</sup> See among others Abraham Denmark, James Mulvenon (eds), 2010, *Contested Commons: The Future of American Power in a Multipolar World*, Washington D.C.: Center for a New American Security; Jan van Tol, Mark Gunzinger, Andrew Krepinevich, Jim Thomas, 2010, *Airsea Battle: A Point of Departure Operational Concept*, Washington, DC: Center for Strategic and Budgetary Assessment.

(b) The (In)Effectiveness of European Controls on Defense Sales: Bolstering China's Military Modernization and East Asian Regional Instability

In light of its different threat assessment and understanding of the underlying commercial motives behind the attempts at lifting the EU embargo, Washington was highly distrustful of the assertion that lifting the arms embargo would not result in increased defense exports to China. In the words of senior State Department officials, "there was skepticism about the assertion that lifting the embargo would have no actual impact, [...] we did not agree with the notion that [lifting the embargo] would not increase the likelihood that there would be more defense sales to China;" "the US export control community did not regard the [EU Code of Conduct] as having a level of reliability that would prevent arms transfers of a sensitive nature, instead it was more of a disclosure process where Europeans would tell other governments what it had already exported; and the EU Code of Conduct did not impress American regulators as having any credible preventive capability." <sup>92</sup> Leaked diplomatic cables provide specific and detailed insights on the origin of Washington's skepticism:

"The Code of Conduct, while generally positive, is no substitute for the China arms embargo. [...] Significantly, the CoC only applies when a EU member state denies an export or brokering application, and then only if the denial was based on CoC criteria. There is no obligation for EU member states to report when they grant export licenses. (COMMENT [by the US official]: This means there is no easy way to evaluate the impact the CoC has had on arms transfers since 1998. Evidence of how seriously member states take the CoC must be gleaned inferentially through national export reports. [...] We are unsure of the extent to which CoC-based peer pressure plays a role in national export decisions. As a 'gentlemen's agreement,' the CoC relies on the like-mindedness and good intentions of national governments, not on fear of punitive action at the EU level. [...] The CoC is a marginally positive tool for managing EU arms exports, but it is no substitute for the EU arms embargo on China. Both are relatively weak political instruments (the embargo itself is contained in only eight words from a 1989 EU Summit declaration that calls for 'an embargo on trade in arms with China'). EU Member States have sold considerable amounts of military equipment to China even under the embargo (as the 2003 COARM Report shows), but after a certain point, such sales would entail certain political costs to the selling nation. The same is not true of the CoC. Under the CoC, Member States would have much more room for maneuver in deciding whether or not China satisfies the agreed export criteria. And if the embargo is lifted, Member States will even be able to point to that event - the end of the embargo - as partial evidence for determining that China is an acceptable purchaser under the CoC."93

In addition, the previously described "Toolbox", which was supposed to strengthen the CoC by establishing a five-years scrutiny and increased transparency on sales to post-embargo countries, was equally seen as ineffective by Washington because it did "not ask EU governments to consult

<sup>&</sup>lt;sup>91</sup> Stephen Rademaker, Assistant Secretary of State for International Security and Nonproliferation (2002-2006), interview, Washington D.C., July 31, 2013.

<sup>&</sup>lt;sup>92</sup> Lincoln Bloomfield, Assistant Secretary of State for Political-Military Affairs (2000-2005), interview, Washington D.C., March 12, 2012.

<sup>&</sup>lt;sup>93</sup> US Embassy in Belgium, 2004, "EU Code of Conduct on Arms Exports: Questions and Answers," Cable from the US Embassy in Brussels, Confidential, April 14, Wikileaks Cablegate.

prior to issuing arms export licenses, and it does not give any state veto authority over any other."<sup>94</sup> The US government therefore saw the Code of Conduct and the Toolbox as weak substitutes for an already weak embargo. Furthermore, lifting the embargo would remove the political pressure on (or cover for) countries wanting to deny an arms export to the PRC. Thirdly, as explained by a CRS report, post-embargo competition from European defense companies would enhance China's negotiating leverage to obtain favorable deals for platforms and technology transfers among European, Russian or Israeli bidders.<sup>95</sup> Russian President Vladimir Putin acknowledged this concern on the likely consequences of lifting the EU embargo: "we sell a lot of arms to China. The less competitors on the Chinese market, the better."<sup>96</sup> Based upon this overall skeptical assessment of European export controls, the US believed that "EU assurances that lifting the ban would have no material consequence were hard to believe [...] because market pressures and lobbying by Beijing would make it very hard for member state regulators to deny sales to China without the political cover of an arms embargo. [...] Even a strengthened Code could be no substitute for the embargo. European governments should not deceive themselves into thinking they can convince the US that it would be okay to lift the embargo."<sup>97</sup>

Interviews and leaked diplomatic cables bring to light the fact that beginning in late 2004 State Department officials were dispatched together with senior military officers from the Joint Chiefs of Staff to brief European officials in various member states and in EU institutions on the direct material implications of lifting the EU embargo for China's military build-up, despite European assertion to the contrary. In these briefings, the American officials "relayed an impressive amount of detail about China's military modernization program, and at the same time demonstrated how it was oriented toward acquiring the ability to defeat Taiwan, and the US forces protecting Taiwan, in a cross-straits conflict. [They showed how] China was seeking (through industrial espionage and military-commercial partnerships) advanced weapons and dual-use technologies from the West to support this modernization." These briefings were meant to demonstrate, among other things, how lifting the embargo would result in growing defense trade flows to China and thereby have "the potential"

<sup>&</sup>lt;sup>94</sup> US Embassy in Belgium, 2005, "EU/China Arms: Text of Draft EU 'Toolbox' for Post-Embargo Countries," Cable from the US Embassy in Brussels, Secret, January 21, Wikileaks Cablegate.

<sup>&</sup>lt;sup>95</sup> Kristin Archick, Richard Grimmett, Shirley Kan, 2005, *op. cit.*, p. 17.

<sup>96</sup> Ibid.

<sup>&</sup>lt;sup>97</sup> US Embassy in Belgium, 2004, "EU/China Arms: DAS Suchan Visit Launches Public Debate," Cable from the US Embassy in Brussels, Confidential, October 13, Wikileaks Cablegate.

<sup>&</sup>lt;sup>98</sup> Interviews with US State Department officials, Washington D.C., October 22, 2010, and April 17, 2012; and interview with a French Ministry of Defense official, Paris, September 10, 2013. See also the following diplomatic cables: US Embassy in Belgium, 2004, "EU/China Arms Embargo: Briefing the PSC on China's Military Modernization," Cable from the US Embassy in Brussels, Secret/Noforn, July 28, Wikileaks Cablegate; US Embassy in Belgium, 2004, "EU/China Embargo: DAS Suchan Visit Launches Public Debate," Cable from the US Embassy in Brussels, Confidential, October 13, Wikileaks Cablegate; US Embassy in Italy, 2004, "Approach To Italian Government On China Arms Embargo: Daylight Between MFA And Prime Ministry Positions," Cable from the US Embassy in Rome, Confidential, October 13, Wikileaks Cablegate; US Embassy in Italy, 2004, "EU GAERC – Italy Confirms Ministers Will Endorse Decision To Lift Libya Arms Embargo; Will Discuss US Concerns Over China Arms Embargo," Cable from the US Embassy in Rome, Confidential, October 8, Wikileaks Cablegate; US Embassy in the Netherlands, 2004, "EU China Arms Embargo: VADM Metzger/DAS Suchan Meeting With GONL," Cable from the US Embassy in the Hague, Confidential, September 27, Wikileaks Cablegate.

<sup>&</sup>lt;sup>99</sup> US Embassy in Belgium, 2004, "EU/China Arms Embargo: Briefing the PSC on China's Military Modernization," Cable from the US Embassy in Brussels, Secret/Noforn, July 28, Wikileaks Cablegate.

for creating a strategic imbalance in the China Sea/Taiwan Straits."<sup>100</sup> Furthermore, besides US alarm "about transfers of seemingly non-lethal systems [...] which could significantly enhance Chinese capabilities," the briefings also underlined the fact that American concerns went "beyond countering immediate military threats to include long-term worries about Chinese proliferation to third countries." <sup>101</sup> European officials in the EU Political and Security Committee nonetheless told American diplomats that "not all Member States fully share your threat assessment." <sup>102</sup>

The US Department of Defense had very specific concerns about how lifting the embargo would contribute to the modernization of Chinese defense capabilities and have potentially destabilizing regional consequences. In its 2005 report on China's military modernization, the Pentagon asserted that:

"The consequences of an EU arms embargo lift would be serious and numerous. [...] Lifting the embargo could allow China access to military and dual-use technologies that would help China to improve current weapon systems and to improve indigenous industrial capabilities for production of future advanced weapons systems. [...] In the medium-to-long term [...] the acquisition of European defense technology would significantly improve PLA capabilities. China is most likely interested in acquiring advanced space technology, radar systems, early-warning aircraft, submarine technology, and advanced electronic components for precision-guided weapons systems. Lifting the EU embargo would also lead to greater foreign competition to sell arms to the PLA, giving Beijing leverage over Russia, Israel, and other foreign suppliers to relax limits on military sales to China. Potential competition from EU countries already may have prompted Russia to expand the range of systems it is willing to market to China. [...] Such an acceleration of China's military modernization would have direct implications for stability in the Taiwan Strait and the safety of US personnel; it would also accelerate a shift in the regional balance of power, affecting the security of many countries. Finally, Beijing's track record in transfers of conventional arms and military technologies suggests EU or other third-party sales to China could lead to improvements in the systems that Chinese companies market abroad, including to countries of concern, such as Iran. Of note, some of China's major recipients of military assistance -Burma, Sudan, and Zimbabwe – all are subject to EU arms embargoes." <sup>103</sup>

The United States therefore had a radically different assessment than its transatlantic counterparts of the strategic implications of lifting the embargo. For Washington, by significantly facilitating China's access to European advanced military technology, removing the arms ban would result in a direct and material improvement of China's defense capabilities, modify the cross-strait military balance, and have potentially destabilizing consequences in East Asia.

<sup>101</sup> US Embassy in the Netherlands, 2004, "EU China Arms Embargo: VADM Metzger/DAS Suchan Meeting With GONL," Cable from the US Embassy in the Hague, Confidential, September 27, Wikileaks Cablegate.

<sup>&</sup>lt;sup>100</sup> US Embassy in Italy, 2004, "Approach To Italian Government On China Arms Embargo: Daylight Between MFA And Prime Ministry Positions," Cable from the US Embassy in Rome, Confidential, October 13, Wikileaks Cablegate.

US Embassy in Belgium, 2004, "EU/China Arms Embargo: Briefing the PSC on China's Military Modernization," Cable from the US Embassy in Brussels, Secret/Noforn, July 28, Wikileaks Cablegate

<sup>&</sup>lt;sup>103</sup> US Department of Defense, 2005, *The Military Power of the People's Republic of China*, Office of the Secretary of Defense, pp. 24-25.

In order to amplify this argument and to convince the Europeans that key regional players shared Washington's concerns on China's military modernization, the US government closely coordinated with its Asia Pacific allies, and in particular Japan. 104 As a senior State Department official recalls, "what was really helpful was that the Japanese were [putting pressure on the Europeans] at the same time. We were working very close on this with the Japanese and the Japanese were pressing all of the EU governments as well as the EU itself - in Brussels. We pushed back on this and the Japanese pushed back. We talked with them, they shared our concerns. [Among US Asian Pacific allies and partners], apart from Japan, nobody pressed them. The Japanese pressed the EU; quietly, but hard." Leaked diplomatic cables confirm that, for instance, the Japanese were "pushing the French hard against lifting the embargo" telling French officials that lifting the embargo on defense sales to China "could lead to an arms race in the region." South Korea appears to have played a lesser role in coordinating their diplomatic demarches with Washington. Japanese officials complained with their US counterparts that "the South Koreans have been strangely quiet on the EU arms embargo [pointing] to South Korea's ties to China as a reason for the silence." 108 Interestingly, the Australian government also sought to influence European debates on the arms embargo, but it was compelled to take a low profile in these debates given that Canberra had lifted its own arms embargo on China in 1992: "the [Government of Australia, GOA] fully shares the [US government, USG] concern about the introduction of any new destabilizing armaments or technologies in the Asia Pacific region, and is vigorously demarching EU capitals to reinforce this message and to press for consultations with Australia before the ban is lifted, given Australia's stake in the region. The GOA has not joined in on USG and Japanese demarches in EU capitals, however, because Canberra lifted its arms export ban in 1992, and therefore has not wanted to risk weakening US and Japanese arguments." Finally, Taiwan focused "its lobbying efforts [against the lifting of the embargo] with human rights organizations and the Vatican. However, [Ministry of Foreign Affairs] officials admit that Taiwan does not have much leverage to counter Beijing and is relying on US and Japanese opposition to slow down the EU decision." Washington therefore exerted significant pressures on the EU, including in coordinating with close Asia Pacific allies, in order to convey its concerns to the Europeans on the consequences of lifting the arms embargo for China's military modernization and for regional stability in East Asia.

(c) American Retaliatory Threats: Implications for Transatlantic Defense Industrial Relations

Thirdly, the United States argued that lifting the EU arms embargo on China would have major adverse repercussions on transatlantic defense industrial cooperation. On the one hand, Washington

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<sup>&</sup>lt;sup>104</sup> On this point, see also US Embassy in the Netherlands, 2004, "Netherlands/EU China Arms Embargo: Meeting with Asian Allies; GONL Briefing Request," Cable from the US Embassy in the Hague, Confidential, July 16, Wikileaks Cablegate.

US Department of State official, interview, Washington D.C., September 11, 2013.

<sup>&</sup>lt;sup>106</sup> US Embassy in France, 2005, "Japanese Embassy on Chirac Visit to Japan, EU Arms Embargo, and Iter," Cable from the US Embassy in Paris, Confidential, March 10, Wikileaks Cablegate.

US Embassy in France, 2005, "Readout of Chirac's March 26-28 Official Trip to Japan," Cable from the US Embassy in Paris, Confidential, April 4, Wikileaks Cablegate.

<sup>&</sup>lt;sup>108</sup> US Embassy in France, 2005, "Japanese Embassy on Chirac Visit to Japan, EU Arms Embargo, and Iter," Cable from the US Embassy in Paris, Confidential, March 10, Wikileaks Cablegate.

<sup>&</sup>lt;sup>109</sup> US Embassy in Australia, 2005, "Australia's View on the EU's Intention to Lift its Arms Embargo Against China," Cable from the US Embassy in Canberra, Confidential, February 17, Wikileaks Cablegate.

<sup>&</sup>lt;sup>110</sup> American Institute in Taiwan (AIT), 2004, "Taiwan Pessimistic About EU Arms Embargo," Cable from the AIT, Confidential, November 23, Wikileaks Cablegate.

was concerned by potential re-transfers of US sensitive technology to the PRC via the EU; on the other, it also used this not-so-veiled retaliatory threat as a diplomatic stick aimed at modifying the EU position on the lifting of the embargo. Senior US officials publicly declared that "a normalization of [EU] arms sales [to China] would have serious commercial and military consequences from the US side. [...] The EU would be affected [given that] Congress would pass laws erecting barriers to defense trade with the EU. [...] The US would 'erect firewalls' when considering defense sales to Europe, and would have to take into account whether a European company wanting sophisticated US technology had any links with China. European governments would be wrong to think there would not be repercussions."111 US diplomatic cables show that American government officials exerted pressures on their European counterparts also in closed-door meetings stressing "that if the embargo were lifted, the US Congress would very likely impose restrictions on technology transfer to Europe, making future cooperation on other projects, such as the Joint Strike Fighter, very difficult." 112 Similarly, the US Congress got intensely involved in this issue. Several hearings were held and key Congressmen voiced their concerns on Europe's attempts at lifting the embargo. 113 The Chairman of the House Foreign Affairs Committee Richard Lugar (R-IN), for instance, warned that "the technology the US shares with European allies could be in jeopardy if allies were sharing that through these commercial sales with the Chinese." <sup>114</sup> In May 2004, the House of Representatives passed its version of the National Defense Authorization Act for Fiscal Year 2005 (H.R. 4200), which included a provision to impose procurement sanctions against any foreign entity that would transfer certain military items to China. 115 Again, in February 2005, Congress passed a resolution "urging the EU to keep the embargo" on arms sales to China. 116 Specifically, the retaliatory measures threatened by the United States included the suspension of cooperation with EU states that were participating in major joint defense projects with the US – such as the F-35 Joint Strike Fighter (JSF) program; or the termination of defense article imports from European member states that were procured for integration into American weapons systems (with the US replacing these foreign defense items with domestically produced ones). 117 Key US weapons systems produced in cooperation with European suppliers included the Patriot Advanced Capability (PAC-3) missile, the Tactical Tomahawk Missile, and the Predator Unmanned Aerial Vehicles. 118 The US therefore sought to persuade EU governments and European defense industries of the existence of a trade-off between continued access to and cooperation with the US defense industry versus enhanced defense trade with China, and that any political move toward the latter would entail adverse consequences for the former.

<sup>&</sup>lt;sup>111</sup> Guy Dinmore, 2004, "US Warns EU Against Resuming Arms Sales to China," *Financial Times*, December 13.

US Embassy in Italy, 2004, "Approach To Italian Government On China Arms Embargo: Daylight Between MFA And Prime Ministry Positions," Cable from the US Embassy in Rome, Confidential, October 13, Wikileaks Cablegate.

<sup>&</sup>lt;sup>113</sup> See United States-China Economic and Security Review Commission (USCC), 2006, *China's Military Modernization and US Export Controls*, hearing before the USCC, March 16-17; US House of Representatives, 2005, *Arms Exports to the People's Republic of China by Member States of the European Union*, Joint hearing before the Committees on Armed Services and on International Relations, US House of Representatives, 109<sup>th</sup> Congress, First Session, April 14; US Senate, 2005, *The Lifting of the EU Arms Embargo on China*, hearing before the Committee on Foreign Relations, US Senate, 109<sup>th</sup> Congress, First Session, March 16.

<sup>&</sup>lt;sup>114</sup> Edward Alden, Demetri Sevastopulo, 2005, "Lugar Threat on EU Arms Sales to China," *Financial Times*, February 21.

Kristin Archick, Richard Grimmett, Shirley Kan, 2005, *op. cit.*, p. 35. This provision was not included in the Senate's bill and was later dropped in conference.

<sup>&</sup>lt;sup>116</sup> *Ibid*.

<sup>117</sup> Ibid.

<sup>118</sup> Ibid.

These pressures were particularly effective on the United Kingdom. At the time, negotiations were indeed ongoing between Washington and London to establish a US-UK defense trade agreement which would facilitate bilateral defense trade, information sharing, and cooperative research and development in which the US and the UK would be the end-users. 119 This agreement (signed in 2007 and ratified by the US Senate in 2010) had encountered significant opposition in Congress out of concerns about the effectiveness of UK export controls and the risks of re-transfers of American technology. 120 Senior US officials recall explaining to their British counterparts "the political damage" that could result from the lifting of the embargo, including Congress ending any considerations of a defense trade treaty with the UK. It was quite clear that [the administration] was on a very delicate path trying to persuade Congress [on the US-UK defense trade treaty] and that Congress would not even consider the treaty [if there was] the perception that the British were keen in creating a channel for European defense technology to China." The eagerness to complete a major defense trade treaty with Washington and the concerns about the potential adverse consequence for UK-US diplomatic relations, led London to gradually modify its position and to move from "sitting on the fence" to being officially opposed to the lifting of the embargo. By 2005, under intense pressure by Washington, the UK government had changed its position and began arguing that it shared the US government's opposition to lifting the EU arms embargo on China. <sup>122</sup>As explained by a senior US official involved in these debates:

"The British government was [initially] confident that it could achieve several goals at once. Achieve some bilateral goals with China, enhance its standing within the EU, and gain credit for selling the Code of Conduct to Washington. Then, at the eleventh hour, it became clear to them that they were risking serious damage to the US-UK defense trade relationship; it appeared that they had not listened to the concerns expressed in Washington. So at the very last minute they suddenly realized that this was a very much more serious and substantive concern and that Washington meant what it said." 123

The threat of retaliatory measures on transatlantic defense industrial cooperation was therefore a key tool employed by Washington to shape the position of European member states and defense companies on the lifting of the embargo by signaling the existence of a trade-off between continued transatlantic defense relations and the lifting of the arms embargo on China.

The previous analysis brings to light the sharply diverging diplomatic, strategic, and economic considerations that shaped the transatlantic controversies on the arms embargo against China in the first half of the 2000s – with France and the US respectively being at the two extremes of the spectrum of views. By 2004, US officials pessimistically assessed that "our lobbying in European capitals has managed to deflect the momentum in favor of this French-led proposal, but it is unclear

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<sup>&</sup>lt;sup>119</sup> Claire Taylor, 2009, *UK-US Defence Trade Co-operation Treaty*, House of Commons Library, International Affairs and Defence Section, February 17.

<sup>&</sup>lt;sup>120</sup> Kristin Archick, Richard Grimmett, Shirley Kan, 2005, *op. cit.*, p. 35.

 $<sup>^{121}</sup>$  Former US State Department official, interview, Washington D.C., September 16, 2013.

<sup>&</sup>lt;sup>122</sup> US Embassy in the United Kingdom, 2006, "UK Views on December EU Foreign Ministers Meeting (GAERC)," Cable from the US Embassy in London, Confidential, December 8, Wikileaks Cablegate.

<sup>&</sup>lt;sup>123</sup> Former US State Department official, interview, Washington D.C., September 16, 2013.

how much longer some of the countries will hold out."<sup>124</sup> "We have slowed this train, but not derailed it."<sup>125</sup> However, by mid-to-late 2005 – in the aftermath of the adoption by Beijing, in March 2005, of the Anti-Secession Law (ASL) authorizing the use of force by the PRC against Taiwan in case Taipei declared independence – the push to lift the embargo lost momentum and was essentially shelved. In the words of a Pentagon official involved in these discussions: "at the time we referred to this as 'snatching defeat from the jaws of victory': the momentum had been all on the side of lifting the embargo and of changing the EU Code of Conduct [...] so that arms could flow on a more regular basis with China; and after [China passed the ASL] all of that momentum shifted completely in the other direction and it was judged that the timing was not right [for lifting the embargo]."<sup>126</sup> Similarly, in the words of a State Department official, "after March 2005 we all realized that they [i.e. the EU member states pushing for the lifting of the embargo] would not get consensus on that. The Anti-Secession Law took a lot of steam out of the EU engine. It stopped being an issue of high-level diplomacy."<sup>127</sup> As explained below, the clash between the US and the EU on this issue therefore gradually translated into a stalemate and the "China arms embargo" issue was essentially shelved by mid-to-late 2005.

#### I.2.B. The 2005 Shelving of the "China Arms Embargo" Issue

Under the combined impact of US intense pressures on the EU and of China's adoption, in March 2005, of the Anti-Secession Law (ASL) the push to lift the embargo lost considerable momentum in the second half of the 2000s. The ASL declared that, in case of Taiwan's secession from China, and if all possibilities for a peaceful reunification had been exhausted, "the state shall employ non-peaceful means and other necessary measures to protect China's sovereignty and territorial integrity." In a March 2005 diplomatic cable titled "Is the EU Retreating on the China Arms Embargo?", US officials assessed that "the EU drive to lift its arms embargo on China appears to be faltering as a result of the March 14 passage of the anti-secession law, increased US pressure, and China's unwillingness to deliver concessions on human rights. [...] EU governments might be persuaded by these factors [...] to postpone their decision" to lift the embargo. External and domestic pressures had indeed led to growing intra-European political fragmentation within the EU – both at the national level and in EU institutions.

At the national level, the consensus between the "big three" began to unravel. As previously shown, mostly as a result of US pressures, by 2005 the UK had clearly moved in the anti-lifting camp. Also, the new German government of Angela Merkel, which came to power in 2005, reversed the

<sup>124</sup> US Embassy in Belgium, 2004, "USEU Scenesetter for Deputy Secretary Visit June 1-2," Cable from the US Embassy in Brussels, Unclassified, May 27, Wikileaks Cablegate. On this point, see also US Embassy in France, 2005, "Review of Issues Raised in SecState Meetings with French Government," Cable from the US Embassy in Paris, Confidential, February 11, Wikileaks Cablegate.

<sup>&</sup>lt;sup>125</sup> US Embassy in Belgium, 2004, "EU/China Arms: Slowing Rush to the Summit," Cable from the US Embassy in Brussels, Confidential, October 18, Wikileaks Cablegate.

<sup>&</sup>lt;sup>126</sup> US Department of Defense official, interview, Washington D.C., March 28, 2012.

<sup>&</sup>lt;sup>127</sup> US Department of State official, interview, Washington D.C., September 11, 2013.

See "Full Text of China's Anti-Secession Law", March 14, 2005, available at <a href="http://english.peopledaily.com.cn/200503/14/eng20050314">http://english.peopledaily.com.cn/200503/14/eng20050314</a> 176746.html

US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo?," Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.

position of her predecessor Gerhard Schröder by opposing the lifting of the arms embargo on China. As explained by German officials in meetings with their American counterparts, Berlin now agreed with Washington on the need to strengthen the EU Code of Conduct and disagreed with the French government's idea to link the strengthening of the CoC to the lifting of the EU arms embargo; they added that "Germany is not inclined to support an end to the arms embargo on China [and] stated that many other member states shared their position. [They] did not expect consensus to be achieved" on the lifting the embargo. 130 Even France, the most ardent advocate of removing the arms embargo, sensed the changing tides. By March 2005, French officials began acknowledging that "Paris has a better appreciation of the intensity of US opposition to an embargo lift" and "that EU capitals have clearly misunderstood the intensity of the US opposition to lifting the embargo"; they also expressed "the fear that we are headed for a 'tsunami' on this issue." 131 At the EU level, the EU Parliament conveyed its opposition to the lifting of the embargo in a draft resolution stressing that "the increasing military build-up in the Taiwan Straits" was "deeply" worrying because it would "lead to the destabilization of the whole region"; "the present tension in cross-Strait relations is a further serious element which must lead the Council not to lift the arms sales embargo on China."132 Also, Javier Solana, then EU High Representative for Foreign and Security Policy, had sent his Representative for WMD Non-Proliferation, Annalisa Giannella, to the US, Japan, and Australia to explain the European position regarding the China arms embargo. In the aftermath of her March 14-15 visit to Washington D.C., the State Department assessed that:

"After Annalisa Giannella's widely-publicized visit to Washington this month [...] the EU has begun to realize that our opposition cannot be explained away with vague assurances about intent or yet more technical briefings about the Code and Toolbox. Recent remarks by President Bush and Secretary Rice, plus tough warnings from senior Congressional [...] leaders, have driven home the message that there will be a serious price to pay for transatlantic relations and defense trade if the EU proceeds with lifting the embargo. For the first time, EU governments appear to be as concerned about the US reaction to a decision to lift the embargo as they are of the Chinese reaction if they do not." 133

EU members were now increasingly "convinced that any decision to lift the embargo should come after a strategic dialogue with the [US government] on regional stability in the Pacific and a framework for pre-consultations on arms exports to China." <sup>134</sup> The EU therefore began considering to "delay lifting the embargo until US and EU officials carry out a strategic dialogue on China that

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<sup>&</sup>lt;sup>130</sup> US Embassy in Germany, 2006, "German Views on the December Foreign Ministers Meeting," Cable from the US Embassy in Berlin, Confidential, December 8, Wikileaks Cablegate. See also US Embassy in the People's Republic of China, 2006, "China-EU Summit: Heavy On Dialogue, Light On Deliverables," Cable from the US Embassy in Beijing, Confidential, September 8, Wikileaks Cablegate.

<sup>&</sup>lt;sup>131</sup> US Embassy in France, 2005, "MOD Advisor Upbeat on Bilateral Relationship; Sees Rapprochement on Middle East; No Change on EU China Arms Embargo," Cable from the US Embassy in Paris, Confidential, March 18, Wikileaks Cablegate.

European Parliament, 2005, "Motion for a Resolution European Parliament Resolution on Relations between the European Union, China and Taiwan," B6-0394/2005, June 29.

<sup>&</sup>lt;sup>133</sup> US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo?", Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.

<sup>&</sup>lt;sup>134</sup> US Embassy in Spain, 2005, "Spanish Views on EU Delegation's Meetings on China Arms Embargo," Cable from the US Embassy in Madrid, Confidential, March 23, Wikileaks Cablegate.

addresses concerns on non-proliferation and regional balance of power issues."<sup>135</sup> Furthermore, Giannella's trip was ill timed as she arrived to Washington D.C. the very same day that China passed the Anti-Secession Law. A State Department official recalls that, in light of the passage of the ASL and of American pressures, Giannella then admitted "we realize that this makes [lifting the embargo] a dead letter for the time being."<sup>136</sup> As a result, at the European Council in June 2005, EU member states decided to postpone the issue considering that the timing was inappropriate for lifting the arms embargo on China.<sup>137</sup> By the end of 2005 the issue of the EU arms embargo on China had been (at least temporarily) shelved.

#### EU Alignment with US Concerns in the Asia Pacific?

The European Union had indeed begun to increasingly take into account US concerns on the consequences of lifting the embargo on China's military modernization and on East Asian regional stability. This is why, in May 2005, EU Troika officials met with representatives of the US National Security Council, the Departments of State and Defense, the Joint Chiefs of Staff, and the intelligence community to launch the EU-US "strategic dialogue" on East Asia "to share assessments and, if possible, develop common approaches to 'managing' China's rise." This "shared assessment" is also reflected in the EU *Guidelines on the EU's Foreign and Security Policy in East Asia.* The work on the draft of this document – adopted by the EU Council in 2007 (and updated in 2012) – began in the summer of 2005, just after the official postponement of the proposal to lift the EU arms embargo on China. Importantly, it adopted some of the key talking points used by American officials to convince the EU not to lift the embargo:

"The US has security commitments to Japan, the Republic of Korea and Taiwan and the associated presence of US forces in the region gives the US a distinct perspective on the regional security challenges. It is important that the EU is sensitive to this. Given the importance of transatlantic relations, the EU has a strong interest in partnership and cooperation with the US on the foreign and security policy challenges arising from East Asia. [...] The US should also, in consultation with all partners, deepen its understanding of the military balance affecting the cross-strait situation; of the technologies and capabilities which, if transferred to the region, could disturb that balance; [...] and factor that assessment into the way that Member States apply the code of Conduct in relation to their exports to the region of strategic and military items." <sup>140</sup>

In the words of Nicola Casarini, this document "put a seal on any EU autonomous initiative vis-à-vis China on security and strategic matters that could be perceived by the American ally and its East

<sup>135</sup> Ibid.

<sup>&</sup>lt;sup>136</sup> Former US Department of State official, interview, Washington D.C., September 11, 2013.

<sup>&</sup>lt;sup>137</sup> Casarini, 2007, op. cit., p. 383.

<sup>&</sup>lt;sup>138</sup> US Embassy in Belgium, 2005, "A/S Hill Launches Strategic Dialogue on East Asia with EU," Cable from the US Embassy in Belgium, Confidential, June 8, Wikileaks Cablegate.

<sup>&</sup>lt;sup>139</sup> Council of the European Union, "Guidelines on the EU's Foreign and Security Policy in East Asia", Brussels, December 14, 2007.

<sup>140</sup> Ibid.

Asian partners as detrimental for the region's strategic balance."<sup>141</sup> By the second half of the 2000s, accordingly, the EU had shelved its plans to lift the arms embargo on China and seemed to have aligned itself with Washington's position.

#### Delinking the "China Arms Embargo" and the Strengthening of the EU Code of Conduct

The fact that the issue arms embargo had become a dead letter is further confirmed by France's decision, by 2007/2008, to "de-link" the strengthening of the Code of Conduct and the removal of the arms embargo on China. Not only did France accept to making the CoC legally binding but it was under the French Presidency of the EU (July-December 2008) that the CoC was made legally binding – with the adoption of the 2008/944/CFSP Common Position (CoP) "defining common rules governing control of exports of military technology and equipment". 142 COARM had finalized the review of the Code of Conduct and reached a draft of the Common Position by June 2005. However, the adoption of the Common Position necessitated a consensus and Paris could therefore block it; and, as previously explained, France's linkage between the strengthening of the EU Code of Conduct and the lifting of the embargo on China had held the negotiations on the Common Position hostage. Two interrelated reasons led France to de-link the strengthening of the CoC and the lifting of the arms embargo on China. First, as a result of the previously described US pressures and intra-European faltering consensus, the issue of the embargo had been removed from the EU diplomatic agenda. In the words of a French Defense Ministry (MOD) official, after 2005 "the issue of the embargo was dead at the European level. France continued to tell the Chinese that is was an important issue; we did the bare minimum so that this issue [the lifting of the embargo] would not be definitely killed; but no concrete initiative was taken because there was no consensus" at the European level. 143 Accordingly, the arms embargo no longer stood in the way of the adoption of the Common Position on arms exports. Secondly, in a context where the European Commission had taken the lead on intra-European defense transfers (through the 2009/43/EC Directive on Intra-EU-Transfers of Defense-Related Products) and was perceived by Paris as seeking to enhance its influence upon extra-European exports as well, the Common Position allowed to French government to retain national sovereignty on matters of arms exports outside the EU while recognizing the Europeanization of export controls of intra-EU transfers under the aegis of the European Commission. 144 As explained by a French MOD official, France "wanted to establish a very clear firewall between the controls on intra-European transfers on the one hand, and extra-European exports on the other; [...] The 'China embargo' issue was dead, and the big question now was 'what should the role of the EU Commission in defense exports be?'; and this is a key question. [...] The aim [of the French government] was to make sure that the European Commission would not take the lead on a regalian prerogative such as the control of arms exports" outside the EU. 145 With France's decision to de-link the strengthening of

<sup>&</sup>lt;sup>141</sup> Nicola Casarini, 2011, "The Rise and Fall of EU-China Relations in Space and Defense Technology," in Frans Paul Van Der Putten, Chu Shulong, *China, Europe, and International Security: Interests, Roles and Prospects*, Routledge, pp. 73-74.

Official Journal of the European Union, Council Common Position 2008/944/CFSP of 8 December 2008, available at <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:335:0099:0099:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:335:0099:0099:EN:PDF</a>

<sup>&</sup>lt;sup>143</sup> French Ministry of Defense official, interview, Paris, December 12, 2013.

<sup>&</sup>lt;sup>144</sup> See Lucie Béraud-Sudreau, 2014, "French adaptation strategies for arm export controls since the 1990s," *Paris Paper n° 10*, Strategic Research Institute of the French Military Academy.

<sup>&</sup>lt;sup>145</sup> French Ministry of Defense official, interview, Paris, December 12, 2013.

the Code of Conduct and the lifting of the embargo, the European export control system had been made legally binding with the establishment of the Common Position. This further demonstrates that, by the second half of the 2000s, Paris had recognized that the initiative to lift the arms embargo had become a political minefield and had therefore accepted to drop the CoC/embargo linkage and to shelve the "China arms embargo" issue.

## ■ (II) RESUMING ARMS SALES TO CHINA IN THE 2010s? THE DEATH KNELL FOR THE LIFTING OF THE EU ARMS EMBARGO ON CHINA

After the failure to lift the "China arms embargo" in the 2000s, in 2010 efforts were made by EU High Representative for Foreign Affairs and Security Policy as well as by the Spanish government to revive the debate on removing the arms ban on China (II.1). It will be shown that these attempts nonetheless utterly failed because of the changing diplomatic, strategic, and economic considerations within the EU – including in France (II.2), coupled with continued American pressures (II.3). Thereafter, the prospects for lifting the EU arms embargo appeared to have definitely vanished.

### II. 1. LADY ASHTON AND SPAIN'S ATTEMPTS AT REVAMPING THE "CHINA ARMS EMBARGO" DEBATE

In 2010, Lady Catherine Ashton, the EU High Representative for Foreign Affairs and Security Policy, circulated a 19-pages strategy paper - which has not been made public - examining national preconditions for lifting embargo at the 16-17 December European Council; this document reportedly stated that "the current arms embargo is a major impediment for developing stronger EU-China cooperation on foreign policy and security matters. The EU should assess its practical implication and design a way forward." <sup>146</sup> Concomitantly, some members of the Spanish government – which then held the Presidency of the European Union (January-June 2010) – also sought to reopen the debate on lifting the arms embargo. Spain's Ambassador to China, Carlo Blasco Villa, told in an interview with the China Daily that the Spanish Presidency of the EU hoped to "deepen discussions [within the EU] on lifting the ban" on arms sales to China. 47 Also, the Spanish Minister of Foreign Affairs declared during a press conference that Madrid was "weighing the pros and cons", adding that Spain was in favor of lifting the embargo. 148 These initiatives, however, did not gather much momentum as the internal disagreements and controversies within the EU prevented reaching the necessary political consensus. A British diplomat explained that "there remains a broad consensus within the EU that the time is not right to lift the arms embargo. We need to see clear progress on the issues that necessitated the embargo in the first place, namely on civil liberties and political rights" in China. 149 Similarly, in conversations with their American counterparts, German officials "distanced [Berlin from these] efforts to bring this up for discussion in the EU; [they stated that] Germany 'currently' had 'no intention' of supporting a lifting of the embargo [and] agreed that now was not the right time to change the status quo." The European Commission Deputy Head of Asia Unit told US officials that the "friends of China", i.e. those within the European Council that officially favored

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<sup>&</sup>lt;sup>146</sup> See "Ashton Pragmatic on China in EU Foreign Policy Blueprint," *EU Observer*, December 17, 2010; "Should the EU lift the arms embargo on China?," *EurActiv*, February 25, 2011.

<sup>&</sup>lt;sup>147</sup> Quoted in "The EU and arms for China," *The Economist*, February 1<sup>st</sup>, 2010.

<sup>148</sup> Ihid

<sup>&</sup>lt;sup>149</sup> "EU to Keep China Arms Embargo Despite Massive Investmnets," *EU Observer*, January 5, 2011.

<sup>&</sup>lt;sup>150</sup> US Embassy in Germany, 2010, "German Views on the EU Arms Embargo Against China and the February 22 EU Foreign Affairs Council," Cable from the US Embassy in Berlin, Confidential, February 19, Wikileaks Cablegate.

the lifting of the embargo against the PRC, "currently number only five: Spain, Cyprus, France, Hungary, and Romania, noting this is 22 short of the required number." French Foreign Ministry officials acknowledge that the initiatives taken by Catherine Ashton and the Spanish government "did not go very far. Spain hoped to make a gesture toward China, but they never discussed it through formal channels, within COASI or COARM for instance, they never put it formally on the agenda, they just made political declarations." Leaked cables confirm that, according to US contacts in the European Commission and the EU Council Secretariat "there has been 'absolutely no move' towards lifting the EU's China arms embargo, despite Spanish [Foreign Minister] Moratinos' January [statement] on the arms embargo. [...] The Spanish Presidency did not include lifting the arms embargo in its priorities and the issue has not been discussed in any of the Spanish-led 2010 meetings of the EU's Asia-Oceania Working Party (COASI) or of the Political and Security Committee (PSC). <sup>153</sup>

This second attempt at lifting the EU arms embargo on China was therefore much weaker and also vanished more quickly than the previous 2003-2005 endeavor. As explained below, this was the consequence of both US unaltered opposition and continued pressure on the EU as well as a changing set of political, strategic, and economic considerations within Europe – including in the traditionally most fervent advocate of lifting the embargo, namely France.

#### II. 2. THE SHIFTING FRENCH POLITICAL, STRATEGIC, AND ECONOMIC INTERESTS IN THE 2010S

In the 2010s, France has taken little concrete diplomatic steps to put "China arms embargo" issue back on the EU agenda and in fact provided little political backing to the relatively feeble attempts at reviving the debates on the EU embargo on China in 2010. This is because, after the failed effort to lift the embargo in the early 2000s, Paris had shifted its position toward what could be described, in the words of one interviewee, as "constructive ambiguity": France would remain officially in favor of lifting the embargo but, *de facto*, would take no significant and concrete initiative to achieve this goal. This approach would allow reaping diplomatic benefits for the Franco-Chinese bilateral relationship – by showing convergence of views on this issue between Paris and Beijing –, while avoiding the political costs and fallouts that would emerge given the existing intra-European and transatlantic disagreements on this issue. On the one hand, the French government therefore continued to justify its support for the lifting of the arms embargo on the basis of the same considerations and arguments used in the 2000s: the embargo is politically discriminatory for a rising power such as China and an obstacle to the development of Franco-Chinese bilateral relations; lifting the embargo would not translate into increased defense sales to China given the effectiveness of the existing export control system; the embargo is counterproductive in that it spurs the development of

<sup>&</sup>lt;sup>151</sup> US Mission to the European Union, 2010, "EU Has 'No Instructions' to Discuss Lifting China Arms Embargo," USEU Brussels, Confidential/Noforn, February 4, Wikileaks Cablegate.

<sup>&</sup>lt;sup>152</sup> French Ministry of Foreign Affair official, interview, Paris, November 14, 2013.

<sup>&</sup>lt;sup>153</sup> US Mission to the European Union, 2010, "EU Has 'No Instructions' to Discuss Lifting China Arms Embargo," USEU Brussels, Confidential/Noforn, February 4, Wikileaks Cablegate.

<sup>&</sup>lt;sup>154</sup> French Ministry of Defense official, interview, Paris, July 16, 2013.

Chinese indigenous capabilities.<sup>155</sup> On the other hand, as explained in detail below, three interrelated factors have made the French government increasingly reluctant to concretize its official "pro-lift" stance.

(a) Intra-European Political Fragmentation and Growing Security Concerns on China's Regional Military Posture

Firstly, in light of the disagreements among the "big three" (Paris, Berlin and London) and, also, of the 2004 enlargement – that integrated ten countries with largely pro-Atlanticist foreign policies –, the French government has realized that reaching a consensus among all the 28 EU member states on the desirability (and feasibility) of lifting the arms embargo of China has become exceedingly difficult. Furthermore, China's increasingly assertive foreign and defense policy in the East and South China Sea has led Paris to scrutinize more thoroughly the potentially destabilizing regional implications of China's defense posture in East Asia and has further complicated any attempt at lifting the EU arms embargo against China. Fast Asia and Succinctly by Christian Lechervy, former Special Advisor for Strategic and Asian affairs to the French President François Hollande:

"Today everyone is aware that the necessary political conditions required to reach a consensus on lifting the embargo are absent within the EU; and the existing and growing tensions in Northeast and Southeast Asia are an aggravating factor. So today nobody is in a position to launch a new initiative [to lift the embargo] because it would probably not succeed. [...] That is why trying today to test the possibility of lifting the embargo – in light of the growing tensions and accidents between China, Japan, South Korea, the Philippines and other ASEAN countries and the US – would probably encounter even more resistance that a few years ago." 158

The 2013 White Paper on Defense and National Security confirms France's changing perspectives on the risks of regional instability in the Asia Pacific resulting from China's assertive posture:

"The China Sea is [...] a major source of tension, with competing territorial claims from several bordering States. The resurgence of a Sino-Japanese dispute over the sovereignty of the Senkaku / Diaoyu islands is only the latest manifestation of this type of disagreement, and should not be allowed to overshadow other stubborn areas of contention in the region: the Taiwan Straits [and] China's claim to sovereignty over the entire South China Sea. [...] Like its European partners, France is not directly threatened by potential conflicts between Asian powers, but it is nevertheless very directly concerned, for several reasons: it is a permanent member of the UN Security Council and of UNCMAC (United Nations Command Military Armistice Commission, Korea) and a power with a presence in the Indian Ocean and the Pacific. It is also a US ally that plays a key role in the security of this strategic part of the world. [France's] prosperity is now inseparable from that of the Asia-Pacific region. [Asia] is the main driver of growth worldwide, but also a region where the risks of tension and conflict are among the

<sup>&</sup>lt;sup>155</sup> Interviews with officials in the French Ministry of Foreign Affairs (November 14, 2013), Ministry of Defense (July 23, 2013; September 10, 2013; December 12, 2013) and the Secretariat-General for National Defence and Security (September 23, 2013), Paris.

<sup>156</sup> Ihid.

<sup>&</sup>lt;sup>157</sup> Interview with an official in the Secretariat-General for National Defence and Security (Paris, September 23, 2013).

<sup>&</sup>lt;sup>158</sup> Christian Lechervy, interview, Paris, October 7, 2013.

highest in the world. [...] For our country, the stability of Asia and freedom of navigation are diplomatic and economic priorities. Alongside its allies, France would, in the event of an open crisis, make a political and military contribution at the appropriate level."<sup>159</sup>

In other words, in the 2010s the French government has increasingly come to scrutinize how regional instability in East Asia might affect French interests in the region – although this impact has been assessed more from a diplomatic and economic standpoint rather than from a purely military perspective. This clearly emerges from interviews with officials in both the French Foreign and Defense Ministries.

Officials in the Ministry of Foreign Affairs (MFA) point out that "there are no strategic tensions between China and France as there are between the US and China; China is not a threat to our vital interests – as it is for the United States. A conflict in East or Southeast Asia would not affect our vital interests; we do not have sufficiently important interests in the region for our vital interest to be directly affected in case of conflict; but there would be an important economic impact." <sup>160</sup> Another MFA official stresses that while "it is true that France does not have vital political/military interests in the region, France does have economic interests in East Asia. [...] France therefore does not have an interest in the destabilization of the [East Asian] region because this would harm our own economic interests." 161 Similarly, in the French Ministry of Defense, officials consider that "France does not want conflicts in the [East Asian] region because this would harm French economic and trade interest. Furthermore, France is engaging with a growing number of countries in the region, and the security interests of ours partners are our security interests." 162 France has indeed expanded defense cooperation with multiple countries in East Asia, such as Indonesia, Malaysia, Singapore and Vietnam - among others; <sup>163</sup> and Paris has also sought to enhance defense trade cooperation with Japan (including the joint development of military equipment) by signing a memorandum of understanding with Tokyo in 2014.<sup>164</sup> These partnerships, coupled with growing economic interests in East Asia, have enhanced France's stake in the stability of the region.

A further indicator of this growing emphasis on France's interests in the stability of the Asia Pacific region is the Ministry of Defense's 2014 report *France and Security in the Asia Pacific*, that builds upon the 2013 White Paper. This report seeks to emphasize and explain how "it is in France's interest to pursue its strong commitment to the security in the Asia-Pacific region, which in turn contributes to its own security." <sup>165</sup> It specifies that "although France's mainland territory is geographically remote from the Asia-Pacific, its territories in New Caledonia, Wallis and Futuna, French Polynesia,

<sup>&</sup>lt;sup>159</sup> French Ministry of Defense, 2013, *White Paper on Defense and National Security*, pp. 34-35-56.

<sup>&</sup>lt;sup>160</sup> French Ministry of Foreign Affairs, interview, Paris, November 14, 2013.

<sup>&</sup>lt;sup>161</sup> French Ministry of Foreign Affairs, interview, Paris, November 14, 2013.

<sup>&</sup>lt;sup>162</sup> French Ministry of Defense, interview, Paris, September 10, 2013.

<sup>&</sup>lt;sup>163</sup> See French Ministry of Defense, 2014, *France and Security in the Asia Pacific*.

<sup>&</sup>lt;sup>164</sup> Agence France-Presse, 2014, "Japan, France Agree on Defense Equipment Cooperation," July 29. This MOU was signed just in the aftermath of Franco-Japanese diplomatic tensions on the sale by the French defense contractor DCNS of helicopters' landing grids to China – which allow helicopters to land or take off from a ship without crew assistance even in bad weather – and that Tokyo feared might be used by Beijing on Chinese ships in Japanese waters surrounding the Senkaku Islands. See Nanae Kurashige, 2013, "Japan fears French copter device may aid China's Senkakus campaign," *The Asahi Shimbum*, March 18; and Romain Mielcarek, 2013, "Tensions franco-japonaises sur fond de livraison de matériel sécuritaire à la Chine », *RFI*, June 7.

<sup>&</sup>lt;sup>165</sup> French Ministry of Defense, 2014, France and Security in the Asia Pacific, p. 4.

and Clipperton Island make it a regional Pacific power;" it also stresses that "France has the second largest exclusive economic zone in the world (11 million km²) after the United States, located mainly in the Pacific (62%) and Indian Oceans (24%), and, as such, it is responsible for protecting the fragile maritime environment and its extensive fish, mineral, and energy resources;" furthermore, given that "Asia has become Europe's largest trading partner, any crisis or conflict in the Asia-Pacific is likely to adversely affect the interests of Europe and France;" finally, the document underlines the fact that France has "over 2,500 military and civilian defence staff present in the Pacific [to] ensure the protection and safety of French territories [and] the surveillance of our exclusive economic zones." <sup>166</sup> Significantly, the report stresses that "France complies with embargoes and other restrictive measures decided by the UN Security Council and the European Council on the Asia-Pacific countries of Burma, *China*, and North Korea." <sup>167</sup>

These oral and written sources show how – coupled with the lack of intra-European political consensus on the EU arms embargo on China – France's growing diplomatic and economic interests in the stability of the Asia Pacific region, and its realization of the potentially adverse consequences of China's aggressive regional behavior for these interests, have contributed to temper France's active pursue of the lifting of the EU arms embargo on China. 168

#### (b) Adverse Consequences for Transatlantic Political and Defense Industrial Relations

Secondly, after the *débacle* of the early 2000s, in the 2010s Paris has begun to cautiously factor in both US security interests in East Asia as well as the potential implications of lifting the embargo for transatlantic political and industrial relations. Indeed, as acknowledged by French officials, the heated transatlantic debates on the arms embargo in the early 2000s "allowed [the French government] to better understand US concerns; France had not yet realized of the potential strategic disequilibria" that could enfold in East Asia;"<sup>169</sup> the 2003-2005 controversies "served as first political lever for the development of EU-US strategic dialogue on East Asian regional stability", <sup>170</sup> as reflected also in the previously mentioned 2012 EU Guidelines on Asia, as well as in the 2013 French White Paper and the 2014 French DOD Report on Asia. Furthermore, American retaliatory threats and the likely consequences of lifting the "China arms embargo" for transatlantic defense trade have loomed increasingly large both within the French government and the industry's decision making. Ministry of Defense officials stress that the 2003-2005 experience has demonstrated that there might be heavy consequences for transatlantic defense industrial cooperation with the United States. <sup>171</sup> In the words of a MOD official, the 2003-2005 controversies "instead of making things evolve [toward the lifting of the embargo] have re-crystallized everything; there have been very strong American pressures."

<sup>167</sup> *Ibid*. (emphasis added). The report adds that "due to the special nature of this kind of equipment, the sale of French armaments to a third country is never a purely technical or commercial decision. It is governed by political and strategic considerations and is a symbol of trust between partners. France's export policy is also based on the principles of transparency, the protection of human rights, international stability and ethics." *Ibid.*, p. 8.

<sup>&</sup>lt;sup>166</sup> *Ibid.*, p. 10.

<sup>&</sup>lt;sup>168</sup> French defense officials also stress potential technology transfers to China, cyber-espionage, reverse engineering, and China's proliferation and re-export practices as additional sources of concern (interviews, French Ministry of Defense, Paris, March and July 2013).

<sup>&</sup>lt;sup>169</sup> French Ministry of Defense, interview, Paris, September 10, 2013.

<sup>&</sup>lt;sup>170</sup> French Ministry of Defense, interview, Paris, December 12, 2013.

<sup>&</sup>lt;sup>171</sup> Interviews with French Ministry of Defense officials, Paris, September 10, 2013; and December 12, 2013.

<sup>&</sup>lt;sup>172</sup> French Ministry of Defense official, interview, Paris, July 29, 2013.

Similarly, given US retaliatory threats, important sectors of the defense industry have become greatly concerned by the potential adverse repercussions of lifting the "China arms embargo" on their defense industrial cooperation with the United States - including on major programs such as the F-35 Joint Strike Fighter. Specifically, French defense industry representatives put forward two arguments to explain the lack of unified lobbying pressure aimed at lifting of the embargo. Firstly, the defense industry considers the lifting of the embargo extremely unlikely because of the lack of political consensus within the EU. <sup>173</sup> The second argument is the trade-off that the European defense industry confronts between continued defense cooperation with the US versus expanded access to the Chinese market. It is indeed worth noting that US domestic market remains by far the world's largest defense market, with US military expenditures reaching approximately 40% of world's defense spending, with China ranking second with 9,5%. 174 After the 2003-2005 US retaliatory threats, as explained by a defense industry representative, within the French Defense Industries Council (CIDEF – the leading French defense industry association), "we all know that there would be a risk of American retaliation if the embargo on arms sales to China was lifted. [...] It will be impossible to reopen the debate on the lifting of the embargo before the Americans change their mind on this issue." <sup>175</sup> In the words of another industry representative, "the defense industry fears the risks of US retaliation; the French government sees the risk of a casus belli with the US government; accordingly, very few people dare putting the issue of the embargo forward. [...] We prefer to be 'on the American side' and work with them - because it is there where we have real money to make - rather than making a few sales to the Chinese but thereby antagonizing our [US] partners. It is a general strategy. [...] We are not going to cut our arm [i.e. defense cooperation with the US] for the Chinese market." After the US retaliatory threats in the early 2000s, the fear of adverse consequences for transatlantic defense industrial cooperation have contributed to dissuading both the French government and the defense industry to strongly advocate for the lifting of the arms embargo against China.

### (c) Decreased Chinese Diplomatic Pressures on the Embargo Issue and the Franco-Chinese Diplomatic Relationship

Finally, both Chinese and French sources show that as the PRC gradually came to understand the growing unlikelihood of the lifting the EU embargo, this issue lost the relevance that it had had in the Franco-Chinese bilateral relationship the 2000s, and Beijing therefore reduced its diplomatic pressure on this specific issue. French diplomats in both Paris and Beijing stress the fact that "China arms embargo" is not a "top-level priority anymore in the Franco-Chinese bilateral relationship;" "we do not talk about the embargo anymore, [the Chinese] got used to the idea that embargo will not be lifted. We still have talking points, in case questions emerge – from the press for instance – but these questions are never asked. The Chinese only very rarely raise this issue, it isn't anymore their spearhead. In the early 2000s, they used to talk about it constantly, now they never, or rarely." <sup>178</sup>

<sup>&</sup>lt;sup>173</sup> Interviews with French industry representatives (Paris, July 24, 2013; September 13, 2013).

<sup>&</sup>lt;sup>174</sup> See SIPRI Military Expenditure Database, 2013.

<sup>&</sup>lt;sup>175</sup> French industry representative, interview, Paris, July 24, 2013.

<sup>&</sup>lt;sup>176</sup> Ibid.

<sup>&</sup>lt;sup>177</sup> French diplomat, interview, Beijing, October 29, 2013.

<sup>&</sup>lt;sup>178</sup> Interviews with officials in the French Ministry of Foreign Affairs, Paris, November 14, 2013.

Similarly, Chinese interviewees stress the decreased salience of the arms embargo in the Franco-Chinese diplomatic relationship in the 2010s. According to a Chinese analyst:

"For the previous administration, for Premier Wen Jiabao [2003-2013], the failure to lift the embargo was a major disappointment. He had moved it at the top of the agenda, worked on it for ten years but nothing happened. This was a major frustration. In 2003-2005 China made a lot of pressures in order to make the EU reach a consensus. [...] But today China does not push as forcefully [as it did in the 2000s] because there is no willingness, no consensus on the EU side. Today China sees the lifting of the EU arms embargo as increasingly impossible. Any attempt may be blocked by some member state; no country is willing to push that issue. [...] There has been a reduction in China's pressure because there is a lack of consensus within the EU."<sup>179</sup>

As far as the Franco-Chinese diplomatic relationship is concerned, he adds:

"France has been one of the more constant supporters of the lifting of the embargo. In the past, France was leading the initiative. France led in pushing in those important strategic issues, such as defense sales. France was a special partner in these strategic issues. But the failure to lift the embargo removed this big advantage for France. There has been a decrease in the strategic relevance of France." 180

Besides the intra-EU disagreements, Chinese interviewees stress two other factors that have contributed to removing the embargo as a first-tier issue in China-EU relations: the growing indigenous capabilities of the PRC that allegedly reduce its need for importing advanced foreign defense technology; and US pressures on individual member states as well as on EU institutions. <sup>181</sup> On the former point, in the words of a Chinese non-proliferation expert, "the next five-to-ten year are the last years for Western defense companies to make profit in China, because China is catching up. The arms embargo is becoming meaningless." <sup>182</sup> Similarly, according to another Chinese observer, "not lifting the embargo is a lost opportunity for the EU arms industry to cooperate with the Chinese industry; there is a small window of opportunity for defense cooperation, a few more years, then China will become a competitor, just look at what the Chinese aerospace industry is doing." <sup>183</sup> China's growing indigenous capabilities — despite its considerable sector-by-sector unevenness — have allegedly made the issue of the EU embargo less relevant than in the early 2000s. <sup>184</sup> On the latter point, Chinese analysts stress both the deterrent effect of American pressures on EU member states in the early 2000s as well as the role of the US rebalance (or "pivot") to the Asia Pacific as inhibitors of European attempts at lifting the embargo. <sup>185</sup> In the words of a Chinese

<sup>&</sup>lt;sup>179</sup> Chinese analyst, interview, Shanghai, November 7, 2013. On this point see also "Chinese PM Urges EU to Trop Arms Embargo," *Aljazeera*, September 20, 2012.

<sup>&</sup>lt;sup>180</sup> Chinese analyst, interview, Shanghai, November 7, 2013.

<sup>&</sup>lt;sup>181</sup> Interviews in Universities and think tanks in Beijing and Shanghai, October and November 2013.

<sup>&</sup>lt;sup>182</sup> Non-proliferation expert, interview, Beijing, October 13, 2013.

<sup>&</sup>lt;sup>183</sup> Chinese analyst, interview, Shanghai, November 7, 2013.

<sup>&</sup>lt;sup>184</sup> For a sector-by-sector assessment of China's indigenous defense and technological industrial base, see Tai Ming Cheung (ed), 2013, *The Chinese Defense Economy Takes Off: Sector-by-Sector Assessment and the Role of the Military End-Users*, Institute on Global Conflict and Cooperation, University of California, San Diego.

<sup>&</sup>lt;sup>185</sup> Interviews in Universities and think tanks in Beijing and Shanghai, October and November 2013. For an analysis of the assessment of and the reactions to the pivot by China's foreign and defense policy elites see Mathieu Duchâtel, Emmanuel Puig, 2015, "Chinese Reactions to the US Rebalance to Asia: Strategic Distrust

analyst "the pivot means that the US would take the issue of the lifting of the embargo even more seriously, because if the US wants to compete with China in the East Asia Pacific region, it will do anything to impede any outside country to undertake actions that would enhance China's defense capabilities." <sup>186</sup>

To sum up, the combination of Europe's continued political fragmentation, a growing appraisal of the security risks of instability in East Asia, US continued retaliatory threats, and the consequent decrease in Chinese diplomatic pressures on the issue of the embargo have contributed to kill the renewed attempt at lifting the EU arms embargo on the PRC in the 2010s.

### II. 3. THE IMMUTABLE AMERICAN POLITICAL, STRATEGIC, AND ECONOMIC INTERESTS IN THE 2010s

At the same time, on the other side of the Atlantic, the US government continued to be adamantly opposed to any hints at lifting the embargo. As shown by leaked diplomatic cables, in 2010 Washington sent action requests to all its embassies in the EU "to reiterate our position that the EU should retain its arms embargo on China" and requiring American diplomats in Europe to "approach host government at the appropriate level to reaffirm US opposition to the lifting of the arms embargo, and solicit host government views on the issues" using talking points identical to those used in the early 2000s:<sup>187</sup>

- "We are concerned by recent comments suggesting that the EU may consider lifting its arms embargo on China;"
- "The United States position on an arms embargo has not changed since the Tiananmen crackdown of June 1989 or since the last time the EU considered lifting the ban in 2004: We continue to believe that lifting the embargo is not warranted, on either human rights or security grounds;"
- "In terms of human rights, the Chinese Government's actions over the last few months have ignored international concern over specific human rights cases [...];"
- "We refer you to the Department of Defense's annual PLA Military Power Report, which highlights the increased capabilities of Chinese military forces. Lifting the arms embargo would have serious implications for the security and stability of the Pacific region;"
- "(If the EU's [Common Position] is brought up) We believe that the [Common Position] cannot replace the embargo;" 188

and Pragmatic Adaptation," in Hugo Meijer (ed), *Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions*, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.

<sup>187</sup> US Secretary of State, 2010, "The EU Arms Embargo on China," Cable to the US Embassies in the EU, Confidential, February 17, Wikileaks Cablegate.

<sup>188</sup> Although the Common Position – in contrast to the previous 1998 Code of Conduct – is a legally binding document, EU member states do maintain national discretion on arms export license decisions and this has continued to be a source of concern for the US government. Indeed, several studies show that while the European Commission's directive on intra-EU defense transfers has *de facto* europeanized and harmonized intra-EU transfers, the EU Common Position on extra-EU defense exports – as Mark Bromley puts it – has "not

<sup>&</sup>lt;sup>186</sup> Chinese analyst, interview, Shanghai, November 7, 2013.

• "We should continue to discuss the requirements of security and stability in East Asia in the context of the US-EU strategic dialogue on Asia." 189

Washington therefore countered the 2010 attempts at reopening the debate of the embargo on the basis of the same considerations that had driven its opposition in the previous decade, all the more so in light of China's growing diplomatic, military, and economic clout.

Firstly, just like in the 2000s, the US considered the driver behind the 2010 renewed attempt at lifting the embargo to be overwhelmingly commercial. In a hearing held by the US-China Economic and Security Review Commission (USCC), Representative Dana Rohrabacher (R-CA) voiced his concerns as follows: "in 2010, for the first time in years, lifting the embargo was on the EU agenda. [...] The European interest in China arms and the Chinese arms market is all about money [...] It's not strategy." <sup>190</sup>

Secondly, in terms of diverging threat assessments, the US government continued to consider that its transatlantic counterparts had considerably different perception of the potential security implications in East Asia of China's military modernization – given the lack of European vital interests in the region, of formal treaties alliances, and of military bases in the Asia Pacific. In the words of a Commissioner of the USCC "none of these European powers has any security interest whatsoever in Asia other than making sure that their markets stay open." <sup>191</sup>

Thirdly, Washington continued to be highly skeptical on the effectiveness of European export controls in case the ban on arms sales was lifted. Removing the embargo would translate into increased European defense sales to China and thereby provide a direct and material contribution to China's military build-up. 192

Furthermore, Washington continued to consider threats to transatlantic defense industrial relations as a successful lever to dissuade the Europeans to lift the embargo. In the words of a senior US Department of State official:

"Lifting of the EU embargo on China would create an enormous chill in transatlantic defense cooperation. There are many very big European and American companies with joint programs: they would be thrown into chaos [...]. The consequences would go beyond the 'political', there would be huge repercussion on transatlantic defense industrial relations; there are US defense companies with huge interests in Europe and vice versa. [...] And these are big companies with big programs, so there would be a

forced any changes in domestic decision making about what and where arms should be exported. In fact, despite the stated aim of achieving more harmonized arms export policies in line with agreed minimum standards, this does not seem to be something that officials believe has been accomplished, nor is it something that they prioritize for the future." Mark Bromley, 2011, "The EU Common Position on Arms Exports and National Export Control Policies," in Alyson JK Bailes & Sara Depauw (eds), 2011, The EU Defence Market: Balancing Effectiveness with Responsibility, Flemish Peace Institute, p. 45. See also Sara Depauw, 2010, The Common Position on Arms Exports in the Light of the Emerging European Defence Market, Flemish Peace Institute, Background Note, January 18; and Mark Bromley, 2012, "The Review of the EU Common Position on Arms Exports: Prospects for Strenghtened Controls," EU Non-Proliferation Consortium, Non-Proliferation Papers No. 7

<sup>&</sup>lt;sup>189</sup> US Secretary of State, 2010, "The EU Arms Embargo on China," Cable to the US Embassies in the EU, Confidential, February 17, Wikileaks Cablegate.

<sup>&</sup>lt;sup>190</sup> United States-China Economic and Security Review Commission (USCC), 2012, *China-Europe Relationship and Transatlantic Implications*, Hearing before the USCC, 112th Congress, Second Session, April 19, 2012, p. 14. <sup>191</sup> *Ibid.* p. 19.

<sup>&</sup>lt;sup>192</sup> United States-China Economic and Security Review Commission, *USCC 2012 Annual Report to Congress*, p. 321.

huge impact on jobs and on the commercial side. Europeans would have to balance the benefits of lifting the embargo with the costs for transatlantic relations. The F-35 Joint Strike Fighter, which is one of the so-called 'crown-jewels', would be dead [with any] hint of lifting or relaxing the embargo on China. There would be great consequences, including for defense industrial relations with France, with Thales, EADS, etc. All the big transatlantic cooperation would be thrown into doubt. [...] What has been persuasive [in the debates over the EU arms embargo on China] has been the threat, implicit or explicit, of damaging transatlantic defense industrial cooperation, it has been a big argument."<sup>193</sup>

Similarly, Representative Rohrabacher touted US strong opposition (and retaliatory moves) to the 2010 European attempts at lifting the embargo as follows: "the move towards officially lifting the embargo was blocked again by a resolute American opposition. Washington has repeatedly said under both George W. Bush and Barack Obama, and with strong congressional support, that European companies [...] can forget about exporting to the United States if they sign contracts with the People's Liberation Army." 194

To sum up, Washington stood firm in its fierce hostility to any EU attempt to revive the debate on lifting the arms embargo on China in the 2010s. In 2010, the European Union faced the very same opposition and retaliatory threats from the US as it did in the 2000s. The continued US pressures coupled with the changing diplomatic, strategic, and economic calculus within the European Union – including in France – marked the death knell of any prospects of lifting the EU arms embargo against China. After this second failed attempt, as confirmed by a senior US State Department official, the issue of the arms embargo has disappeared from the transatlantic diplomatic agenda: "there has been much less of a push back in recent years, less pressure from Europe. [...] In the most recent discussions, it has not been an issue, it is dormant. The issue of the embargo died down as a front-end-center issue." <sup>195</sup>

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<sup>&</sup>lt;sup>193</sup> US Department of State official, interview, Washington D.C., October 3, 2013.

<sup>&</sup>lt;sup>194</sup> United States-China Economic and Security Review Commission, 2012, *China-Europe Relationship and Transatlantic Implications*, Hearing before the USCC, 112th Congress, Second Session, April 19, 2012, p. 14. <sup>195</sup> US Department of State official, interview, Washington D.C., October 3, 2013.

### ■ (III) TRANSATLANTIC DUAL-USE EXPORTS TO CHINA OR THE HOPELESSNESS OF CONTAINMENT

While the prospect of lifting the European arms embargo against China has vanished from the transatlantic diplomatic agenda, it will be shown that highly sensitive dual-use exports - that are not covered by the US and European embargoes - continue to flow to China. Also, the PRC has increasingly relied upon the commercial-military integration (CMI) and the development of a dualuse science and technological industrial base (D<sup>2</sup>STIB) to fuel its military modernization (for details, see the Appendix). As stressed by the 2014 Pentagon's report on China, "a high priority for China's advanced technology acquisition strategy is its civil-military integration policy to develop an innovative dual-use technology and industrial base that serve both military and civilian requirements. China's defense industry has benefited from integration with its expanding civilian economy and science and technology sectors, particularly sectors with access to foreign technology." <sup>196</sup> As a consequence, although the ban on arms sales to China is unlikely to be removed, not only has the uneven interpretation of Europe's embargo across the EU led to significant European defense sales to the PRC (III.1), but the transfer of sensitive dual-use technology to China remains a considerable challenge and a highly divisive issue between the two sides of the Atlantic (III.2). This, in turn, testifies the hopelessness, in the post-Cold War era, of applying a transatlantic strategy of military/technological containment of the PRC in the style of the Cold War containment of the Soviet Union.

#### III. 1. THE "POROUS" EU EMBARGO AND EUROPEAN DEFENSE SALES TO CHINA

As a result of the diverging interpretations within Europe of what is covered by the EU embargo on China, EU member states have approved arms export licenses to China with a total value of €254 million in 2008, of €209 million in 2009, and of more than €217 million in 2010 (see figure below). <sup>197</sup> In 2010, only 30 license applications for exporting European military items to China were denied. <sup>198</sup> As previously mentioned, France has been by far the biggest EU supplier both in terms of the value and the types of defense equipment exported to the PRC. Paris authorized 89% of the total value of these arms export licenses in 2008, 95% in 2009, and more than 90% in 2010. <sup>199</sup> A study by the Stockholm International Peace Research Institute (SIPRI), based upon data from the French Ministry of Defense, details the quantity and type of equipment exported by France to the PRC, which ranked as the 17<sup>th</sup> largest recipient of French defense exports between 2003 and 2012. <sup>200</sup> The SIPRI report shows that, during this timeframe, the value of the French export authorizations delivered for

<sup>&</sup>lt;sup>196</sup> US Department of Defense, 2014, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014*, Office of the Secretary of Defense, p. 13.

<sup>&</sup>lt;sup>197</sup> Bart van Hezewijk, 2012, "Licensed Exports to China: A Not So Level Playing Field," World Export Controls Review, November (based upon the 2011 COARM annual report).

<sup>&</sup>lt;sup>198</sup> Ibid.

<sup>&</sup>lt;sup>199</sup> Ibid.

<sup>&</sup>lt;sup>200</sup> Oliver Bräuner, Mark Bromley, Mathieu Duchâtel, 2013, "Arms Exports to China," *SIPRI Policy Paper No. 42* (forthcoming).

transfers or licensed production oscillated between €160 and €180 million, with an annual value of actual deliveries ranging from €76 to €115 million. Pecifically, between 2003 and 2012, the majority of French defense transfers to China included imaging and countermeasures equipment (42%), aircraft equipment (37%), and electronic equipment (6%). Not surprisingly, therefore, the European arms embargo on China has been labeled as a "porous" – or even "invisible" – ban on arms sales to China, as it has resulted in significant licit sales of defense equipment to the PRC since 1989.

	China	%	Hong Kong	%	Taiwan	%	Worldwide
United States	\$17,700	0.00%	\$1,300,429	0.00%	\$311,249,894	0.91%	\$34,085,021,543
European Union	€217,687,589	0.69%	€2,407,875	0.01%	€77,742,419	0.25%	€31,722,887,511
<ul> <li>Austria</li> </ul>	€128,096	0.01%	€35,274	0.00%	€136	0.00%	€1,768,320,054
– Belgium					€77,413	0.01%	€1,002,810,809
- Bulgaria					€2,855,000	0.97%	€295,809,848
<ul> <li>Czech Republic</li> </ul>	€859,697	0.19%					€451,075,224
<ul> <li>Finland</li> </ul>					€7,500	0.01%	€61,219,431
- France	€196,329,666	1.76%					€11,181,813,034
- Germany	€1,645,071	0.03%	€281,177	0.01%	€8,727,802	0.18%	€4,754,136,037
<ul> <li>Hungary</li> </ul>			€55,000	0.04%			€138,164,302
- Italy	€657,743	0.02%	€19,338	0.00%	€5,163,788	0.16%	€3,251,458,929
<ul> <li>Netherlands</li> </ul>					€27,036,622	2.96%	€912,881,300
- Spain			€50,000	0.00%	_		€2,238,406,427
<ul> <li>United Kingdom</li> </ul>	€18,067,316	0.64%	€1,967,086	0.07%	€33,874,157	1.19%	€2,836,853,872

For the EU and its Member States the licence value for China includes licensed exports to Macao (licences from Austria, Czech Republic and United Kingdom, total value <€150,000). The U.S. does not list Macao as a separate destination.

For France the licence value for China includes licences for Hong Kong (no separate data available).

For Italy and Spain the licence value for Hong Kong represents actual export value as license value is not available.

Source: Bart van Hezewijk, 2012, "Licensed Exports to China: A Not So Level Playing Field," World Export Controls Review, November (based upon the 2011 COARM annual report).

In contrast, the US embargo against China, being enshrined in US law since 1989 – coupled with the previously described American concerns on the contribution of defense sales to China's military build-up –, has prevented any significant sale of American military equipment to the PRC since 1989. In 2009 and 2011, for instance, there were no exports of US defense articles from the US to China. <sup>204</sup> In 2010, Washington authorized one license with a value of merely \$17,700 for defense articles to China (Category XIV, i.e. toxicological agents, including chemical and biological agents, and associated equipment); <sup>205</sup> the US also authorized a license value of \$300,000 for defense services to China. <sup>206</sup> These values pale in front of European, and especially French, defense exports to the PRC. The combination of the stringent US embargo and of Europe's (relatively) weaker arms ban has nonetheless prevented the American and European exports of major weapons systems to the

<sup>&</sup>lt;sup>201</sup> *Ibid*.

<sup>&</sup>lt;sup>202</sup> *Ibid*.

<sup>&</sup>lt;sup>203</sup> May-Britt Stumbaum, 2008, "The Invisible Ban. EU Maintains Weapons Embargo on China," *Jane's Intelligence Review: Chinawatch*, December, p. 52-53.

<sup>&</sup>lt;sup>204</sup> Bart van Hezewijk, 2012, *op. cit.*, p. 4 (based upon data from the 2011 "Report by the Department of State pursuant to Section 655 of the Foreign Assistance Act of 1961").

<sup>&</sup>lt;sup>205</sup> This license might have been issued for the export chemical agents for a proficiency test by the Organisation for the Prohibition of Chemical Weapons, see Bart van Hezewijk, 2012, *op. cit.*, p. 4.
<sup>206</sup> *Ibid*.

People's Republic of China since 1989. At the same time, however, these restrictions do not cover the sale of sensitive dual-use technology that could directly contribute to the modernization of the Chinese military.

#### III. 2. TRANSATLANTIC DUAL-USE EXPORTS TO THE PRC

Both the United States and the European Union implement export controls on the sale of dual-use items. European dual-use export controls are governed by the European Commission Dual-Use Regulation 428/2009, and its Annex I specifies the list of controlled dual-use items. This list is derived from the control lists of the multilateral export control regimes (the Wassenaar Arrangement, the Missile Technology Control Regime, the Nuclear Suppliers Group and the Australia Group). In the US, the statutory authority for dual-use export controls is the Export Administration Act (EAA) of 1979, implemented by the Export Administration Regulations (EAR), which authorizes the Department of Commerce's Bureau of Industry and Security (BIS) to control the dual-use items listed in the Commerce Control List (CCL). Despite these transatlantic export control systems, growing challenges to controlling the global diffusion of technology in the post-Cold War era (III.2.A) and differences in China-related regulations on the two sides of the Atlantic (III.2.B) have resulted in considerable transatlantic dual-use technology transfers to China (III.2.C).

#### III.2.A. The Challenge of Dual-Use Technology Diffusion in the Post-Cold War Era

Several interrelated factors – as examined in more detail elsewhere – have weakened the ability of states to control the diffusion of dual-use technology in the post-Cold War era; and this, in turn, has facilitated the acquisition by China of advanced dual-use technology to fuel its military build-up.<sup>207</sup>

First, the post-Cold War multilateral institution governing export controls, the Wassenaar Arrangement – which replaced the Cold War Coordinating Committee for Multilateral Export Controls (COCOM) in 1996 –, lacks COCOM's unanimity rule that provided each COCOM member with the right to veto the individual exports of other member countries. And the reason is that, beginning in the early 1990s, pressures mounted from the Europeans to loosen multilateral export restrictions and to dismantle COCOM. The demise of the USSR paved the way for a radical reform of the multilateral export control framework. COCOM formally ceased to exist on March 31, 1994, and negotiations started over its replacement with a new post-Cold War institution. Throughout the negotiations, several European states (and in particular France, the UK, and Germany) opposed a COCOM-type institution (i.e. with members' veto power) and did not want to target specific countries (such as China as well as Iran, Iraq, Libya and North Korea) the same way COCOM targeted Warsaw Pact countries.<sup>208</sup> As far as China was concerned, the US negotiating team was able, despite

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<sup>&</sup>lt;sup>207</sup> This section draws on Hugo Meijer, 2011, "Controlling the Uncontrollable? US Dual-Use Export Controls in the Post-Cold War Era," *Fiche de l'I.R.S.E.M. No. 10*, Strategic Research Institute of the French Military Academy; and Hugo Meijer, 2013, *op. cit.*, Chapter III.2.

<sup>&</sup>lt;sup>208</sup> Interviews with officials from the US Departments of State, Defense and Commerce who participated in the negotiations that led to the replacement of COCOM with Wassenaar, Washington D.C., March-May and

the reluctance of the French delegation, to maintain the Europeans' restrictions on arms transfers to the PRC in line with their 1989 post-Tiananmen embargo; but on dual-use exports to China, in the words of a US negotiator, "we largely failed." He explains that although the goal of the US negotiating team was to restrict China's access to dual-use technologies, its European allies were unwilling to accept it: "in fact, no ally was willing to restrict technology to China. There was never any opportunity to get restrictions on [dual-use exports to] China." As stressed by William Clements, Director for Nonproliferation and Export Controls at National Security Council (1993-1995), the Europeans saw China more as an economic opportunity than as a potential military competitor. The head of the US delegation to the Wassenaar Arrangement Experts Group for advanced civil and military technologies recalls the Dutch Vice-Minister of Foreign Economic Relations and chair of the Wassenaar negotiations, Frans Engering, as telling him "with Iran we are with you, but China is our market." As a consequence of these disagreements, the post-Cold War multilateral export control institution that emerged from the negotiations lacks a veto power and agreed-upon targets, and is therefore a much loser system and is less effective than its Cold War predecessor.

Second, the commercialization and global diffusion of dual-use technologies have led to the proliferation of alternative sources of supply (the so called "foreign availability") of advanced technologies. Throughout the Cold War and until the mid-1980s, the development of state-of-the-art technologies applicable to military systems was most often driven by the defense sector, i.e. generated by defense contractors funded by governments and then transferred and adapted to the commercial marketplace. However, beginning in the 1980s and increasingly so after the end of the Cold War, commercial R&D expenditures gradually came to outpace the government R&D funding.<sup>213</sup> As a consequence, the center of gravity in the development of dual-use technologies has shifted from State-led research to the commercial sector. And the continuing trend toward the globalization of high tech industries means that exports are now the key to the growth and good health of the high technology sector. As a consequence of these trends, excessively stringent controls harm the competitiveness of the national industries by putting them at a competitive disadvantage relative to foreign competitors not subject to the same levels of control, without inhibiting China (or any other target country) from acquiring sensitive technologies. In the words of a former US National Security Council official "the technological advances simply made the [foreign] availability of computational capability so diffuse that it became impossible to control. [...] You just lost control."<sup>214</sup>

Third, and relatedly, the growing indigenous technological capabilities in countries subject to export controls have made many export controls to such countries increasingly ineffective, if not sometimes irrelevant. This is apparent, for instance, both in the case of US controls on semiconductors and supercomputer exports to the People's Republic of China. In the semiconductor sector, the Government Accountability Office (GAO) has concluded that:

"The gap between US and Chinese semiconductor manufacturing technology has rapidly narrowed. [...] Fifteen years ago, China was five generations of technology behind the

September-November 2010.

James Lewis, head of the US delegation to the Wassenaar Arrangement Experts Group for advanced civil and military technologies (1993-1996), interview, Washington D.C. April 29, 2010.

210 Ihid.

<sup>&</sup>lt;sup>211</sup> William Clements, interview, Washington D.C., March 25, 2010.

<sup>&</sup>lt;sup>212</sup> James Lewis, interview, April 29, 2010.

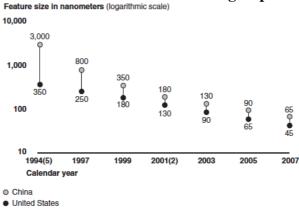
<sup>&</sup>lt;sup>213</sup> Hugo Meijer, 2011, op. cit., p. 6.

<sup>&</sup>lt;sup>214</sup> William Clements, Director for Nonproliferation and Export Controls at National Security Council (1993-1995), interview, Washington D.C., March 25, 2010.

United States' then-current commercial production capability. [...] Today, China's advanced manufacturing facilities can make chips that are less than one generation behind the current, commercial state-of-the-art. [...] The growing sophistication of China's semiconductor manufacturing facilities, which has improved its ability to develop more capable weapons systems and advanced consumer electronics, has been fuelled by China's success in acquiring manufacturing technology from abroad."<sup>215</sup>

A 2008 follow-up report by the GAO showed that since 2002 commercial state-of-the-art production had continued to advance in China. By 2007, US companies produced integrated circuits with a feature size of 45 nanometers, while the most advanced companies in China were able to produce integrated circuits with a feature size of 65 nanometers – approximately one generation behind. <sup>216</sup> This example highlights how global technology diffusion allows China, through its access to foreign technologies, to narrow the gap with western state-of-the-art dual-use technologies.

### China's Indigenous Capabilities US and Chinese Semiconductor Manufacturing Capability, 1994-2007



Source: Government Accountability Office, 2008, Export Controls: Challenges with Commerce's Validated End-User Program May Limit Its Ability to Ensure That Semiconductor Equipment Exported to China Is Used as Intended, GAO-08-1095, September.

This is also the case of supercomputers (or high-performance computers). Supercomputers have civilian applications (such as weather forecasting) as well as military and intelligence applications. These are used by intelligence agencies for cryptography and cryptanalysis (i.e. code breaking and code protection of encrypted electronic communications) as well as by the military for designing and modeling complete submarine hulls, developing non-acoustic anti-submarine warfare sensors, simulating nuclear weapons tests, chemical and biological weapons production, and designing improved nuclear weapons and ballistic missiles. The worldwide diffusion of the computational capabilities has facilitated China's acquisition of these dual-use technologies. The percentage of the world's 500 most powerful supercomputers employing commercially available microprocessors has

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<sup>&</sup>lt;sup>215</sup> Government Accountability Office, 2002, *Export Controls: Rapid Advances in China's Semiconductor Industry Underscore Need for Fundamental US Policy Review*, GAO-02-620, pp. i-2-9

<sup>&</sup>lt;sup>216</sup> Government Accountability Office, 2008, Export Controls: Challenges with Commerce's Validated End-User Program May Limit Its Ability to Ensure That Semiconductor Equipment Exported to China Is Used as Intended, GAO-08-1095, September 2008, p. 11. The feature size of a semiconductor is measured in nanometers and is used to define the current level of technology. Each reduction in feature size, from 65 to 45 nanometers for instance, is considered a move to a new generation of technology (*ibid*).

grown considerably beginning in the 1990s (from approximately 10% in 1993 to 75% in 1997). <sup>217</sup> And as explained by a former senior US export control official, "the basic ingredients, the chips, the microprocessors [are] widely available and manufactured all over Asia and Europe by a variety of companies." <sup>218</sup> Several interviewees stress the fact that in Asia, beside Japan, other countries had become a source for China's acquisition of computer technology (e.g. semiconductors), such as Taiwan, South Korea and Malaysia. <sup>219</sup> As a consequence of this proliferation of sources of supply, coupled with Beijing's major investments in this field, China's supercomputing capabilities have considerably increased in the post-Cold War era. In 2010 and again in 2013, China surpassed the US in building the world's most powerful supercomputer, the Tianhe-1A and Tianhe 2 respectively (also known as "Milky Way"). <sup>220</sup> Given the growing capabilities of the PRC in the field of supercomputing, most controls on the export of supercomputers to China have essentially lost their *raison d'être*.

In sum, the weakening of the post-Cold War multilateral institution governing export controls, the commercialization and worldwide diffusion of advanced technologies, as well as China's growing indigenous capabilities, have reduced the effectiveness of US and European export controls toward China. Besides these growing challenges to the control of dual-use technology diffusion, differing regulations on dual-use exports to the PRC on the two sides of the Atlantic have also facilitated Chinese access to advanced technology.

#### III.2.B. Different Transatlantic Regulations on Dual-Exports and the "China Rule"

While the European Union implements export controls on the items listed in Annex I of its supranational regulation, the EU does not have a specific policy or regulation with regard to dual-use transfers to the PRC. In contrast, the US government has established, in 2007, the so-called "China Rule." This regulation is a key difference between how the US and the EU restrict dual-use exports to China and it became, as explained below, a source of transatlantic controversy over technology transfers to the PRC in the 2000s. 222

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<sup>&</sup>lt;sup>217</sup> Seymour Goodman, Peter Wolcott, Patrick Homer, 1998, *High-Performance Computing, National Security Applications, and Export Control Policy at the Close of the 20th Century,* Center for International Security and Arms Control, Stanford University, May, p. 14.

<sup>&</sup>lt;sup>218</sup> Statement by William Reinsch, Under Secretary of Commerce for Export Administration (1994-2001), *Chinese Access to Dual-Use and Military Technology*, hearing before the Joint Economic Committee, Congress of the United States, 105<sup>th</sup> Congress, Second Session, April 24, 1998, p. 5.

<sup>&</sup>lt;sup>219</sup> Interviews with Ian Baird, Deputy Assistant Secretary of Commerce for Export Administration (1992-2000), March 27, 2010); William Clements, Director of Nonproliferation and Export Controls at the National Security Council (1993-1995), March 25, 2010; David Tarbell, Deputy Under Secretary of Defense for Technology Security Policy and Director of the Defense Technology Security Administration (1994-2001), May 4, 2010; and Richard Van Atta, Assistant Deputy Under Secretary for Dual Use and Commercial Programs (1993-1998), May 4, 2010.

Ashlee Vance, 2010, "China Wrests Supercomputer Title from US," *New York Times*, 28 October. For updates on the world's 500 most powerful supercomputers, see <a href="http://www.top500.org">http://www.top500.org</a>.

<sup>&</sup>quot;Revisions and Clarification of Export and Reexport Controls for the People's Republic of China (PRC); New Authorization Validated End-User; Revision of Import Certificate and PRC End-User Statement Requirements," Federal Register, Vol. 72, No. 117, June 19, 2007.

As explained by Matthew Borman, Deputy Assistant Secretary of Commerce in charge of export controls (2001-present) (interview, Washington D.C., September 13, 2013) a second "structural" difference between US

The "China Rule" combines two major components: on the one hand, it imposes tighter controls on a limited number of technologies if they are knowingly intended for military end-use in China (the Military End-Use List); on the other, it establishes a mechanism aimed at facilitating trade with trusted civilian PRC end-users (the Validated End-User program, VEU). 223 In the words of Under Secretary of Commerce for Industry and Security (2007-2009) Mario Mancuso "this new rule builds higher fences around the most sensitive technologies to hedge against a rapid and opaque Chinese military buildup. At the same time, it will boost civilian high-tech trade by making it easier for US companies to compete and win in China." The China Rule specifically and exclusively modifies US regulations on export controls to the PRC, thereby reflecting the US government's growing concerns over the potential contribution of dual-use technologies to the modernization of the People's Liberation Army. In the words of Roy Kamphausen, China Branch Chief in the Directorate for Strategic Plans and Policy (J5) of the Joint Staff (2001-2003) and then Country Director for China, Mongolia, Hong Kong, and Taiwan in the Office of the Secretary of Defense (2003-2004):

"China's military modernization was becoming of more concern to the Pentagon, and in particular the idea that China was wanting to implement Network Centric Warfare, which was essentially how to use information technology to improve situational awareness and cue targeting systems, and in the end result in much more accurate targeting and destruction. [...] The concern was that [through the acquisition of dual-use technologies] related to space, high-computing, and others, they would be in a much better position to facilitate their transition to information-centered warfare." 225

The main changes envisaged by the "China Rule" can be synthesized as follows. The rule incorporates a presumption of denial for items controlled for reasons of national security, biological and chemical proliferation, nuclear proliferation and missile technology by amending the existing regulation "to make clear that the overall policy of the United States for exports to the PRC of [items controlled on the Commerce Control List for reasons of national security] is to approve exports for civil end-uses but generally to deny exports that will make a direct and significant contribution to Chinese military capabilities."<sup>226</sup> The rule establishes a Military End-Use List of 20 product categories.<sup>227</sup> These items include among others: carbon fiber and prepegs for use in composite structures; certain hydraulic fluids, bearings and bearing systems, and oscilloscopes; high performance computers (exceeding 0.5 weighted teraflops), and telecommunications equipment operating outside normal temperatures;

and EU regulations is the so-called US "Entity List" – of which the EU has no equivalent. This document lists the names of certain foreign persons – including businesses, research institutions, government and private organizations, individuals, and other types of legal persons – that are subject to specific license requirements for the export, reexport and/or transfer (in-country) of specified items. For more details, see http://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list

This section draws on Hugo Meijer, 2013, op. cit., Chapter X.

<sup>&</sup>lt;sup>224</sup> Quoted in Wendell Minnick, 2007, "US Streamlining Curbs on Exports To China's Military," *DefenseNews*, June 25, 2007.

<sup>&</sup>lt;sup>225</sup> Roy Kamphausen, interview, Washington D.C., March 28, 2012.

<sup>&</sup>quot;Revisions and Clarification of Export and Reexport Controls for the People's Republic of China (PRC); New Authorization Validated End-User; Revision of Import Certificate and PRC End-User Statement Requirements," Federal Register, Vol. 72, No. 117, June 19, 2007 (emphasis added).

<sup>&</sup>lt;sup>227</sup> The 20 product categories consist of 31 export control classification numbers (ECCNs). ECCNs are a classification used in the Commerce Control List to identify items for export control purposes. There are 10 categories on the Commerce Control List. The first number of the ECCN identifies the category to which it belongs, for instance, 1 = Nuclear Materials Facilities and Equipment, 4 = Computers, 9 = Propulsion Systems, Space Vehicles and Related Equipment. See <a href="http://www.bis.doc.gov/licensing/doineedaneccn.html#qtwo">http://www.bis.doc.gov/licensing/doineedaneccn.html#qtwo</a>.

certain lasers, optical sensing fibers, airborne communications and inertial navigation systems; and certain avionics production and test equipment, underwater systems, aircraft, and aero gas turbine engines.<sup>228</sup> With this new list, a license is required if the exporter knows, has reason to know, or is informed by the Commerce Department that the item is or may be intended for military end-uses in China.

The China Rule also establishes the Validated End-User (VEU) program. The VEU is a method that allows trusted Chinese end-users to be nominated for the program and, after the approval of the Commerce Department, US exporters may transfer items eligible under the program to the Validated End-User in China without a license. This method consists of an application process by companies in China; the US government's decision to approve (or deny) access to the VEU is based upon a range of information including: the VEU candidate's past record of exclusive civil end-use activities; its compliance record with US export controls; its capability to comply with the recordkeeping requirements of the VEU authorization; agreement to on-site review prior to approval and subsequently to ensure adherence to VEU conditions; and its relationship with US and foreign companies. The US government also analyzes the VEU candidate's structure and ownership as well as its business activities or corporate relations with government or military organizations on the basis of a variety of information including: proprietary information provided by the VEU candidate, publicly available information, and classified intelligence reports to cross-check data and to confirm the enduser's ownership interests and structure, and its fitness for the VEU program.<sup>229</sup> Overall, the VEU is meant to streamline the licensing process for certain companies for whom US exporters would routinely request licenses for the same product over time, thereby facilitating Sino-American trade with trusted civilian end-users.

The creation of the first (and most controversial) component of the "China Rule," the Military End-Use List, found its origin in two main causes: the previously mentioned US government's concerns about the role of dual-use technology in China's military modernization and the 2003 Wassenaar Arrangement's Statement of Understanding. In December 2003, the 33 members of the Wassenaar Arrangement agreed to a Statement of Understanding (SOU) on the control of otherwise uncontrolled dual-use items. The SOU established "catch-all" controls for countries subject to an arms embargo, i.e. it recommended "member countries to take appropriate measures to ensure that a government authorization is required for exports of non-listed dual-use items for military end-uses in destinations subject to (1) a binding United Nations Security Council arms embargo, (2) any relevant regional arms embargo that is binding, or (3) any relevant regional arms embargo to which a participating state has voluntarily consented to adhere." The Acting Assistant Secretary of State for International Security and Nonproliferation (2005-2006) Francis Record explains the origin of the 2003 Wassenaar's "catch-all" provision as follows:

<sup>&</sup>lt;sup>228</sup> US Department of Commerce, 2008, "Keynote Address of Under Secretary of Commerce for Industry and Security Mario Mancuso – Technology Leadership, Economic Power, and US National Security: US Dual-Use Trade with China," The Heritage Foundation, February 20. These items had been previously controlled mainly for anti-terrorism reasons and a license was therefore required only for their export to countries deemed to be sponsors of terrorism (Cuba, Iran, North Korea, Sudan, Syria).

<sup>229</sup> *Ibid*.

<sup>&</sup>lt;sup>230</sup> Christopher Padilla, Assistant Secretary for Export Administration (2006-2007), interview, Washington D.C., June 13, 2011.

<sup>&</sup>lt;sup>231</sup> US Department of Commerce, 2006, *US Dual-Use Export Controls for China Need to Be Strengthened,* Office of Inspector General, Final Report No. IPE-17500, p. 20, p. 20, footnote 45.

"The European Union adopted a conventional arms catch-all in 2000 as one element of a new regulation concerning export controls for dual-use items and technology. That catch-all is established in Article 4.2 of Council Regulation Number 1334/2000, and as such is legally binding on all Member States of the European Union. Authorization is required for the export of items and technology not listed on the EU's dual-use control list if the purchaser or destination is 'subject to an arms embargo decided by a common position or joint action adopted by the Council or a decision of the OSCE or an arms embargo imposed by a binding resolution' of the UN Security Council and the item is or may be intended for a military end-use. Following adoption of this provision within the EU, the then 15 Members of the EU jointly sponsored a proposal in the Wasssenaar Arrangement to adopt a similar provision. That proposal was adopted at the December 2003 Wassenaar Plenary."<sup>232</sup>

In 2004, the question became how the US and the EU should implement that Wassenaar recommendation. According to then Deputy Assistant Secretary of Commerce for Export Administration (2001-present), Matthew Borman, "as we were thinking of how to implement this Wassenaar provision, we in the Commerce Department came up with the idea of what is now in the China Rule: we would not apply to China military end-use controls to all items subject to our jurisdiction, but only to an additional list of enumerated [items]. A very limited catch-all if you will in terms of the scope of items." At the same time, disagreements emerged between the US and the EU on the extent to which China, which was subject to an arms embargo, should be covered by these catch-all controls. As stressed by the US government's 2007 report *Interagency Review of US Export Controls for China*, "it appeared that the United States was mostly alone in applying the restrictions for exports to China." According to leaked diplomatic cables, US export control officials met with their counterparts in France and Germany trying, unsuccessfully, to persuade them to apply the same level of controls on dual-use exports to China as the US government did. In a bilateral meeting with French officials, the US official

"urged the GOF [Government of France] to work with the USG [US Government] to ensure that the Chinese military could not obtain such systems [the items listed in the China Rule] from other Wassenaar countries [...]. He urged the GOF to implement similar controls as part of its Wassenaar Arrangement commitments. [...] The GOF was noncommittal on whether or how it would work with the EU to adopt similar controls. [The US official] pressed, arguing that to allow unlisted exports to military end-uses is both contrary to the Wassenaar understanding and would undermine the EU arms embargo. GOF officials argued that because the EU embargo is 'limited,' they did not agree that the 2003 SOU applied to China.<sup>235</sup>

Similarly, in a meeting with German officials, the US government "urged Germany implement similar

<sup>234</sup> US Department of Commerce, 2006, *US Dual-Use Export Controls for China Need to Be Strengthened,* Office of Inspector General, Final Report No. IPE-17500, p. 20.

Additional Information for the Record provided by Francis Record, in *China's Military Modernization and US Export Controls*, hearing before the United States-China Economic and Security Review Commission, March 16-17, 2006

<sup>&</sup>lt;sup>233</sup> Matthew Borman, interview, Washington D.C., November 10, 2010.

<sup>&</sup>lt;sup>235</sup> US Embassy in France, 2006, "Export Control Bilats Between France and DOC Assistant Secretary Christopher Padilla," Cable from the US Embassy in Paris, Confidential, December 7, Wikileaks Cablegate.

controls as part of its WA [Wassenaar Arrangement] commitments. [The German officials] said the German Government agrees with the USG concerning arms exports to China. [...] In the end, though, Germany will follow EU regulations on dual-use items."<sup>236</sup> The EU member states indeed considered that the "catch-all" clause should not be applied to China, because the EU arms embargo on the PRC is a declaration by the EU Council (and not a decision or a common position) and is therefore not legally binding.<sup>237</sup> The Assistant Secretary of Commerce then in charge of dual-use export controls, Christopher Padilla (2005-2006), explains these transatlantic disagreements as follows: "the reason why the US did [apply the Wassenaar recommendation on exports to China] and no one else did is that the strategic reality is that none of the other allies realistically face prospects of dealing with the Chinese military in an hostile situation, this is not true for the United States. Clearly the US and China have a different military relationship and posture than our European allies and China. So that is why the US did more than the others. [...] It is a reflection of the strategic realities." <sup>238</sup> These controversies between the two sides of the Atlantic reflect the conflicting transatlantic perspectives on China's military modernization that characterized the 2000s – discussed in Section I.

Divergences in China-related transatlantic regulations on dual-use exports to the PRC and the previously described decreased effectiveness of dual-use export controls in the post-Cold War era – coupled with the industry's major economic interests in accessing the lucrative Chinese market –, have translated into considerable transatlantic dual-use transfers to the PRC.

#### III.2.C. Characterizing Transatlantic Dual-Use Transfers to China

Despite the fragmentary nature of the available data from open source, the following analysis seeks to shed light (to the extent possible) on the volume and categories of dual-use technologies transferred by the US and the EU – including by France – to the People's Republic of China.

#### US Dual Use Exports to China

The United States reports its dual-use exports in the Department of Commerce's (DOC) Bureau of Industry and Security (BIS) annual reports. In 2010, US exports to controlled countries totaled \$107.4 billion and China was by far the largest single export market among the controlled country group, with roughly 86% of the total, and Russia ranking second with roughly 6%.<sup>239</sup> The DOC data indicate that computer and electronic products, transportation equipment, machinery, chemicals, and waste and scrap represented more than half of the total US exports to controlled countries, especially

<sup>&</sup>lt;sup>236</sup> US Embassy in Germany, 2007, "Export Control Bilateral Talks Between Germany and DOC Assistant Secretary Padilla," Cable from the US Embassy in Berlin, Confidential, February 2, Wikileaks Cablegate. See also US Embassy in Sweden, 2007, "Export Control Bilats Between Sweden And DOC Assistant Secretary Christopher Padilla," Cable from the US Embassy in Stockholm, Confidential, January 23, Wikileaks Cablegate.

<sup>&</sup>lt;sup>237</sup> On this point, see Bart Van Hezewijk, 2012, p. 5.

<sup>&</sup>lt;sup>238</sup> Christopher Padilla, interview, Washington D.C., June 13, 2011.

<sup>&</sup>lt;sup>239</sup> US Department of Commerce, 2011, *Bureau of Industry and Security Annual Report for Fiscal Year 2011*, Bureau of Industry and Security, pp. 60-63; for details on export licenses for China, see the appendix "Approved Applications for Country Group D.

China. Specifically, an analysis of American license applications for exports to China in 2010 shows that a large number involved manufacturing equipment and facilities, electronics, and components for use in foreign-invested production facilities; among the top-valued manufacturing equipment exported in 2010 were equipment for semiconductors, chemical manufacturing facilities, acoustics and electronic components (including top-valued components such as mass spectrometers, integrated circuits and pressure transducers). As the 2011 BIS report puts it, "many other types of [dual-use] products, such as aircraft, computers and other electronic components are doubtless exported without the need for an export license (i.e., because they are not controlled for national security reasons or are eligible for shipment under a license exception)."<sup>241</sup>

#### European Dual-Use Exports to China

In contrast, due to industrial considerations, the European Union does not report the value of its member states' dual-use exports. This makes it quite hard to quantify overall EU dual-use transfers to China, let alone to gauge their impact upon China's military modernization. According to some reports, European dual-use transfers to China have been extensive in the areas of commercial aviation, space technology, information and communications technology, material science, mechanical engineering, and nuclear physics. <sup>242</sup> Furthermore, a growing number of illicit technology transfers (including espionage, cyber-theft, etc) via companies or research institutes in China has been reported. As a Pentagon report explains, a "network of government-affiliated companies and research institutes often provides the PLA access to sensitive and dual-use technologies or knowledgeable experts under the guise of civilian R&D. The enterprises and institutes accomplish this through technology conferences and symposia, legitimate contracts and joint commercial ventures, partnerships with foreign firms, and joint development of specific technologies. In the case of key national security technologies, controlled equipment, and other materials not readily obtainable through commercial means or academia, China has used its intelligence services and other illicit approaches" to collect sensitive information. 243 Furthermore, dual-use exports increasingly include intangible technology transfers (ITT) that pose considerable a challenge for export control authorities. As Oliver Bräuner indicates, ITT include both the transfer of technical information via electronic means (e.g., email, software, or telephone) and the transfer of knowledge and skills by persons (e.g., technical assistance, research papers presented at academic conferences, etc.). 244 A final venue for sensitive technology transfers – usually neglected in the existing literature – is law-enforcement cooperation, which has been an important channel for sensitive technology transfers such as signal and image recognition software, textiles for law-enforcement agencies uniforms, and night-vision equipment.<sup>245</sup>

<sup>&</sup>lt;sup>240</sup> Ibid.

<sup>&</sup>lt;sup>241</sup> *Ibid*.

<sup>&</sup>lt;sup>242</sup> Oliver Bräuner, 2013, "Beyond the Arms Embargo: EU Transfers of Defense and Dual-Use Technologies to China," *Journal of East Asian Studies*, Vol. 13, p. 464.

<sup>&</sup>lt;sup>243</sup> US Department of Defense, 2014, op. cit., p. 14.

<sup>&</sup>lt;sup>244</sup> See Oliver Bräuner, 2013, *op. cit.*, p. 464.

<sup>&</sup>lt;sup>245</sup> Oliver Bräuner, Mark Bromley, Mathieu Duchâtel, 2013, "Arms Exports to China," *SIPRI Policy Paper No. 42* (forthcoming).

#### European ITAR-Free Satellite Technology

One area of EU dual-use transfers to China that has generated considerable transatlantic controversies has been the development, by some European companies, of so-called ITAR-free satellites that could be sold to China, despite the existing export controls. In order to circumvent US arms export control regulation (the International Traffic in Arms Regulations, or ITAR) and its cumbersome licensing process, to offer customers faster delivery of products, and to have access to fast growing markets like the Chinese one, several European satellite companies began, in the early 2000s, to design and advertise satellites without US-built ITAR controlled components, the so-called "ITAR-free" satellites. The company Thales Alenia Space, in particular, has gradually developed a niche market of ITAR-free communications satellites, which can be exported to the People's Republic of China for launch. 246 Thales Alenia Space (formerly Alcatel) decided, in 1998, with the support of European institutions, to reduce its dependence upon US components and to develop "unrestricted," or "ITAR-free," satellites. 247 Not only would these satellites contain no US-built ITAR components, but the decision was made to adopt the de minimis rule: for satellite exports to China, the overall USbuilt components would not exceed 25% of the satellite's technological content.<sup>248</sup> European Institutions such as the European Space Agency (ESA) and national agencies supported this strategy, seeing it as a move that may improve Europe's strategic independence from the United States in space technology.<sup>249</sup> The ESA had indeed encouraged European companies to find non-US sources for space products, and had funded the development of competing products to avoid burden ITAR requirements and develop indigenous capabilities.<sup>250</sup> The French and German governments also provided funding to facilitate European research, development, and production of indigenous components and equipment. <sup>251</sup> In 2001, Thales announced that it would market GEO Spacebus commercial communications satellites without US-built ITAR components.<sup>252</sup> Commercially, the objective pursued by Thales in developing ITAR-free space technology was twofold. First, this would avoid the uncertainty, time delays and potential revenue losses associated with ITAR restrictions.<sup>253</sup> Second, they would offer the flexibility for customers to launch spacecraft on any launch vehicle, including those restricted for US-built satellites or with US-built components, such as China's Long March vehicles. 254 This would allow companies to gain access to less expensive Chinese launchers. The key commercial driver behind Thales' decision was indeed the prospect for the Chinese market, perceived to have the greatest growth potential.<sup>255</sup> Between 2005 and 2010, ten ITAR-free GEO telecommunications satellites were launched by Chinese Long March vehicles (figure below). 256 Five were manufactured by Thales Alenia Space and five by the Chinese spacecraft manufacturer China

<sup>&</sup>lt;sup>246</sup> Jeffrey Foust, 2011, "The Sisyphean Task of Export Control Reform," *The Space Review*, November 7.

<sup>&</sup>lt;sup>247</sup> Employee in a European defense firm, interview, Paris, June 30, 2011. Alcatel Alenia Space was bought by the Thales Group in 2007.

<sup>&</sup>lt;sup>248</sup> *Ibid*.

<sup>&</sup>lt;sup>249</sup> Ibid.

US Department of Defense, 2007, Defense Industrial Base Assessment: US Space Industry Final Report, August., p. x.

<sup>&</sup>lt;sup>251</sup> Employee in a European defense firm, interview, Paris, June 30, 2011.

<sup>&</sup>lt;sup>252</sup> US Federal Aviation Administration, 2010, Semi-Annual Launch Report: Second Half of 2010 – Special Report: "ITAR-Free" Satellites and Their Impact on the US Launch Industry, p. 2.

<sup>&</sup>lt;sup>253</sup> *Ibid.*, p. 2.

<sup>&</sup>lt;sup>254</sup> *Ibid.*, p. 2.

<sup>&</sup>lt;sup>255</sup> Employee in a European defense firm, interview, Paris June 30, 2011.

<sup>&</sup>lt;sup>256</sup> One spacecraft was eventually transferred to Ariane 5.

Academy of Space Technology (CAST).<sup>257</sup> The US government and industry therefore became increasingly concerned that the introduction of ITAR-free satellites therefore enabled China to gain experience and benefit from increased opportunities in the international commercial launch market.<sup>258</sup>

Launches of "ITAR-free" Commercial GEO Communications Satellites, 2005-2010

ITAR-Free Satellite	Owner/Operator	Prime Contractor	Bus Type	Launch Date	Launch Vehicle
APStar 6	APT Satellite (China - Hong Kong)	Thales Alenia Space	Spacebuss 4000	April 12, 2005	Long March 3B
Sinosat 2	Sinosat (China)	China Academy of Space Technology (CAST)	DFH-4	October 29, 2006	Long March 3B
Nigcomsat I	National Space Research and Development Agency (Nigeria)	CAST	DFH-4	May 14, 2007	Long March 3B
Sinosat 3	Sinosat (China)	CAST	DFH-3A	June 1,2007	Long March 3A
Chinasat 6B	Chinsat (China)	Thales Alenia Space	Spacebus 4000	July 5, 2007	Long March 3B
Rascom-QAF I	Regional African Satellite Communication Organization (RascomStar-QAF)	Thales Alenia Space	Spacebus 4000	December 21, 2007	Ariane 5
Chinasat 9	Chinasat (China)	Thales Alenia Space	Spacebus 4000	June 9, 2008	Long March 3B
Venesat I	Ministry of Science and Technology (Venezuela)	CAST	DFH-4	October 30, 2008	Long March 3B
Palapa-D	PT IndosatTbk (Indonesia)	Thales Alenia Space	Spacebus 4000	August 31, 2009	Long March 3B
Chinasat 6A (Sinosat 6)	Chinasat (China)	CAST	DFH-4	September 4, 2010	Long March 3B

Source: US Federal Aviation Administration, 2010, Semi-Annual Launch Report: Second Half of 2010 – Special Report: "ITAR-Free" Satellites and Their Impact on the US Launch Industry.

Other European companies have also developed components or products to replace US-made parts. The European Aeronautic Defense and Space Company (EADS) has built a satellite motor that is completely ITAR-free and two British companies, Marotta and Surrey Satellite Technology, have also begun advertising their products as ITAR-free. Accordingly, US satellite components and technology have gradually begun to be designed out by their European competitors. A 2007 report prepared for the European Commission highlights how ITAR controls proved to be a substantial disadvantage to US businesses and that by offering "ITAR-free" products and services European manufacturers were gaining significant market shares and becoming the market leaders in this area. Beginning in the second half of the 2000s, the US government and satellite industry therefore began voicing the complaint that European manufacturers, thanks to these "ITAR-free"

<sup>&</sup>lt;sup>257</sup> US Federal Aviation Administration, 2010, *op. cit.*, p. 4.

<sup>&</sup>lt;sup>258</sup> *Ibid.*, pp. 3-9. On the US concerns over Thales' ITAR-free satellites see US Embassy in France, 2008, "Thales Preliminary Response to Blue Lantern End Use Check on Satellite Components," Cable from the US Embassy in Paris, Unclassified, July 11, Wikileaks Cablegate.

<sup>&</sup>lt;sup>259</sup> See George Abbey, Neal Lane, 2009, *United States Space Policy: Challenges and Opportunities Gone Astray*, The American Academy of Arts and Sciences, p. 5, and Mitchell Wallerstein, 2009, "Losing Controls: How US Export Restrictions Jeopardize National Security and Harm Competitiveness," *Foreign Affairs*, Vol. 88, No. 6, p. 13.

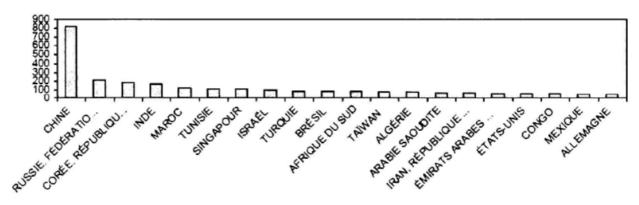
<sup>&</sup>lt;sup>260</sup> Risk & Policy Analysts, 2007, *Impact Assessment Relating to the Economic and Governance Evolution of Space in Europe*, Report prepared for the European Commission – Directorate General Enterprise & Industry, p. 46.

satellites, were obtaining a captive market in China.<sup>261</sup>

#### French Dual-Use Exports to China

Despite the lack of EU reports on dual-use exports, a few member states (such as the United Kingdom) do publish some data in reports of their national export control authorities. <sup>262</sup> Data obtained by the author from the French government provides greater insights into France's main dual-use exports to China. <sup>263</sup> Just like for the United States, China is by far the largest destination of French dual-use exports, followed by Russia (figure below).

#### **Number of Notified Licenses, by country of destination**



Source: Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage

The overall value of dual-use export license requests (all destinations combined) in 2012 was €4,8 billion, almost equivalent to the same figure for military export licenses (€5 billion in 2012 – including sales within Europe). The value of French dual-use exports to China in 2012 was €1,7 billion, i.e. more than 30% of France's total dual-use exports. The table and figure below show the distribution of these exports by export control category. As reported by the French government, "more than 75% of France's dual-use exports to China are destined to nuclear material, far ahead of civilian aerospace exports (10%) (the Chinese program C919) and space exports (sale of components). The other exported items mostly relate to process engineering."

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<sup>&</sup>lt;sup>261</sup> Institute for Defense Analysis, 2007, *op. cit.*, p. 49. See also the statement by the President of the Satellite Industry Association, Patricia Cooper, in *Export Controls on Satellite Technology*, hearing before the Subcommittee on Terrorism, Non-Proliferation and Trade of the Committee on Foreign Affairs, House of Representatives, 111<sup>th</sup> Congress, First Session, April 2, 2009, pp. 43-44.

<sup>&</sup>lt;sup>262</sup> The UK publishes the value of its military and dual-use exports in its annual *Strategic Export Controls* reports.

<sup>&</sup>lt;sup>263</sup> Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage; and Ministère du redressement productif, 2013, *Le contrôle des exportations des biens à double usage*, Service des biens à double usage.

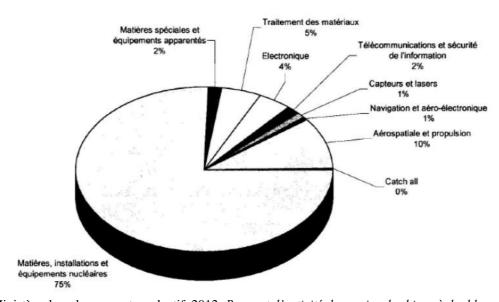
<sup>&</sup>lt;sup>264</sup> Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage.

<sup>&</sup>lt;sup>265</sup> *Ibid*.

<sup>&</sup>lt;sup>266</sup> *Ibid* (author's translation).

EU Dual-Use List Category <sup>267</sup>	French Dual-Use Exports to China (€ million)		
0 Nyalaan matanial installations and againment	1 297		
0 – Nuclear material, installations and equipment	1 297		
1 – Special materials and related equipment	29		
2 – Materials processing	83		
3 – Electronics	70		
5 – Telecommunications and information security	29		
6 – Sensors and lasers	19		
7 – Navigation and avionics	11		
9 – Aerospace and propulsion	171		

Source: Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage

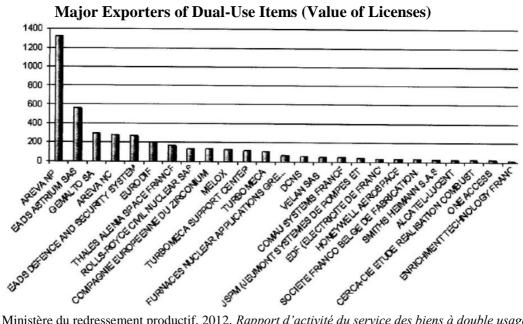


Source: Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage

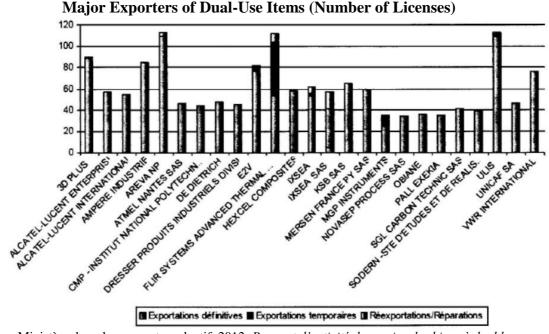
The figures on French dual-use exports to China are consistent with those on overall French dual-use exports to all destinations combined. France's dual-use exports are "dominated by the big contracts (nuclear and satellites) for approximately 50%" of total exports. The following two figures show the 25 most important exporters and demonstrate the preeminence, by far, of the nuclear industry, followed by the space, electronics, chemicals processes, oil and gas industries.

<sup>&</sup>lt;sup>267</sup> Data for categories 4 and 8 are not available in the report (*ibid*).

Ministère du redressement productif, 2013, *Le contrôle des exportations des biens à double usage*, Service des biens à double usage, p. 25 (author's translation).



Source : Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage



Source : Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage

The preceding data and analysis show how, notwithstanding of the US and European embargoes on arms sales to China, not only has the "porous" EU arms ban allowed significant sales of military equipment to the PRC – most notably by France –, but different transatlantic regulations and the growing challenges associated to the worldwide technology diffusion have resulted in considerable dual-use transfers to China. Evaluating the impact of transatlantic dual-use exports to China is extremely difficult on the basis of fragmentary open sources and given the complexity of global supply chains. Nonetheless, senior government officials do acknowledge that the diffusion of dual-use technology has contributed to China's military modernization in the area, for instance, of dual-use aerospace and of information and communication technology (such as semiconductors, high-

performance computers, and telecommunications equipment). Furthermore, as explained in the conclusion of this study, the flow and diffusion of advanced dual-use technology to a rising China testify the hopelessness, in the post-Cold War era, of applying a transatlantic unified strategy of military/technological containment of the PRC in the style of the Cold War containment of the Soviet Union.

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<sup>&</sup>lt;sup>269</sup> Former US National Security Council official, interview, Washington D.C., April 23, 2010.

#### CONCLUSIONS

This study has sought to compare and contrast the American and European perspectives vis-à-vis China's military modernization and the export of defense-related technology to the PRC. To do so, it has investigated the diplomatic, military, and economic considerations that have shaped the respective positions on the two sides of the Atlantic. Based upon a wide range of previously undisclosed written and oral sources, two core findings emerge from this work. First, the combination of relentless US pressures and of shifting political, strategic, and economic considerations within the European Union has killed the prospects of lifting the EU arms embargo on China. In particular, the preceding analysis brings to light four key explanatory factors of the "death knell" of the EU "China arms embargo" issue. First, the internal political fragmentation within the European Union, with increasingly diverging views and a consequent lack of political consensus among member states, including among the "big three" (France, United Kingdom, Germany). Second, the considerable external pressures exerted by the United States (and Japan) as well as Washington's retaliatory threats of adverse consequences for transatlantic defense industrial relations. Third, and relatedly, facing a trade-off between continued defense industrial cooperation with the US, i.e. the world's largest defense market, versus enhanced defense exports to China, part of the European defense industrial base appears to have opted for the former and decided - to paraphrase a previously mentioned interviewee - not to "cut its American arm" for the sake of having access to the Chinese market. Finally, as a consequence of these factors, China has come to realize the growing unlikelihood of the lifting of the European arms embargo and has therefore decreased its diplomatic pressures on the EU on this specific issue. The intertwining of these external and internal pressures marked the "death knell" of any prospects of lifting the EU arms embargo against China.

The second finding that emerges from these pages is — notwithstanding the vanishing of the "China arms embargo" from the transatlantic diplomatic agenda — the continued clash between the two sides of the Atlantic on the transfer of dual-use technologies to the PRC. On the one hand, in the post-Cold War era, changing strategic, technological, and industrial dynamics have reduced the effectiveness of dual-use export controls toward China. On the other hand, major economic interests in exporting to the lucrative Chinese market, coupled with transatlantic divergences in China-related regulations, have resulted in considerable dual-use technology transfers to the PRC. In other words, although 1989 US and European arms embargos have greatly complicated China's defense industrial modernization, it has been possible for Beijing to partly overcome these challenges by taking advantage of the diffusion of advanced dual-use technologies to fuel its military modernization via commercial-military integration and the development of a dual-use science and technological industrial base.

During the Cold War, the United States and its European allies (together with other COCOM partners), adopted a two-pronged strategy aimed at maintaining a quality edge of Western military equipment against Soviet quantitative preponderance through, on the one hand, major investments in military-related research, development, and production ("leap ahead") and, on the other, a national and multilateral system of export controls ("keep them behind"). This study shows that in the strategic, technological, and economic environment of the post-Cold War era, while the transatlantic arms embargoes are unlikely to be lifted, the ability of the US and Europe to use

<sup>&</sup>lt;sup>270</sup> Hugo Meijer, 2014a, op. cit.

restrictions on strategic trade as a tool for military/technological containment vis-a-vis China has considerably decreased. In a globalized economy where potential rivals are also economically interdependent and in which political ideologies do not crystallize into competing blocs, even if the Americans and the Europeans wanted to contain China they would not be able to do so. In other words, in the post-Cold War era, a transatlantic strategy of military/technological containment of the People's Republic of China has become unviable.

### ■ APPENDIX: CHINA'S MILITARY MODERNIZATION IN THE POST-COLD WAR ERA BETWEEN SELF-SUFFICIENCY AND FOREIGN TECHNOLOGY ACQUISITION

This Appendix provides a brief overview of the key sources of China's military modernization. Since the end of the Cold War, China's efforts to modernize its defense technological and industrial base have relied upon a three-pronged approach based on fostering China's indigenous innovation capabilities (A), civil-military integration (B), and the acquisition of advanced foreign military and dual-use technology (C).

#### (A) INDIGENOUS INNOVATION

In the words of former Premier Wen Jiabao "the basis of [China's] scientific advancement must be placed on the ability to increase our indigenous innovation capability."<sup>271</sup> Beijing has indeed fostered its indigenous industrial and technological capabilities by investing into research and development in selected technology areas such as microelectronics, space systems, and information technologies.<sup>272</sup> In order to promote these sectors, the PRC has increased research and development (R&D) expenditures through several public funding programs such as the 863 Program (or National Hightech Research and Development Program), which focuses on research fields such as information technology, aerospace, biotechnology, and automation technology.<sup>273</sup> China's spending on R&D substantially increased between 2001 and 2007, growing at an average of 22.54% annually.<sup>274</sup> Beijing's long-term vision to develop an advanced technological and industrial base has been spelled out in documents issued by the State Council such as the Development Program of Science and Technology for National Defense for 2006 to 2020 and the Medium-and Long-Term National Science and Technology Development Plan (2006-2020) (or MLP) that identify as key R&D priorities for the 2006-2020 period information technology, laser technology, strategic reconnaissance, space-based technology, and high-performance computers. <sup>275</sup> The MLP also stressed for the first time the need to foster "indigenous innovation" (Zizhu Chuangxin) and to reduce the degree of dependence on foreign technology to 30 percent or less (down from 50 percent).<sup>276</sup>

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<sup>&</sup>lt;sup>271</sup> Speech quoted in Micah Springut, Stephen Schlaikjer, and David Chen, 2011, *China's Program for Science and Technology Modernization: Implications for American Competitiveness*, prepared for the United States-China Economic and Security Review Commission, p. 77.

<sup>&</sup>lt;sup>272</sup> Richard Bitzinger, Ken Boutin, 2009, "China's Defence Industries: Change and Continuity," in Ron Huisken (ed.), *Rising China: Power and Reassurance*, ANU E Press, p. 135.

Evan Medeiros et al., 2005, A New Direction for China's Defense Industry, RAND Corporation, p. 234.

<sup>&</sup>lt;sup>274</sup> NSD Bio Group, 2009, *Research Report on Chinese High Tech Industries*, prepared for the United States-China Economic and Security Review Commission, p. 5.

<sup>&</sup>lt;sup>275</sup> Tai Ming Cheung, 2009, "Dragon on the Horizon: China's Defense Industrial Renaissance," *Journal of Strategic Studies*, Vol. 32, No. 1, p. 31. See also Tai Ming Cheung, 2011, "The Chinese Defense Economy's Long March from Imitation to Innovation," *Journal of Strategic Studies*, Vol. 34, No. 3, Special Issue: China's Emergence as a Defense Technological Power, pp. 333-338.

<sup>&</sup>lt;sup>276</sup> See "Innovation, Espionage, and Chinese Technology Policy," statement by Adam Segal, Senior Fellow for Counterterrorism and National Security at the Council on Foreign Relations, in *Communist Chinese Cyber-Attacks, Cyber-Espionage and Theft of American Technology*, hearing before the Foreign Affairs Committee, Subcommittee on Oversight and Investigations, US House of Representatives, 1<sup>st</sup> Session, 112<sup>th</sup> Congress, April 15, 2011, p. 37. The degree of technology dependence is measured as the spending on technology imports as a

#### (B) CIVIL-MILITARY INTEGRATION

The second component of the modernization of China's defense technological and industrial base (DTIB) has been the integration of civil and military R&D and production activities (or civil-military integration) considered by China's defense planners as a key to developing advanced military capabilities.<sup>277</sup> Beginning in the late 1990s, the PRC has begun a gradual transition from defense conversion to civil-military integration (CMI, or spin-on). CMI can be defined as "the process of combining the defense and civilian industrial bases so that common technologies, manufacturing processes and equipment, personnel, and facilities can be used to meet both defense and commercial needs." <sup>278</sup> A key objective of China's CMI has been to exploit civil technological development for military applications and to improve China's defense manufacturers' access to dualuse technological capabilities.<sup>279</sup> Indeed, China's Tenth Five-Year Plan for 2001-2005 aimed at promoting the development of "two-way civil-military technology cooperation, transfers, promotions, and joint development [...] as a means to establish a capable civil-military-industrial foundation."280 Accordingly, as Richard Bitzinger notes, with the Tenth Five-Year Plan, "the spin-on of advanced commercial technologies to the Chinese military-industrial complex and in support of the overall modernization of the PLA was made explicit policy."<sup>281</sup> Similarly, China's 2004 Defense White Paper declared that the PRC adhered "to the strategic guideline of combining military needs with civilian needs, reserving military potential within civilian capability."282 These decisions marked China's shift from the defense conversion strategy that lasted until the late 1990s to the integration of the civilian and defense industrial base that characterized the 2000s and the 2010s.

#### (C) Acquisition of Foreign Arms and Dual-Use Technology

Thirdly, China has relied upon the acquisition and absorption of foreign technologies. Although China's defense technological and industrial modernization aims, in the long-term, at achieving self-sufficiency, in the short/medium-term it has developed a strategy of acquiring foreign technology in order to complement its indigenous efforts.<sup>283</sup> The channels adopted to enhance China's access to foreign advanced technologies have included, on the one hand, the acquisition of foreign advanced military equipment and, on the other, efforts to obtain dual-use technologies through both legal and covert means.

The embargoes imposed by the United States and the European Union in 1989 resulted in a major disruption in China's weapons and technology acquisition and led the PRC to turn to alternative foreign sources for its arms imports. Beginning in the 1990s, China's major suppliers of weapons systems became Russia and, to a lesser extent, Israel. Russia has provided China with the Su-27 and Su-30 fighter aircrafts, AA-12 air-to-air missiles, SA-10, SA-15, and SA-20 surface-to-air

share of the sum of domestic R&D funding plus technology imports.

US Department of Defense, 2005, *The Military Power of the PRC*, Office of the Secretary of Defense, p. 22.

<sup>&</sup>lt;sup>278</sup> Richard Bitzinger, 2004, "Civil-Military Integration and Chinese Military Modernization," *Asia-Pacific Center for Security Studies Series*, Vol. 3, No. 9, December, p. 2.

<sup>279</sup> Ibid.

<sup>&</sup>lt;sup>280</sup> Tai Ming Cheung, 2009, *op. cit.*, p. 183.

<sup>&</sup>lt;sup>281</sup> Richard Bitzinger, Ken Boutin, 2009, *op. cit.*, p. 135.

<sup>&</sup>lt;sup>282</sup> US Department of Defense, 2005, *op. cit.*, p. 22.

<sup>&</sup>lt;sup>283</sup> Tai Ming Cheung, 2009, op. cit., p. 46.

missiles, 3M-54E Novator Alpha antiship cruise missiles, Kilo class submarines, and Sovremenny destroyers – among others. <sup>284</sup> In addition to Russia, Israel has also been a supplier of advanced military technology to China throughout the 1990s and until the mid-2000s especially in the areas of aircraft and missile technology, as well as in tank weaponry technology. <sup>285</sup> In the 2000s, however, the government of Israel came under intense US diplomatic pressure to halt its arms and dual-use sales to the PRC. A controversy arose between the US and Israel over the implementation of the Sino-Israeli contract to provide Beijing with its first advanced Phalcon Airborne Early Warning (AEW) Systems, a deal estimated at \$1 billion. <sup>286</sup> The US worked through the US-Israel Joint Political-Military Group (JPMG) to persuade the Israeli government to cancel the Phalcon project. <sup>287</sup> By 2001, under heavy pressure by the US government, Israel accepted to terminate the Phalcon deal with China. Similarly, in 2004, the United States pressed Israel to nullify its contract with China to upgrade a fleet of 100 Harpy drones (or unmanned aerial vehicles, UAVs), produced by Israel Aerospace Industries, originally sold to China in 1994 and that, under the terms of the contract, had to be upgraded. <sup>288</sup> In 2005, Israel accepted to cancel the agreement with China and began to strengthen its export control system. <sup>289</sup>

Besides arms imports, in the context of the Western arms embargoes, of China's commercial-military integration, and of its opening to the world markets, Beijing has come to increasingly rely upon an additional and critical source for its acquisition of military-related technology: the import of foreign dual-use technologies. China's civilian industries that had the biggest potential for supporting the PLA's military technological development include microelectronics, computers, telecommunications equipment, and space.<sup>290</sup> In the 1990s, China began to take advantage of its growing wealth and of the growing worldwide availability of commercially developed dual-use

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<sup>&</sup>lt;sup>284</sup> US Department of Defense, 2004, *The Military Power of the PRC*, Office of the Secretary of Defense, p. 30.

<sup>&</sup>lt;sup>285</sup> Bates Gill, Taeho Kim, 1995, "Contemporary Chinese Arms and Technology Imports from the West and the Developing World," in *China's Arms Acquisitions from Abroad. A Quest for 'Superb and Secret Weapons,'* SIPRI Research Report No. 11, Oxford University Press, pp. 81-86. See also Yoram Evron, 2013, "Between Beijing and Washington: Israel's Technology Transfers to China," *Journal of East Asian Studies*, Vol. 13, No. 3, pp. 503-528.

Wade Boese, 2000, "Israel Halts Chinese Phalcon Deal," *Arms Control Today*, September. The Phalcon radar system is designed to provide simultaneous long-range tracking of multiple air and surface targets.

287 Lincoln Bloomfield, Assistant Secretary of State for Political-Military Affairs and Co-Chairman of the US-Israel

Joint Political-Military Group (JPMG) from 2001 to 2005, interview, Washington D.C., March 26, 2012. The JPMG is a US-Israeli bilateral mechanism established in 1983 to coordinate military exercises, security planning and logistics. It is co-chaired by the Director General of the Israeli Ministry of Defense and the US Assistant Secretary of State for Political-Military Affairs.

<sup>&</sup>lt;sup>288</sup> According to the US-China Commission, "the Harpy is designed to detect, attack, and destroy radar emitters. These systems pose a significant threat to various critical military C<sup>4</sup>ISR facilities on Taiwan as well as to US operational forces operating in the region. The UAV has a range of about five hundred kilometers and contains a high-explosive warhead" (United States-China Economic and Security Review Commission, 2004, *op. cit.*, p. 201). Compared to the aborted Phalcon deal, valued at \$1 billion, the Harpy UAVs deal was relatively small (about \$55-70 million). Yitzhak Shichor, 2005, "The US Factor in Israel's Military Relations with China," *China Brief*, Vol. 5, No. 12.

<sup>&</sup>lt;sup>289</sup> On the latter point, see US Embassy in Israel, 2006, "Israeli MOD DG Toren on Export Control Reform," Cable from the US Embassy, Confidential, July 13, Wikileaks Cablegate. See also US Embassy in Israel, 2006, "DOE Delegation Discusses Export Controls with Israeli Officials," Cable from the US Embassy in Tel Aviv, Secret, January 31, Wikileaks Cablegate.

<sup>&</sup>lt;sup>290</sup> Roger Cliff, 2001, The Military Potential of China's Commercial Technology, RAND Corporation, pp. ix-x.

technologies "to leap into current and next-generation capabilities for the PLA."<sup>291</sup> Randall Schriver, Director and then Senior Director for China, Taiwan and Mongolia in the Office of the Secretary of Defense (1995-1997; 1997-1998), explains that by the mid-1990s a "strong feeling" emerged within the US government that "particularly because of the Tiananmen sanctions [...] the dual-use route would become much more attractive to the Chinese. Their hardware and platforms were mostly coming from Russia, but in terms of dual-use it was sort of free rein among the Western economies."<sup>292</sup> China therefore increasingly focused on the acquisition and development of the commercially developed dual-use technologies that form the backbone of the so-called Revolution in Military Affairs.<sup>293</sup> In particular, one of Beijing's highest priorities for strategic modernization has become, ever since, the development of information-based C<sup>4</sup>ISR systems (command, control, communications, computers, intelligence, surveillance, and reconnaissance).<sup>294</sup>

<sup>&</sup>lt;sup>291</sup> Richard Fisher, 1999, "Foreign Arms Acquisition and PLA Modernization," in James Lilley, David Shambaugh (eds), *China's Military Faces the Future*, M.E. Sharpe, p. 85.

<sup>&</sup>lt;sup>292</sup> Randall Schriver, interview, Washington D.C., April 14, 2010.

Wendy Frieman, 1999, "The Understated Revolution in Chinese Science and Technology: Implications for the PLA in the Twenty-First Century," in James Lilley, David Shambaugh (eds), *China's Military Faces the Future*, M.E. Sharpe, pp. 250-251.

<sup>&</sup>lt;sup>294</sup> James Mulvenon, Richard Yang, 1999, *The People's Liberation Army in the Information Age*, RAND Corporation, p. 1.

#### BIBLIOGRAPHY

- "Ashton Pragmatic on China in EU Foreign Policy Blueprint," EU Observer, December 17, 2010.
- "China defense budget to increase 12.2 pct in 2014: Report," Xinhua, March 5, 2014.
- "Chinese PM Urges EU to Trop Arms Embargo," Aljazeera, September 20, 2012.
- "EU to Keep China Arms Embargo Despite Massive Investments," EU Observer, January 5, 2011.
- "Revisions and Clarification of Export and Reexport Controls for the People's Republic of China (PRC); New Authorization Validated End-User; Revision of Import Certificate and PRC End-User Statement Requirements," Federal Register, Vol. 72, No. 117, June 19, 2007.
- "Should the EU lift the arms embargo on China?," EurActiv, 25 February, 2011.
- "The EU and arms for China," The Economist, February 1st, 2010.
- Abbey, George, Neal Lane, 2009, *United States Space Policy: Challenges and Opportunities Gone Astray*, The American Academy of Arts and Sciences.
- Agence France Presse, 2014, "Japan, France Agree on Defense Equipment Cooperation," July 29.
- Alden, Edward, Demetri Sevastopulo, 2005, "Lugar Threat on EU Arms Sales to China," *Financial Times*, February 21.
- American Institute in Taiwan, 2004, "Taiwan Pessimistic About EU Arms Embargo," Cable from the AIT, Confidential, November 23, Wikileaks Cablegate.
- Bader, Jeffrey 2012, *Obama and China's Rise: An Insider's Account of America's Asia Strategy*, Washington D.C.: Brookings Institution Press.
- Bélanger, Yves, 2012, « Économie de défense et industrie militaire, la mondialisation à l'heure du repli budgétaire », in Yves Bélanger, Aude Fleurant, Hélène Masson, Yanick Quéau, *Les mutations de l'industrie de défense. Regards croisés sur trois continents*, Cahier de l'Irsem, No. 10, May.
- Béraud-Sudreau, Lucie, 2014, "French adaptation strategies for arm export controls since the 1990s" Paris Paper n° 10, Strategic Research Institute of the French Military Academy.
- Bitzinger, Richard, 2004, "Civil-Military Integration and Chinese Military Modernization," *Asia-Pacific Center for Security Studies Series*, Vol. 3, No. 9, December.
- Bitzinger, Richard, Ken Boutin, 2009, "China's Defence Industries: Change and Continuity," in Ron Huisken (ed.), *Rising China: Power and Reassurance*, ANU E Press.
- Boese, Wade, 2000, "Israel Halts Chinese Phalcon Deal," Arms Control Today, September.
- Boyd, Dallas, Jeffrey Lewis, Joshua Pollack, 2010, *Advanced Technology Acquisition Strategies of the People's Republic of China*, Science Application International Corporation, report sponsored by the Defense Threat Reduction Agency of the US Department of Defense.
- Bräuner, Oliver, 2013, "Beyond the Arms Embargo: EU Transfers of Defense and Dual-Use Technologies to China," *Journal of East Asian Studies*, Vol. 13, pp. 457-482.
- Bräuner, Oliver, Mark Bromley, Mathieu Duchâtel, 2013, "Arms Exports to China," SIPRI Policy Paper No. 42 (forthcoming).

- Bromley, Mark, 2011, "The EU Common Position on Arms Exports and National Export Control Policies," in Alyson JK Bailes & Sara Depauw (eds), 2011, *The EU Defence Market: Balancing Effectiveness with Responsibility*, Flemish Peace Institute.
- Bromley, Mark, 2012, "The Review of the EU Common Position on Arms Exports: Prospects for Strenghtened Controls," EU Non-Proliferation Consortium, Non-Proliferation Papers No. 7.
- Bromley, Mark, Michael Brzoska, 2008, "Towards a Common, Restrictive EU Arms Export Policy? The Impact of the EU Code of Conduct on Major Conventional Arms Exports," *European Foreign Affairs Review*, Vol. 13, pp. 333-356.
- Buckley, Chris 2005, "French Leader Signs Chinese Trade Deals and Criticizes Arms Ban," *The New York Times*, April 22.
- Bumiller, Elisabeth, 2005, "Bush Says Europe Should Not Lift Its China Arms Embargo," *The New York Times*, February 23.
- Casarini, Nicola, 2007, "The International Politics of the Chinese Arms Embargo Issue," *The International Spectator*, Vol. 42, No. 3, pp. 371-389.
- Casarini, Nicola, 2009, Remaking Global Order: The Evolution of Europe-China Relations and its Implications for East Asia and the United States, Oxford University Press.
- Casarini, Nicola, 2011, "The Rise and Fall of EU-China Relations in Space and Defense Technology," in Frans Paul Van Der Putten, Chu Shulong, *China, Europe, and International Security: Interests, Roles and Prospects*, Routledge, pp. 63-80.
- Casarini, Nicola, 2013, "The European 'Pivot' in Asia," European Union Institute for Security Studies, Issue Alert, March.
- Cheung, Tai Ming, 2009, "Dragon on the Horizon: China's Defense Industrial Renaissance," *Journal of Strategic Studies*, Vol. 32, No. 1.
- Cheung, Tai Ming, 2011, "The Chinese Defense Economy's Long March from Imitation to Innovation," *Journal of Strategic Studies*, Vol. 34, No. 3, Special Issue: China's Emergence as a Defense Technological Power, pp. 333-338.
- Cheung, Tai Ming (ed), 2013, *The Chinese Defense Economy Takes Off: Sector-by-Sector Assessment and the Role of the Military End-Users*, Institute on Global Conflict and Cooperation, University of California, San Diego.
- Clarke, Duncan, Johnston, Robert, 1999, "US Dual-Use Exports to China, Chinese Behavior, and the Israel Factor: Effective Controls?," *Asian Survey* 39 (2).
- Cliff, Roger, 2001, The Military Potential of China's Commercial Technology, RAND Corporation.
- Cooper, Patricia 2009, statement in *Export Controls on Satellite Technology*, hearing before the Subcommittee on Terrorism, Non-Proliferation and Trade of the Committee on Foreign Affairs, House of Representatives, 111<sup>th</sup> Congress, First Session, April 2.
- Council of the European Union, 1998, "European Union Code of Conduct on Arms Exports," Document 8675/2/98 Rev 2, Brussels, June 5.
- Council of the European Union, 2004, Presidency Conclusions of the Brussels European Council, December 16-17.
- Council of the European Union, 2007, "Guidelines on the EU's Foreign and Security Policy in East Asia", Brussels, December 14.

- Decreton, Sébastien, 2009, "La question de la levée de l'embargo sur les ventes d'armes à la Chine," *Critique internationale*, No. 43 (April/June).
- Denmark, Abraham, James Mulvenon (eds), 2010, *Contested Commons: The Future of American Power in a Multipolar World*, Washington D.C.: Center for a New American Security.
- Depauw, Sara, 2010, *The Common Position on Arms Exports in the Light of the Emerging European Defence Market*, Flemish Peace Institute, Background Note, January 18.
- Dinmore, Guy, 2004, "US Warns EU Against Resuming Arms Sales to China," *Financial Times*, December 13.
- Duchâtel Mathieu, Emmanuel Puig, 2015, "Chinese Reactions to the US Rebalance to Asia: Strategic Distrust and Pragmatic Adaptation," in Hugo Meijer (ed), *Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions*, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.
- Erickson, Jennifer, 2013, "Market Imperative Meets Normative Power: Human Rights European Arms Transfer Policy," *European Journal of International Relations* 19 (2), pp. 209-234.
- European Commission, 2003, *China: A Maturing Partnership. Shared Interests and Challenges in EU-China Relations*, Brussels, COM (2003) 533 Final, September 10.
- European Commission, 2008, "Restrictive Measures," available at <a href="http://eeas.europa.eu/cfsp/sanctions/docs/index\_en.pdf#2.1">http://eeas.europa.eu/cfsp/sanctions/docs/index\_en.pdf#2.1</a>
- European Commission, 2014, "Countries and Region: China," available at http://ec.europa.eu/trade/policy/countries-and-regions/countries/china
- European Commission, 2014, "Facts and Figures on EU-China Trade."
- European Parliament, 2005, "Motion for a Resolution European Parliament Resolution on Relations between the European Union, China and Taiwan," B6-0394/2005, June 29.
- Evron, Yoram, 2013, "Between Beijing and Washington: Israel's Technology Transfers to China," *Journal of East Asian Studies*, Vol. 13, No. 3, pp. 503-528.
- Fisher, Richard, 1999, "Foreign Arms Acquisition and PLA Modernization," in James Lilley, David Shambaugh (eds), *China's Military Faces the Future*, M.E. Sharpe.
- Fleurant, Aude-Emmanuelle, 2012a, « Moteurs et conséquences des mutations de l'industrie de défense américaine », in Yves Bélanger, Aude Fleurant, Hélène Masson, Yanick Quéau, *Les Mutations de l'industrie de défense : regards croisés sur trois continents*, Cahier de l'IRSEM, n° 10.
- Fleurant, Aude-Emmanuelle, 2012b, « Mutations industrielles de défense, entre léthargie européenne et activisme mondial ? », Lettre de l'IRSEM Dossier stratégique: État des lieux du marché et de l'industrie de défense mondiale, n° 5.
- Foust, Jeffrey, 2011, "The Sisyphean Task of Export Control Reform," The Space Review, November 7.
- Freeman, Charles, 2013, "The Commercial and Economic Relationship" in Shambaugh, David, (ed), Tangled Titans: The United States and China, Royman & Littlefield Publishers.
- French Ministry of Defense, 2014, France and Security in the Asia Pacific.

- Frieman, Wendy, 1999, "The Understated Revolution in Chinese Science and Technology: Implications for the PLA in the Twenty-First Century," in James Lilley, David Shambaugh (eds), *China's Military Faces the Future*, M.E. Sharpe, pp. 250-251.
- Gill, Bates, Taeho Kim, 1995, "Contemporary Chinese Arms and Technology Imports from the West and the Developing World," in *China's Arms Acquisitions from Abroad. A Quest for 'Superb and Secret Weapons,'* SIPRI Research Report No. 11, Oxford University Press.
- Godwin, Paul, 1996, "From Continent to Periphery: PLA Doctrine, Strategy and Capabilities towards 2000," *The China Quarterly*, No. 146, Special Issue: China's Military in Transition.
- Goodman, Seymour, Peter Wolcott, Patrick Homer, 1998, *High-Performance Computing, National Security Applications, and Export Control Policy at the Close of the 20th Century,* Center for International Security and Arms Control, Stanford University, May.
- Government Accountability Office, 2002, Export Controls: Rapid Advances in China's Semiconductor Industry Underscore Need for Fundamental US Policy Review, GAO-02-620.
- Government Accountability Office, 2008, Export Controls: Challenges with Commerce's Validated End-User Program May Limit Its Ability to Ensure That Semiconductor Equipment Exported to China Is Used as Intended, GAO-08-1095, September 2008.
- Grimmett, Richard, Theresa Papademetriou, 2005, European Union's Arms Control Regime and Arms Exports to China: Background and Legal Analysis, Congressional Research Service, CRS Report for Congress RL32785.
- Hannas, William, James Mulvenon, Anna Puglisi, *Chinese Industrial Espionage: Technology Acquisition and Military Modernisation*, Routledge, 2014.
- Harding, Harry, 1992, *A Fragile Relationship. The United States and China since 1972* (Washington, DC: The Brookings Institution Press).
- House of Commons of the United Kingdom, 1998, Seventh Annual Report, Select Committee on Foreign Affairs, available at: <a href="http://www.publications.parliament.uk/pa/cm199900/cmselect/cmfaff/467/467fa08.htm#n47">http://www.publications.parliament.uk/pa/cm199900/cmselect/cmfaff/467/467fa08.htm#n47</a>.
- House of Commons of the United Kingdom, 2000, Trade and Industry 11th Report Minutes of Evidence, Trade and Industry Select Committee, July 17.
- House of Commons of the United Kingdom, 2012, Scrutiny of Arms Exports: UK Strategic Export Controls Annual Report 2010, Quarterly Reports for July to December 2010 and January to September 2011, the Government's Review of arms exports to the Middle East and North Africa, and control issues Business, Innovation and Skills Committee, available at <a href="http://www.publications.parliament.uk/pa/cm201213/cmselect/cmquad/419/41919.htm">http://www.publications.parliament.uk/pa/cm201213/cmselect/cmquad/419/41919.htm</a>
- Johnson-Freese, Joan, 2000, "Alice in Licenseland: US Satellite Export Controls since 1990," *Space Policy* 16 (3).
- Johnston, Alastair Iain, 2013, "How New and Assertive Is China's New Assertiveness?," *International Security*, Vol. 37, No. 4.
- Kessler, Glenn, 2005, "Rice Warns Europe Not to Sell Advanced Weaponry to China: Military Balance At Risk, Allies Told," *Washington Post*, March 21.
- Kogan, Eugene, 2005, *The European Union Defence Industry and the Appeal of the Chinese Market*, Studien und Berichte zur Sicherheitspolitik, Schriftenreihe der Landesverteidigungsakademie.

- Kurashige, Nanae, 2013, "Japan fears French copter device may aid China's Senkakus campaign," *The Asahi Shimbum*, March 18.
- Masson Hélène, 2012, « L'industrie de défense européenne et les marchés d'Amérique du Nord et d'Amérique latine : entre attractivité et maîtrise des risques », in Yves Bélanger, Aude Fleurant, Hélène Masson, Yannick Quéau, Les Mutations de l'industrie de défense : regards croisés sur trois continents, Cahier de l'IRSEM, n° 10.
- Matsuda, Yasuhiro, 2014, "How to Understand China's Assertiveness since 2009: Hypotheses and Policy Implications," *Strategic Japan CSIS*, April.
- Medeiros, Evan, et al., 2005, A New Direction for China's Defense Industry, RAND Corporation.
- Meijer, Hugo, 2011, "Controlling the Uncontrollable? US Dual-Use Export Controls in the Post-Cold War Era," *Fiche de l'I.R.S.E.M. No. 10*, Strategic Research Institute of the French Military Academy.
- Meijer, Hugo, 2013, *Trading with the Enemy: The Making of US Export Control Policy toward the People's Republic of China*, Ph.D. Dissertation, Sciences Po, Paris.
- Meijer, Hugo, 2014a, "Balancing Conflicting Security Interests: US Defense Exports to China in the Last Decade of the Cold War," *Journal of Cold War Studies* (Fall).
- Meijer, Hugo, 2014b, "Globalisation, transferts technologiques américains et modernisation militaire de la République populaire de Chine," in Pierre Journoud (ed), *Stratégie, puissance et influence chinoises depuis la Guerre froide*, l'Harmattan, Collections Intern-national, forthcoming.
- Meijer, Hugo, 2015, "Introduction: The Reconfiguration of American Primacy in World Politics. Prospects and Challenges for the US Rebalance to Asia", in Hugo Meijer (ed), *Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions*, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.
- Mielcarek, Romain, 2013, « Tensions franco-japonaises sur fond de livraison de matériel sécuritaire à la Chine », *RFI*, June 7.
- Ministère du redressement productif, 2012, *Rapport d'activité du service des biens à double usage*, Service des biens à double usage.
- Ministère du redressement productif, 2013, *Le contrôle des exportations des biens à double usage*, Service des biens à double usage.
- Minnick, Wendell, 2007, "US Streamlining Curbs on Exports To China's Military," *DefenseNews*, June 25, 2007.
- Morrison, Wayne, 2013, *US-China Trade Issues*, Congressional Research Service, CRS Report for Congress RL33536.
- Mulvenon, James, Richard Yang, 1999, *The People's Liberation Army in the Information Age*, RAND Corporation.
- Murphy, David, Shada Islam, 2004, "China's Love Affair with Europe," *The Far Eastern Economic Review*, No. 12 February 2004, pp. 26-29.
- NSD Bio Group, 2009, *Research Report on Chinese High Tech Industries*, prepared for the United States-China Economic and Security Review Commission.
- Office of the National Counterintelligence Executive, 2011, Report to Congress on Foreign Economic Collection and Industrial Espionnage, 2009-2011, October.

- Official Journal of the European Union, Council Common Position 2008/944/CFSP of 8 December 2008, available at <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:335:0099:0099:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:335:0099:0099:EN:PDF</a>
- Organisation for Economic Cooperation and Development (OECD), *OECD Estimates of R&D Expenditures Growth in 2012*, 17 January 2014, available at www.oecd.org/sti/inno/Note MSTI2013 2.pdf
- Pawlak Patryk (ed), 2012, Look East, Act East: Transatlantic Agendas in the Asia Pacific, Paris: European Union Institute for Security Studies
- Record, Francis, 2006, statement in *China's Military Modernization and US Export Controls*, hearing before the United States-China Economic and Security Review Commission, March 16-17.
- Reinsch, William, 1998, Under Secretary of Commerce for Export Administration (1994-2001), statement in *Chinese Access to Dual-Use and Military Technology*, Hearing before the Joint Economic Committee, Congress of the United States, 105<sup>th</sup> Congress, Second Session, April 24.
- Rémond, Mathieu, 2009, « Ventes d'armes à la Chine: la fin de l'embargo européen ? », *Politique étrangère*, 2008/2.
- Rennack, Dianne, 1997, *China: US Economic Sanctions*, Congressional Research Service, CRS Report for Congress 96-272, 1 October 1997.
- Risk & Policy Analysts, 2007, *Impact Assessment Relating to the Economic and Governance Evolution of Space in Europe*, Report prepared for the European Commission Directorate General Enterprise & Industry.
- Ross, Robert, 1995, *Negotiating Cooperation. The United States and China. 1969-1989.* Stanford: Stanford University Press.
- Segal, Adam, 2011, "Innovation, Espionage, and Chinese Technology Policy," statement in *Communist Chinese Cyber-Attacks, Cyber-Espionage and Theft of American Technology*, hearing before the Foreign Affairs Committee, Subcommittee on Oversight and Investigations, US House of Representatives, 1<sup>st</sup> Session, 112<sup>th</sup> Congress, April 15.
- Shambaugh, David, 2004, "China and Europe: The Emerging Axis," Current History (september).
- Shichor, Yitzhak, 2005, "The US Factor in Israel's Military Relations with China," *China Brief*, Vol. 5, No. 12.
- Spiegel, Peter, John Thornhill in Paris, 2005, "France Urges End to China Arms Embargo," *Financial Times*, February 15.
- Springut, Micah, Stephen Schlaikjer, and David Chen, 2011, *China's Program for Science and Technology Modernization: Implications for American Competitiveness*, prepared for the United States-China Economic and Security Review Commission.
- Stumbaum, May-Britt, 2008, "The Invisible Ban. EU Maintains Weapons Embargo on China," *Jane's Intelligence Review: Chinawatch*, December.
- Stumbaum, May-Britt, 2009a, "Risky Business? The EU, China and Dual-Use Technology." European Union Institute for Security Studies (EUISS) Occasional Paper No. 80.
- Stumbaum, May-Britt, 2009b, *The European Union and China: Decision-making in EU foreign and security policy towards the People's Republic of China*, Baden-Baden: Nomos.

- Stumbaum, May-Britt, 2010, "How to deal with China's Military Rise? Differing Responses of the European Union and the United States and the Case of Dual-use Technology Transfer", in Munevver Cebeci, *Issues in European Union and US Foreign Policy*, Rowman & Littlefield Publishers.
- Stumbaum, May-Britt, 2015, "Impact of the Rebalance on Europe's Interest in East Asia: Consequences for Europe in Economic, Diplomatic and Military/Security Dimensions", in Hugo Meijer (ed), Origins and Evolution of the US Rebalance toward Asia: Diplomatic, Military, and Economic Dimensions, Palgrave MacMillan/CERI Series in International Relations and Political Economy, forthcoming.
- Suettinger, Robert, 2003, *Beyond Tiananmen. The Politics of US-China Relations, 1989-2000*, Washington, DC: The Brookings Institution Press.
- Taylor, Claire, 2009, *UK-US Defence Trade Co-operation Treaty*, House of Commons Library, International Affairs and Defence Section, February 17.
- United States-China Economic and Security Review Commission (USCC), 2006, *China's Military Modernization and US Export Controls*, hearing before the USCC, March 16-17.
- United States-China Economic and Security Review Commission, 2012, *China-Europe Relationship and Transatlantic Implications*, Hearing before the US-China USCC, 112th Congress, Second Session, April 19, 2012.
- United States-China Economic and Security Review Commission, *USCC 2012 Annual Report to Congress*.
- US Census Bureau, 2013, "Top Trading Partners November 2013," available at <a href="http://www.census.gov">http://www.census.gov</a>
- US Department of Commerce, 2006, *US Dual-Use Export Controls for China Need to Be Strengthened,* Office of Inspector General, Final Report No. IPE-17500.
- US Department of Commerce, 2008, "Keynote Address of Under Secretary of Commerce for Industry and Security Mario Mancuso Technology Leadership, Economic Power, and US National Security: US Dual-Use Trade with China," The Heritage Foundation, February 20.
- US Department of Commerce, 2011, *Bureau of Industry and Security Annual Report for Fiscal Year 2011*, Bureau of Industry and Security.
- US Department of Defense, 2004, *The Military Power of the People's Republic of China*, Office of the Secretary of Defense.
- US Department of Defense, 2005, *The Military Power of the People's Republic of China*, Office of the Secretary of Defense.
- US Department of Defense, 2007, *Defense Industrial Base Assessment: US Space Industry Final Report*, August.
- US Department of Defense, 2014, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014, Office of the Secretary of Defense.
- US Embassy in Australia, 2005, "Australia's View on the EU's Intention to Lift its Arms Embargo Against China," Cable from the US Embassy in Canberra, Confidential, February 17, Wikileaks Cablegate.

- US Embassy in Austria, 2006, "Austria on the December 11-12 EU Foreign Ministers Meeting (GAERC) and the China Arms Embargo," Cable from the US Embassy in Vienna, Confidential, December 6, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "China Arms Embargo: April 2 PSC Debate and Next Steps for US," Cable from the US Embassy in Brussels, Secret, April 7, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "EU Code of Conduct on Arms Exports: Questions and Answers," Cable from the US Embassy in Brussels, Confidential, April 14, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "EU/China Arms Embargo: Briefing the PSC on China's Military Modernization," Cable from the US Embassy in Brussels, Secret/Noforn, July 28, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "EU/China Arms: DAS Suchan Visit Launches Public Debate," Cable from the US Embassy in Brussels, Confidential, October 13, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "EU/China Arms: Slowing Rush to the Summit," Cable from the US Embassy in Brussels, Confidential, October 18, Wikileaks Cablegate.
- US Embassy in Belgium, 2004, "USEU Scenesetter for Deputy Secretary Visit June 1-2," Cable from the US Embassy in Brussels, Unclassified, May 27, Wikileaks Cablegate.
- US Embassy in Belgium, 2005, "A/S Hill Launches Strategic Dialogue on East Asia with EU," Cable from the US Embassy in Belgium, Confidential, June 8, Wikileaks Cablegate.
- US Embassy in Belgium, 2005, "EU/China Arms: Text of Draft EU 'Toolbox' for Post-Embargo Countries," Cable from the US Embassy in Brussels, Secret, January 21, Wikileaks Cablegate.
- US Embassy in Belgium, 2005, "Is the EU Retreating on the China Arms Embargo," Cable from the US Embassy in Brussels, Confidential, March 24, Wikileaks Cablegate.
- US Embassy in France, 2005, "Codel Smith Meets Chirac, French Officials," Cable from the US Embassy in Paris, Confidential, January 31, Wikileaks Cablegate.
- US Embassy in France, 2005, "EU China Arms Embargo: Expanding on French Defense Minister's Financial Times Comments," Cable from the US Embassy in Paris, Confidential, February 18, Wikileaks Cablegate.
- US Embassy in France, 2005, "Japanese Embassy on Chirac Visit to Japan, EU Arms Embargo, and Iter," Cable from the US Embassy in Paris, Confidential, March 10, Wikileaks Cablegate.
- US Embassy in France, 2005, "MOD Advisor Upbeat on Bilateral Relationship; Sees Rapprochement on Middle East; No Change on EU China Arms Embargo," Cable from the US Embassy in Paris, Confidential, March 18, Wikileaks Cablegate.
- US Embassy in France, 2005, "MOD Advisor Upbeat on Bilateral Relationship; Sees Rapprochement on Middle East; No Change on EU China Arms Embargo," Cable from the US Embassy in Paris, Confidential, March 18, Wikileaks Cablegate.
- US Embassy in France, 2005, "Readout of Chirac's March 26-28 Official Trip to Japan," Cable from the US Embassy in Paris, Confidential, April 4, Wikileaks Cablegate.
- US Embassy in France, 2005, "Review of Issues Raised in SecState Meetings with French Government," Cable from the US Embassy in Paris, Confidential, February 11, Wikileaks Cablegate.

- US Embassy in France, 2006, "Export Control Bilats Between France and DOC Assistant Secretary Christopher Padilla," Cable from the US Embassy in Paris, Confidential, December 7, Wikileaks Cablegate.
- US Embassy in France, 2008, "Thales Preliminary Response to Blue Lantern End Use Check on Satellite Components," Cable from the US Embassy in Paris, Unclassified, July 11, Wikileaks Cablegate.
- US Embassy in Germany, 2006, "German Views on the December Foreign Ministers Meeting," Cable from the US Embassy in Berlin, Confidential, December 8, Wikileaks Cablegate.
- US Embassy in Germany, 2007, "Export Control Bilateral Talks Between Germany and DOC Assistant Secretary Padilla," Cable from the US Embassy in Berlin, Confidential, February 2, Wikileaks Cablegate.
- US Embassy in Israel, 2006, "DOE Delegation Discusses Export Controls with Israeli Officials," Cable from the US Embassy in Tel Aviv, Secret, January 31, Wikileaks Cablegate.
- US Embassy in Israel, 2006, "Israeli MOD DG Toren on Export Control Reform," Cable from the US Embassy, Confidential, July 13, Wikileaks Cablegate.
- US Embassy in Italy, 2004, "Approach To Italian Government On China Arms Embargo: Daylight Between MFA And Prime Ministry Positions," Cable from the US Embassy in Rome, Confidential, October 13, Wikileaks Cablegate.
- US Embassy in Italy, 2004, "EU GAERC Italy Confirms Ministers Will Endorse Decision To Lift Libya Arms Embargo; Will Discuss Us Concerns Over China Arms Embargo," Cable from the US Embassy in Rome, Confidential, October 8, Wikileaks Cablegate.
- US Embassy in Spain, 2005, "Spanish Views on EU Delegation's Meetings on China Arms Embargo," Cable from the US Embassy in Madrid, Confidential, March 23, Wikileaks Cablegate.
- US Embassy in Sweden, 2007, "Export Control Bilats Between Sweden and DOC Assistant Secretary Christopher Padilla," Cable from the US Embassy in Stockholm, Confidential, January 23, Wikileaks Cablegate.
- US Embassy in the Netherlands, 2004, "EU China Arms Embargo: VADM Metzger/DAS Suchan Meeting With GONL," Cable from the US Embassy in the Hague, Confidential, September 27, Wikileaks Cablegate.
- US Embassy in the Netherlands, 2004, "Netherlands/EU China Arms Embargo: Meeting with Asian Allies; GONL Briefing Request," Cable from the US Embassy in the Hague, Confidential, July 16, Wikileaks Cablegate.
- US Embassy in the People's Republic of China, 2006, "China-EU Summit: Heavy On Dialogue, Light On Deliverables," Cable from the US Embassy in Beijing, Confidential, September 8, Wikileaks Cablegate.
- US Embassy in the United Kingdom, 2006, "UK Views on December EU Foreign Ministers Meeting (GAERC)," Cable from the US Embassy in London, Confidential, December 8, Wikileaks Cablegate.
- US Federal Aviation Administration, 2010, Semi-Annual Launch Report: Second Half of 2010 Special Report: "ITAR-Free" Satellites and Their Impact on the US Launch Industry.

- US House of Representatives, 2005, *Arms Exports to the People's Republic of China by Member States of the European Union*, Joint hearing before the Committees on Armed Services and on International Relations, US House of Representatives, 109<sup>th</sup> Congress, First Session, April 14.
- US Mission to the European Union, 2010, "EU Has 'No Instructions' to Discuss Lifting China Arms Embargo," USEU Brussels, Confidential/Noforn, February 4, Wikileaks Cablegate.
- US Secretary of State, 2010, "The EU Arms Embargo on China," Cable to the US Embassies in the EU, Confidential, February 17, Wikileaks Cablegate.
- US Senate, 2005, *The Lifting of the EU Arms Embargo on China*, hearing before the Committee on Foreign Relations, US Senate, 109<sup>th</sup> Congress, First Session, March 16.
- US-China Economic and Security Review Commission (USCC), 2012, *Europe Relationship and Transatlantic Implications*, Hearing before the US-China ESRC, 112th Congress, Second Session, April 19, 2012.
- Van der Putten, Frans Paul, 2009, "The EU Arms Embargo against China: Should Europe Play a Role in East Asian Security," Clingdael Asia Studies, Occasional Paper No. 7.
- Van Hezewijk, Bart, 2012, "Licensed Exports to China: A Not So Level Playing Field," World Export Controls Review, November.
- Van Tol, Jan, Mark Gunzinger, Andrew Krepinevich, Jim Thomas, 2010, *Airsea Battle: A Point of Departure Operational Concept*, Washington, D.C.: Center for Strategic and Budgetary Assessment.
- Vance, Ashlee, 2010, "China Wrests Supercomputer Title from US," New York Times, October 28.
- Vennesson, Pascal, 2007, "Lifting the EU Arms Embargo on China: Symbols and Strategy," *Institute of European and American Studies*, Vol. 37, No. 3, pp. 417-444.
- Wallerstein, Mitchell, 2009, "Losing Controls: How US Export Restrictions Jeopardize National Security and Harm Competitiveness," *Foreign Affairs*, Vol. 88, No. 6.
- Wise, David, 2011, *Tiger Trap: America's Secret Spy War with China*, New York, Houghton Mifflin Harcourt.
- Yuan, Jing-Dong, 1996, "United States Technology Transfer Policy toward China: Post-Cold War Objectives and Strategies," *International Journal* 51 (2).
- Zhang, Jian, 2013, "China's Growing Assertiveness in the South China Sea: A Strategic Shift?," National Security College, Australian National University.
- Zhang, Shu Guang, 2001, *Economic Cold War: America's Embargo against China and the Sino-Soviet Alliance*, 1949-1963. Stanford: Stanford University Press.

# TRANSATLANTIC PERSPECTIVES ON CHINA'S MILITARY MODERNIZATION

This study provides a comparative analysis of how the United States and the European Union position themselves vis-à-vis China's military modernization by examining and contrasting the diplomatic, military, and economic interests at stake, on both sides of the Atlantic, in the transfer of defence-related technology to the People's Republic of China. To do so, it focuses upon the issue of Europe's arms embargo on China, as it has sparked major controversies and frictions between the US and the EU in the post-Cold War era. Based on a large body of primary sources (including 199 interviews conducted in Washington D.C., Paris, Beijing, and Shanghai, as well as several dozens of diplomatic cables leaked by Wikileaks), two core findings emerge from this work. First, the combination of relentless US pressure and of shifting political, strategic, and economic considerations within the European Union has killed the prospects of lifting the EU arms embargo on China. The intertwining of external and internal pressure has sounded the death knell for the China arms embargo issue. The second finding that emerges from these pages is that - despite the disappearance of the EU embargo on China from the transatlantic diplomatic agenda -, the continuous flow of highly sensitive dual-use technology to a rising China testifies the futility, in the post-Cold War era, of applying a transatlantic strategy of military/technological containment of China that echoes the Cold War containment of the Soviet Union.

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