U.S.-China Economic and Security Review Commission
Staff Report

December 18, 2013

China’s Potential Air Defense System Sale to Turkey and Implications for the United States

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The Turkish Undersecretariat for Defense Industries in Ankara, Turkey, chaired by Turkish Prime Minister Recep Tayyip Erdoğan, recently announced its selection of a Chinese state-owned company to build Turkey’s first long-range air defense system. The deal, if realized, likely would strain Turkey’s relations with the United States and Europe, boost China’s arms industry, and strengthen ties between Turkey and China.

Details of Turkey’s Proposed Weapons Deal with China

In the proposed deal, China Precision Machinery Import and Export Corporation (CPMIEC) would provide four Fangdun (FD)-2000 air defense system batteries, each consisting of missiles, launchers, radars, sensors, vehicles, and support systems. The FD-2000 is the export version of China’s HQ-9 system.

Turkey selected CPMIEC over U.S. companies Raytheon and Lockheed Martin, which offered the Patriot Advanced Capability-3 (PAC-3); Russia’s Rosoboronexport, which offered the S-400; and the Italian and French company Eurosam, which offered the SAMP/T Aster 30. Murad Bayar, Turkish Undersecretary of Defense Industries, explained CPMIEC’s bid was “perfectly in compliance with [Ankara’s] terms and conditions,” and beat the rival bids in terms of “price, technology, local work share, technology transfer and credit financing terms.” China’s willingness to co-produce the FD-2000 in Turkey and transfer the technology were particularly important factors in Ankara’s decision, since Turkey seeks to increase its defense industries’ self-sufficiency. Since Turkey joined NATO in 1952, the United States has been Ankara’s main source of advanced weapon systems.

Figure 1: Bids for Turkey’s Long-Range Air Defense System, in Order of Turkey’s Stated Preference

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Missile System</th>
<th>Range</th>
<th>Proposed Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>CPMIEC</td>
<td>FD-2000 (HQ-9 export variant)</td>
<td>200 km up to an altitude of 30 km</td>
<td>$3.44 billion</td>
</tr>
<tr>
<td>Italy/France</td>
<td>Eurosam</td>
<td>SAMP/T Aster 30</td>
<td>&gt;100 km up to an altitude of 20 km</td>
<td>$4.4 billion</td>
</tr>
<tr>
<td>United States</td>
<td>Raytheon/Lockheed Martin</td>
<td>PAC-3</td>
<td>45 km up to an altitude of 15 km</td>
<td>$4.6 billion</td>
</tr>
<tr>
<td>Russia</td>
<td>Rosoboronexport</td>
<td>S-400</td>
<td>400 km up to an altitude of 50 km</td>
<td>$8.4 billion</td>
</tr>
</tbody>
</table>

† See Figure 1 for details of the bids offered.
NATO’s Deployment of Patriot Air Defense Systems in Turkey

Although Turkey currently does not have a long-range air defense system, NATO since early 2013 has operated six PAC-3 air defense batteries in Turkey, along its border with Syria. NATO deployed these systems after Ankara requested assistance defending its airspace from Syria, which shot down a Turkish jet in June 2012 and killed five Turkish civilians with mortar shells in October 2012. The United States in November 2013 extended the deployment of its two Patriot batteries in Turkey through 2014.

U.S. and NATO Concerns about the Proposed Deal

U.S. and NATO officials as well as members of Congress have questioned Turkey’s plan to integrate the FD-2000 with NATO’s missile defense architecture. Integration would require Chinese access to U.S. and NATO classified or export-controlled munitions data in order to facilitate the exchange of information between the NATO and Chinese systems. Furthermore, Chinese personnel would have to install and repair the system and train Turkish operators, potentially providing opportunities for Chinese intelligence collection on NATO personnel and facilities.

- On November 19, U.S. Senator Mark Kirk (R-IL) offered an amendment to the Senate version of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2014 that would prohibit funds from being used to “integrate missile defense systems of the People’s Republic of China into United States missile defense systems.” The amendment included a “sense of Congress” that Chinese surface-to-air missile (SAM) systems “should not be integrated” with NATO’s missile defense architecture. This proposed amendment was later included in a new NDAA agreement reached by the Armed Services Committee leaders of both the House of Representatives and Senate. The new NDAA agreement, including the prohibition of FY14 funds for missile defense integration with Chinese systems, was passed by the House of Representatives on December 12, 2013. As of the publication of this report, the agreement awaits consideration in the Senate.

- In an October 11 letter to the Obama Administration, seven U.S. Senators wrote, “Since Turkey is fully integrated into NATO’s missile defense network … we are concerned about the risk of third-country access to NATO and U.S. classified data and technology … If Turkey proceeds with this procurement, we must take steps to protect the security of the United States and our NATO allies. Such steps might include Turkish expulsion from the NATO Air Defense Ground Environment and intensified scrutiny of all Turkey-NATO security cooperation activities.”

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†† See Appendix 1 for a map of the deployment. The United States, Germany, and the Netherlands operate Turkey’s six PAC-3 battalions. 19 countries have or operate Raytheon’s Patriot air defense systems (PAC-2 and PAC-3): Bahrain (PAC-3), Denmark (PAC-3), Germany (PAC-3), Greece (PAC-2 and PAC-3), India (PAC-3), Israel (enhanced PAC-2), Japan (PAC-3), Jordan (PAC-3), Kuwait (PAC-3), the Netherlands (PAC-2 and PAC-3), Poland (PAC-3), Qatar (PAC-3), Saudi Arabia (PAC-2), South Korea (PAC-2), Spain (PAC-2), Taiwan (PAC-3), Turkey (PAC-3), United Arab Emirates (PAC-3), and the United States (PAC-3). Missile Threat, “Patriot,” April 13, 2013. http://missilethreat.com/defense-systems/patriot-2/


See Appendix 2 for the full text of the letter. House Armed Services Strategic Forces Subcommittee Chairman Mike Rodgers (R-AL) also said the announced deal “[sent] a chill through the spine of members of Congress who care about NATO and Turkey’s alignment to the West.” Rachel Oswald, “Congress Urges Hagel, U.S. to Block Turkey-China
NATO Secretary-General Anders Fogh Rasmussen asserted, “What is important for [NATO] is that the system acquired by the individual country … must be able to work and operate with the systems in other countries. I expect that Turkey will also comply with that.”

U.S. Army Lieutenant General Frederick Ben Hodges, commander of NATO’s Land Command Headquarters, cited “cybersecurity concerns” about the proposed deal. He said, “NATO will never allow, in my view should never allow, a Chinese-designed system to be able to plug into the NATO Integrated Missile Defense System.”

Heidi Grant, U.S. Air Force deputy undersecretary for international affairs, said, “If [Ankara] select[s] a system that’s not interoperable, that’s their choice. They’ve chosen not to be interoperable. Our role is to make sure they’re informed of our recommendation of the best systems to be interoperable with the U.S.”

Furthermore, the United States has levied sanctions against CPMIEC, prohibiting U.S. companies from conducting business with the Chinese firm. On February 13, 2013, the United States found CPMIEC in violation of the Iran, North Korea, and Syria Nonproliferation Act.

A senior U.S. diplomat in Ankara said, “Turkish entities to be involved in this program in partnership with CPMIEC would be denied access to any use of U.S. technology or equipment in relation to this program … No U.S. equipment would ever be sold or authorized to be used anywhere in the program.” This could effectively result in U.S. sanctions on elements of the Turkish defense industry and severely limit U.S. defense firms’ ability to conduct business in Turkey. For example, Raytheon’s partnerships with Turkish component suppliers for its Patriot SAM system could face the risk of cancellation.

In December 2013, Bank of America Merrill Lynch refused to advise Turkish defense firm Aselsan on its second public offering, writing in a letter to Aselsan, “If it is possible that you work with the Chinese company, we would not work with you.” U.S. officials reportedly helped the U.S. company prepare the letter.

A U.S. Department of State spokesperson on October 7 said, “[W]e have conveyed our serious concerns about the Turkish Government’s contract discussions with the U.S.-sanctioned company for a missile defense system that will not be interoperable … with NATO systems or collective defense capabilities.”

Turkey’s Response to U.S. and NATO Concerns

Ankara has dismissed U.S. and NATO concerns regarding the proposed deal, insisting CPMIEC’s SAM system should be allowed to be fully integrated with NATO’s missile defense architecture. Prime Minister Erdoğan explained: “Many NATO member states have Russian weapons in their inventories. If NATO is so sensitive about the issue it would remove the weapons from Russia in NATO’s own inventory.” Turkish officials also emphasized Turkey’s right to independently make decisions about its own national defense.


CPMIEC has a long history of weapons proliferation and has faced U.S. sanctions repeatedly over the last two decades. For an overview of pre-2000 U.S. sanctions on CPMIEC and CPMIEC’s role in the Chinese arms export industry, see Evan S. Medeiros and Bates Gill, Chinese Arms Exports: Policy, Players, and Process (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, August 2000), p. 46-48.
Turkish Deputy Prime Minister Bulent Arinc said, “…[W]hen it comes to the subject of defending Turkey … we have the power to take a decision without looking to anyone else.”

Despite Ankara’s view that integration with the NATO air defense system is possible, Turkey appears willing to use the FD-2000 as a standalone SAM system if it does not receive better offers. Although Turkey’s ability to detect and assess air and missile threats would be less robust without access to NATO data, a standalone system nonetheless would provide a limited defensive capability. Furthermore, Turkey would fill knowledge and technology gaps in its defense and commercial industries, thus potentially enabling Turkey to produce future air defense systems indigenously.

**Chinese Arms Exports Progress**

Ankara’s selection of CPMIEC over its U.S., European, and Russian competitors in the initial round of bidding marks a political victory for Beijing and progress toward the Chinese defense industry’s goal of becoming a leading exporter of high-end arms and equipment. An article in China’s official military press notes, “[E]ven if this transaction fails, China has already won its spurs, since the order was won in a formal bidding process … This is invaluable promotional material which strongly demonstrates that the defense industry of China has found its position among the great powers of the world.”

China, long among the global leaders in small arms and ammunition sales, is poised to become a major seller of advanced military technology due to its ability to offer “good enough” equipment at a lower price than its competitors. However, China’s success in marketing these systems will depend on potential customers’ perception of the quality and reliability of these unproven systems compared to Western alternatives.

**Prospects for the Deal to Materialize**

Although Ankara announced it had selected CPMIEC to build Turkey’s air defense system in September, Turkey and China have yet to finalize the deal. Turkish officials remain optimistic about CPMIEC’s bid, estimating a deal could be signed by April 2014, with delivery of the SAM system by 2017. Undersecretary Bayar assessed it is “highly likely” that Turkey will sign the contract with CPMIEC. Similarly, Prime Minister Erdoğan said Turkey would only stop the deal if the Chinese company decided to withdraw its offer.

Nevertheless, Ankara in late October extended the bidding deadline to January 31, 2014, almost certainly due to U.S. and NATO pressure. Ankara also may be leveraging negotiations with CPMIEC to extract better terms from the competing companies. Although Turkey likely prefers the proven reliability and NATO integration of the Patriot system to an untested Chinese system, CPMIEC’s offer probably will retain an advantage due to its generous co-production and technology transfer terms and lower price.

- A Eurosam official told the press that the European defense firm is working to enhance its bid, “especially in view of Turkish sensitivities about technology transfer.” According to Undersecretary Bayar, Eurosam could be the preferred option if the CPMIEC deal fails.

- Raytheon and Lockheed Martin reportedly have strengthened their bid since Turkey’s initial decision by including co-production arrangements. However, the U.S. companies remain in third place behind Eurosam due to the Patriot’s higher price and the firms’ reluctance to provide Turkey with complete technology transfer terms.
Implications for China-Turkey Relations

The proposed deal would support Turkey’s strategy to broaden its relations beyond the United States and Europe. However, even if the FD-2000 deal proceeds, political and economic issues will continue to complicate relations between China and Turkey in the near term. Points of contention include Beijing’s support for the Assad regime in Syria, an approximately $18 billion trade deficit favoring China, and Turkey’s perception of Beijing’s hostility toward the Muslim Turkic minority in northwest China.33
Appendix 1: Patriot Missiles Deployed in Turkey

Watching the Border
NATO Patriot missile-defense sites in Turkey

Adana
(Pop. 1.6 million)
Deployed by the Netherlands

Kahramanmaras
(Pop. 440,000)
Deployed by Germany

Gaziantep
(Pop. 1.4 million)
Deployed by the U.S.

Appendix 2: Senate Letter to Secretary Kerry and Secretary Hagel

United States Senate
WASHINGTON, DC 20510

October 11, 2013

The Honorable John Kerry
Secretary of State
Department of State
2201 C Street, NW
Washington, DC 20520

The Honorable Charles Hagel
Secretary of Defense
Department of Defense
1000 Defense Pentagon
Washington, DC 20301

Dear Secretary Kerry and Secretary Hagel:

We write with grave concern over reports that the Turkish government plans to buy a missile defense system from the China Precision Machinery Import and Export Corp (CPMIEC), an entity designated under U.S. law for missile technology proliferation, including to Iran.

According to reports, Turkish officials plan to “fully integrate” the Chinese system with NATO assets. Since Turkey is fully integrated into NATO’s missile defense network, such as the NATO Air Defense Ground Environment, we are concerned about the risk of third-country access to NATO and U.S. classified data and technology.

Turkey's decision to procure a missile defense system from a designated Chinese company is disturbing given the availability of alternative systems, including the U.S.-made Patriot, which would pose no risk to NATO’s security. If Turkey proceeds with this procurement, we must take steps to protect the security of the United States and our NATO allies. Such steps might include Turkish expulsion from the NATO Air Defense Ground Environment and intensified scrutiny of all Turkey-NATO security cooperation activities.

We strongly urge you to exert all available diplomatic pressure to prevent Turkish procurement of a CPMIEC missile defense system and ensure NATO will never allow such a system to be integrated into NATO's security architecture. Further, we request that you undertake a comprehensive review of the security implications posed by this procurement and report back with appropriate steps the U.S. and NATO should take to protect the security of classified data and technology. Thank you in advance for your prompt consideration and reply.

Sincerely,

MARK KIRK
United States Senator

JOHN CORNYN
United States Senator
ROGER F. WICKER
United States Senator

JOHN BARRASSO
United States Senator

JOHN BOOZMAN
United States Senator

JAMES INHOFE
United States Senator

TED CRUZ
United States Senator


