



## Iranian Atomic Energy Organization Attempted Carbon Fiber Procurement

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The Institute for Science and International Security has learned that Iran's Atomic Energy Organization (AEOI) recently made an attempt to purchase tons of controlled carbon fiber from a country. This attempt occurred after Implementation Day of the Joint Comprehensive Plan of Action (JCPOA). The attempt to acquire carbon fiber was denied by the supplier and its government. Nonetheless, the AEOI had enough carbon fiber to replace existing advanced centrifuge rotors and had no need for additional quantities over the next several years, let alone for tons of carbon fiber. This attempt thus raises concerns over whether Iran intends to abide by its JCPOA commitments. In particular, Iran may seek to stockpile the carbon fiber so as to be able to build advanced centrifuge rotors far beyond its current needs under the JCPOA, providing an advantage that would allow it to quickly build an advanced centrifuge enrichment plant if it chose to leave or disregard the JCPOA during the next few years. The carbon fiber procurement attempt is also another example of efforts by the P5+1 to keep secret problematic Iranian actions.

Had the supplier and its government chosen to move forward with the sale, the government would have been required to submit a sales proposal to the JCPOA Joint Commission's Procurement Working Group (PWG), administered by the United Nations Security Council Affairs division.<sup>1</sup> Iran is required by the JCPOA to receive PWG approval to purchase goods such as this type of carbon fiber, which is classified as nuclear dual-use by the Nuclear Suppliers Group (NSG) Part II list.<sup>2</sup>

There was little prospect that the AEOI would have received PWG approval for this carbon fiber purchase. Based on International Atomic Energy Agency (IAEA) findings, on Implementation Day, the AEOI had enough carbon fiber on-hand to build replacement rotors for its advanced centrifuge program for a considerable period of time. Given that only one country in the PWG

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<sup>1</sup> Previous Institute for Science and International Security reports analyzing and assessing issues relating to the JCPOA Procurement Channel can be found at: <http://isis-online.org/studies/category/illicit-trade/>

<sup>2</sup> Iran must also have approval for purchases of nuclear direct-use goods that are on the NSG Part I list. This requirement for approval of nuclear exports to Iran will be in place until year ten of the JCPOA, or until 2026, and is codified into international law along with the rest of the JCPOA by United Nations Security Council resolution 2231.

needs to object to stop a sale, it is likely that one of the European countries or the United States would have voted to block the sale. The reason would be to prevent Iran's nuclear program from developing excess stockpiles of a critical raw material used in advanced centrifuges.

The AEOI and the Iranian regime more broadly may have sought to test whether the supplier government would use the PWG. If it did, Iran may have been interested to find out whether the PWG would block the sale or see if the proposal could cause dissension in the PWG. Iran may have wanted to probe the overall willingness of traditionally reluctant suppliers to now provide controlled goods to Iran's nuclear program. Prior to Implementation Day but after the JCPOA was finalized in July 2015, Iranian agents approached US defense contractors with statements that sanctions had ended and requested to buy goods. Their supply would have violated US trade control and sanction laws.

On June 15, 2016, after the attempted carbon fiber procurement, the AEOI spokesman stated on Iranian television that Iran is not required to use the JCPOA Procurement Channel for procurements of raw materials such as carbon fiber and that the United States was seeking to reinterpret JCPOA commitments.<sup>3</sup> Notably the JCPOA text does not include the word "raw" next to materials but the requirement that Iran must seek approval for purchase of NSG Part II goods, such as this type of carbon fiber, would supersede that interpretation.<sup>4</sup> This would support the theory that Iran was seeking to reinterpret the JCPOA illegitimately. It could have also been probing for weaknesses in the system and seeking to find suppliers that are either willing to make an illicit sale or are uninformed about government obligations under UNSCR 2231 to go through the Procurement Channel.

Following the denial of the carbon fiber purchase by the supplier and its government, Iran subsequently (and curiously), reported the denial of the procurement to the International Atomic Energy Agency (IAEA). But that may have simply been motivated by a desire to preempt the supplier or the supplier's government from reporting the attempt to the UNSC or the IAEA.

### **Advanced Centrifuge Surge Capability in the Short-Term**

Regardless of the true intentions of Iran in seeking the carbon fiber, procurement of tons of this carbon fiber would have allowed Iran to surge in the construction of advanced centrifuges in case of a breakdown of the JCPOA in the near term. Iran thus may have been seeking to hedge against any near-term breakdown of the JCPOA.

High quality, untreated carbon fiber has a relatively short lifespan of about one to five years, where the latter is possible if the fiber is stored carefully. The attempted procurement could

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<sup>3</sup> "Iran: Only Required to Report Nuclear Material Completely Processed – Not Enriched Materials in Process," Fars News Agency. June 15, 2016. <http://en.farsnews.com/newstext.aspx?nn=13950326001031>

<sup>4</sup> See *Joint Comprehensive Plan of Action*, Vienna, July 14, 2015, Annex IV, paragraph 7. <http://apps.washingtonpost.com/g/documents/world/full-text-of-the-iran-nuclear-deal/1651/>

not have been intended for use in about ten years as the JCPOA's advanced centrifuge restrictions start to lift; it would no longer be usable.<sup>5</sup> Thus, Iran cannot argue that it is seeking the carbon fiber for use after ten years, when the JCPOA allows it to ramp up its deployment of the number of advanced centrifuges that depend on carbon fiber.

This case shows that Iran will seek to make purchases that the Procurement Working Group would be unlikely to approve. Suppliers need to be vigilant against such attempts and should report them to their governments, which should inform the United Nations Security Council Affairs division, the PWG, and the IAEA.

Given Iran's on-going commitment to making illicit procurements, it may seek to illegally acquire carbon fiber and other nuclear dual-use goods. What then would be the Joint Commission's response to a clear violation by Iran of its procurement related JCPOA obligations?

The Joint Commission and the UN Security Council should issue warnings to governments and suppliers about Iran's activities and increase outreach via the UN Secretariat to UN member states alerting them to the possible efforts of Iran to make illicit procurements. They should also reiterate the obligations of UN member states under Resolution 2231.

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<sup>5</sup> The restrictions on advanced centrifuge deployment will start to end at year ten of the agreement, or ten years after Implementation Day, which occurred on January 16, 2016.