

ASSESSING THE IRAN DEAL

Elements of a Nuclear Weapon

Fissile Material Production

		<u>Uranium Enrichment</u>	
		NUMBER OF CENTRIFUGES OPERATING	
Congress	Administration	Framework Agreement	JCPOA
• 0	Unspecified	 5,060 IR-1 centrifuges at Natanz 1,040 IR-1 centrifuges at Fordow producing non-nuclear medical isotopes 	 5,060 IR-1 centrifuges at Natanz 1,040 IR-1 centrifuges installed at Fordow, of which 348 will enrich materials other than uranium, for use as medical isotopes
		Types of Centrifuges Operating	
Congress	Administration	Framework Agreement	JCPOA
Unspecified	Unspecified	For 10 years, only IR-1 centrifuges	 For 10 years, only IR-1 centrifuges By year eight, however, Iran will be permitted to begin building and stockpiling IR-6 and IR-8 centrifuges for eventual installation and use in its enrichment facilities
		Number of Centrifuges Installed	
Congress	Administration	Framework Agreement	JCPOA
Unspecified	Unspecified	 6,104 installed for the next tenfifteen years No more than 5,060 IR-1 centrifuges at Natanz No more than 1,044 IR-1 centrifuges at Fordow Excess centrifuges will be removed to IAEA safeguarded facility 	 6,104 installed for the next ten years No more than 5,060 IR-1 centrifuges at Natanz No more than 1,044 IR-1 centrifuges at Fordow Excess centrifuges in both Natanz and Fordow will be removed and stored in Natanz under IAEA monitoring





		Centrifuge R&D	
Congress	Administration	Framework Agreement	JCPOA
• Unspecified	Temporary suspension	"Limited" R&D with advanced centrifuges for 10 years	 For ten years, centrifuge R&D will limited to IR-2m, IR-4, IR-5, IR-6, IR-7 and IR-8 models But some limitations on R&D will be relaxed after 8.5 years For the first 10 years, Iran can test up to 10 IR-4 centrifuges and a single IR-5 at once After eight and a half years, Iran can ramp up from testing a smaller number of IR-6 and IR-8 centrifuges to running as many as 30 of each No stockpiling of enriched uranium produced by advanced centrifuges during R&D For 15 years, all enrichment R&D with advanced centrifuges will occur at Natanz Iran will be allowed to conduct computer modelling and simulations of new centrifuge models (beyond those specified above)
		Enrichment Facilities	
Congress	Administration	Framework Agreement	JCPOA
 Natanz: Unspecified Fordow: Closed 	 Natanz: Enrichment to 3.5 percent Fordow: Enrichment to 3.5 percent 	 Natanz: Uranium enrichment Fordow: Production of non-nuclear medical isotopes, no uranium enrichment for 15 years 	 Natanz: For 15 years, any uranium enrichment will only happen at Natanz Fordow: No uranium enrichment or uranium enrichment R&D at Fordow for 15 years



		Enrichment Level	
Congress	Administration	Framework Agreement	JCPOA
No enrichment	<5 percent enrichment	No enrichment over 3.5 percent 15 years Facility of Management Chapter (15)	 No enrichment over 3.67 percent for 15 years
C	Administration	Enriched Uranium Stockpiles	JCPOA
Congress	Administration	Framework Agreement	JCPOA
Unspecified	300 kg of 3.5 percent enriched uranium, no stockpile of 20 percent enriched uranium	 300 kg stockpile for 15 years; how excess will be eliminated remains unspecified 	 For 15 years, maximum nuclear material stockpile will be 300 kilograms of UF6 enriched up to 3.67 percent Excess UF6 will be sold in return for natural (unenriched) uranium or diluted Fuel rods for use in Iran's reactors will not be counted against this total
		Plutonium Enrichment	
Congress	Administration	Framework Agreement	JCPOA
Arak reactor must be shut	Arak reactor will not produce plutonium	 Arak reactor will be modified to "not produce weapons grade plutonium" Spent fuel to be shipped out of Iran; no additional heavy water reactors for 15 years "Indefinite" commitment not to engage in spent fuel reprocessing 	 Arak reactor will be redesigned so it cannot produce any weapons-grade plutonium. All spent fuel rods (which could also be source material for weapons-grade plutonium) will be sent out of the country as long as this reactor exists – to a country of Iran's choosing Iran will not be able to build a single heavy-water reactor for at least 15 years Iran will not engage in spent fuel reprocessing or R&D into such activities for 15 years



NUCLEAR WEAPON DESIGN			
Congress	Administration	Framework Agreement	JCPOA
Must be ceased, dismantled, and Iran must disclose its past research	Iran must address IAEA concerns about possible military dimensions	Iran will implement an unspecified "agreed set of measures" to address IAEA concerns	 Iran pledges to answer all outstanding questions the IAEA has about the possible military dimension (PMD) of Iran's nuclear program and research by October 15, 2015 The IAEA would issue its assessment of these answers by December 15, 2015 Deal does not contain consequences for if Iran fails to meet this deadline or the IAEA finds its answers unsatisfactory Iran is prohibited from engaging in nuclear weapons research
	BA	LLISTIC MISSILE DEVELOPMEN	NT
Congress	Administration	Framework Agreement	JCPOA
 Must be ceased, dismantled, and Iran must disclose its past research 	 Unspecified 	 Unaddressed 	Unaddressed
		INSPECTIONS	
Congress	Administration	Framework Agreement	JCPOA
Iran must accept IAEA demands for increased inspections	 Iran must accept IAEA demands for increased inspections 	 Iran will implement Additional Protocol, grant inspectors access to "suspicious sites," allow real time monitoring of uranium and centrifuge facilities for 20 – 25 years, and provide early notification of new nuclear facilities 	 Iran will voluntarily submit to the IAEA Additional Protocol as well as another measure known as the modified Code 3.1 of the Safeguard Agreement IAEA monitoring will include: Daily access to declared facilities, including uranium mines and mills,





			centrifuge assembly plants, and enrichment facilities A long-term IAEA presence in Iran Up to 150 IAEA inspectors in the country, including Americans (who were previously barred) IAEA monitoring of uranium ore produced by Iran for 25 years Surveillance of centrifuge construction for 20 years A mechanism to ensure speedy resolution of IAEA access concerns for 15 years IAEA will not have immediate access to suspicious sites, would need Iranian consent which might require an arbitration process lasting as long as 54 days
Congress	Administration	DEAL DURATION Framework Agreement	JCPOA
No expiration date	 Unspecified 	Provisions in place for a minimum of 10 years	 Some limitations begin to lapse as early as eight years in All significant nuclear restrictions lifted within 10 – 15 years
		SIGNALING RESOLVE	
Congress	Administration	Framework Agreement	JCPOA
"It is the sense of Congress that the United States should be prepared to take all necessary	 Unspecified 	"All previous UNSC sanctions can be reimposed"	 Joint Commission established to rule on disputes in a 35 day-long arbitration process. UNSC would then take up the issue, voting on a resolution to continue lifting sanctions



measures, including military action if required, to prevent Iran from threatening the United States, its allies, or Iran's neighbors with a nuclear weapon."			 If resolution fails or is not passed within 30 days, UNSC sanctions are re-imposed UNSC sanctions cannot be reimposed on contracts signed during the time when sanctions were lifted
Congress	Administration	SANCTIONS RELIEF Framework Agreement	JCPOA
Unspecified	Relief of	U.S. and Iranian understandings of	All UNSC resolutions will be terminated at
	sanctions on the gold trade, petrochemical industry, and some banking restrictions	the framework revealed major differences of understanding in the timing and scope of sanctions relief o Iran asserted that "all" UNSC, EU, and U.S. sanctions would be lifted, and that relief would be granted upfront o The United States asserted that only "nuclear-related" sanctions would be suspended, upon Iran addressing "key" concerns	the moment that the IAEA verifies Iranian implementation of the deal • After 10 years, UNSC and EU sanctions will be fully lifted and can no longer be re-imposed • The United States will suspend enforcement of relevant sanctions at the moment that the IAEA verifies Iranian implementation of the deal and terminate certain Executive Orders • Sanctions to be lifted include some that could be contested as non-nuclear • The United States will allow for sale of commercial aircraft, parts and service to Iran • After five years, the conventional arms embargo on Iran will be lifted



No lates the second standing
 No later than eight years after the
deal's adoption, the United States
will terminate all sanctions on Iran
prohibiting it from important
sensitive nuclear technology and
ballistic missile components
Re-imposing Sanctions: Iran will
treat any re-imposition of lifted
sanctions or imposition of new
nuclear-related sanctions as a
reason to stop complying with the
deal

Discrepancies between the framework and the final agreement.