



# **Nuclear, Missile & Space Digest**

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## Contents

### India

- **Ballistic missile submarine Arighat in final stages of trials, to be commissioned early 2021**
- **ISRO to kick off 2021 by launching its first Indian start-up passenger into space aboard the PSLV-C51**
- **India, UK Hold Bilateral Dialogue On Nuclear Disarmament, Non-Proliferation**
- **India launches new communications satellite CMS-01 into orbit**
- **India, Vietnam sign seven agreements during virtual summit**
- **Rs 40,000 crore liquidity boost for private coal-based power plants**
- **Make in India: BHEL plans to shift Rs 3,000 cr worth of annual imports to local vendors**
- **Vajpayee's Pokhran Nuclear Tests In 1998 'Most Enduring' Contribution: Jaishankar**
- **India's first-ever privately designed and developed rocket is a step closer to becoming a reality in 2021**
- **Vikram Sarabhai death anniversary: Lesser-known facts about visionary scientist**
- **Isro to launch first satellite developed entirely by Brazil's space agency**
- **Missiles, drones, defence shield — India has a series of military trials planned for 2021**
- **India and Bhutan to collaborate for outer space exploration**
- **BHEL bags order from Nuclear Power Corporation of India**

### China

- **Irradiation technology could be used in killing coronavirus on cold chain food packaging: China National Nuclear Corporation**
- **Chang'e 5 recovery team use exoskeletons to aid mission**
- **PLA naval brigade conducts UAV delivery training**
- **China launches new Long March-8 rocket in step towards reusable space vehicles**
- **China aims for commercial race with at least 20 Long March-8 rocket launches a year**
- **China says reports of demands on nuclear power complicating EU talks are fake**

### USA

- **U.S. Nuclear Weapons Agency Hacked as Part of Massive Cyber-Attack**
- **Trump admin releases space nuclear power and propulsion strategy**
- **NuScale finalises agreement with Sarens**
- **US Administration issues Space Policy Directive**
- **Advanced reactor projects teams receive US federal risk reduction funding**
- **U.S. Energy Department probes hack, says no threat to national security**
- **U.S. has evidence hackers accessed its nuclear networks -Politico**
- **Explainer-Russia's potent cyber and information warfare capabilities**
- **US Navy sails nuclear submarine through Strait of Hormuz**
- **DOE selects advanced reactor concepts for funding**
- **Congress approves nuclear energy funding for FY2021**
- **US uranium miners ready to support nuclear power, says Uranium Committee**

### Europe

- **French power production cut by latest strike over nuclear reform**
- **French power production cut by workers protesting nuclear reform**
- **British nuclear firm Sellafield Ltd fined over electrical safety incident**
- **EU foreign ministers pave way for revival of Iran nuclear deal**
- **Climate could pay the price as Europe's nuclear plants age**
- **UK and Euratom sign Nuclear Cooperation Agreement**

## Russia

- **Putin instructs to focus on developing all components of nuclear triad**
- **Russia to place 13 Yars and Avangard ICBM launchers on combat alert next year**
- **Russia urges US to extend New START for the benefit of whole world**
- **Rosatom launches Russian additive manufacturing**
- **Rosatom may put stages I, II of nuclear center in Bolivia into operation in 2021**
- **Russian Defense Ministry does not rule out US might revise its stance on New START**
- **Even if extended, New START will have to be changed considering nuclear powers – senator**
- **Russia set to work out new ‘security equation’ with US — Lavrov.**
- **The barrier to nuclear is perception, says panel**
- **Leningrad II-1 completes safety tests**

## West Asia

### Iran

- **JCPOA Joint Commission holds online meeting**
- **JCPOA Joint Commission meeting is regular and usual: Iran**
- **Nullifying rather than removing sanctions: Ayatollah Khamenei**
- **11 Europeans’ JCPOA commitments that were reneged on**
- **Iran's president says "no doubt" U.S. will return to nuclear deal commitments**
- **New agreement needed to revive Iran nuclear deal under Biden, IAEA chief says**
- **Iran rejects IAEA chief's call that new agreement needed after Biden takes office -tweet**
- **China rejects possibility of JCPOA renegotiation**
- **Iran hits back at IAEA chief's call for new agreement, says JCPOA not renegotiable**
- **Iran has inked arms deal with other countries: defense minister**
- **Zarif reminds Pompeo of his self-sanctioning lunacy**
- **Zarif: E3 share blame with U.S. for ‘irreparable harm’ to Iranians**
- **IAEA Grossi not in position to demand new agreement with Iran**
- **UN calls for efforts to preserve JCPOA**
- **Rouhani: We're seriously after nullifying sanctions**
- **Arrival of Israeli submarine in Persian Gulf ‘act of aggression,’ Iran says**
- **Ireland to do everything it can to preserve JCPOA at UN Security Council**
- **Iran's foreign minister says Trump trying to fabricate pretext to attack Iran**

## East Asia

### North Korea

- **Former US nuclear negotiator says N. Korea's ultimate goal is to secure regime**

- **Mysterious N.Korea site may be building nuclear components, report says**
- **N. Korea's Kangson facility may not be uranium enrichment plant: Heinonen**
- **N. Korea could conduct ICBM test early next year: think tank**

## South Korea

- **Presidential secretary for peace planning tapped as new chief nuclear envoy**
- **Seoul's new nuclear envoy holds phone calls with US, Japan counterparts**
- **Seoul finalizes energy mix, to invest in nuclear decommissioning**

## Japan

- **Japan regulator appeals court ruling on two nuclear reactors**

## Misc/ World

- **New agreement needed to revive Iran nuclear deal under Biden, IAEA chief says**

## Op-ed

### India

- **India should focus on multilateral partnerships to counter China, experts say**
- **Need to bring space, aeronautical sectors closer, have long-term vision: Veteran scientist**
- **Credibilising India's strategic deterrence**

### China

- **Is China really ready to back a nuclear arms-free Southeast Asia?**

## West Asia

### Iran

- **Serious doubts about Grossi's intentions**
- **Iran N-deal: Heated rhetoric, heightened risk of miscalculation widen differences**
- **E3 forced to back down**
- **EU, Germany and Biden administration agree that JCPOA is a win-win: Kimball**
- **The Importance of International Law – the JCPOA must be upheld**

## South Korea

- **Unnecessary price**

## Think Tanks

- **The India-China Nuclear Dynamic: India's Options**
- **Nuclear Deterrence 3.0**
- **NATO Completes Annual Nuclear Exercise**

## Interviews/ Reports

- **No guarantee a Republican administration won't quit nuclear deal again: expert**

## India

### **Ballistic missile submarine Arighat in final stages of trials, to be commissioned early 2021**

Snehesh Alex Philip

The Print, December 16, 2020

Arighat, the second of the indigenous Arihant class nuclear-powered ballistic missile carrying submarine (SSBN), is in the final stages of sea trials and will be commissioned early next year, ThePrint has learnt. Sources in the defence and security establishment said the submarine has performed well during the sea trials so far, and added that the commissioning of the vessel was delayed due to the coronavirus pandemic.

While the original plan was to have four Arihant class submarines, it was changed by the UPA government, sources in the know said. Now, the two Arihant class submarines will have a displacement of 6,000 tonnes while two other SSBNs will be of a larger size (7,000 tonnes displacement). A key differentiating factor will be that the two larger vessels under construction — S4 and S4\* at the Ship Building Centre in Visakhapatnam — will have eight missile tubes instead of four. India currently also operates a nuclear-powered attack submarine (SSN) INS Chakra II, which is under lease from Russia.

<https://theprint.in/defence/ballistic-missile-submarine-arighat-in-final-stages-of-trials-to-be-commissioned-early-2021/567869/>

### **ISRO to kick off 2021 by launching its first Indian start-up passenger into space aboard the PSLV-C51**

Business Insider, December 17, 2020

Sriharikota (Andhra Pradesh), The first quarter of 2021 will see Indian space agency's till ringing with the commercial launch of Brazilian satellite Amazonia as well as three Indian satellites, said a top official. "End of February or early March 2021, we will be sending our rocket Polar Satellite Launch Vehicle-C51 (PSLV-C51). The primary payload will be the Brazilian satellite called Amazonia an earth observation satellite," K. Sivan, Chairman, Indian Space Research Organisation (ISRO), told IANS.

"The PSLV-C51 mission will be a very special mission not only for ISRO but also for India as the rocket will be carrying the earth observation satellite Anand made by an Indian startup called Pixxel (Incorporated as Syzygy Space Technologies Pvt Ltd)," Sivan said.

<https://www.businessinsider.in/science/space/news/isro-to-kick-off-2021-by-launching-its-first-indian-start-up-passenger-into-space-abroad-the-pslv-c51/articleshow/79780410.cms>

### **India, UK Hold Bilateral Dialogue On Nuclear Disarmament, Non-Proliferation**

Business World, December 17, 2020

The annual India-UK Bilateral Dialogue on Disarmament and Non-Proliferation was held virtually on Thursday, wherein the two sides held discussions on several issues including nuclear disarmament and non-proliferation and conventional weapons, among other things. According to an official release, the discussions between two sides focused on a range of contemporary issues of mutual interest in the area of nuclear, chemical, biological disarmament and non-proliferation, conventional weapons, outer space security and export control.

India and the UK recognised the importance of the dialogue for enhancing mutual understanding and appreciation on international security issues that contribute to the bilateral strategic partnership.

<http://www.businessworld.in/article/India-UK-hold-bilateral-dialogue-on-nuclear-disarmament-non-proliferation/17-12-2020-355000/>

### **India launches new communications satellite CMS-01 into orbit**

Elizabeth Howell

Space, December 18, 2020

India successfully launched a communications satellite into orbit Thursday (Dec. 17) to provide service across the country's mainland and some island regions, the Indian Space Research Organisation (ISRO) announced. The satellite, called CMS-01, lifted off a Polar Satellite Launch Vehicle (PSLV)-C50 rocket at 5:11 a.m. EST (1041 GMT or 3:41 p.m. local time) from the Satish Dhawan Space Center (on the island of Sriharikota). It reached its intended temporary orbit about 20 minutes after launch, ISRO officials said in a release. CMS-01 was the only passenger aboard the rocket.

<https://www.space.com/india-launches-communications-satellite-cms-01>

### **India, Vietnam sign seven agreements during virtual summit**

Hindustan Times, December 21, 2020

The meeting was held at a time when both countries are grappling with China's aggressive actions in the region. India is locked in a military standoff with China in Ladakh sector of the Line of Actual Control (LAC) while Vietnam has major differences over Chinese claims within its exclusive economic zone in the South China Sea. India and Vietnam signed seven agreements for cooperation in areas such as defence, petrochemicals and nuclear energy and unveiled a joint vision for peace and prosperity against the backdrop of concerns in both countries about China's aggressive actions across the region.

<https://www.hindustantimes.com/india-news/india-vietnam-sign-seven-agreements-during-virtual-summit/story-O9TBrm7JWzAyxK4pwGz7fP.html>

### **Rs 40,000 crore liquidity boost for private coal-based power plants**

Energy World, December 22, 2020

Private sector coal-based power plants could get a liquidity boost of Rs 40,000 crore this year because of the government's Atmanirbhar Bharat scheme which provided liquidation of overdue receivables from state power distribution companies (discoms) and also because Coal India has allowed the thermal plants to avail credit period for purchasing coal. Ratings agency CRISIL said in a statement the government's Rs 1.2 lakh crore loan scheme announced under Atmanirbhar Bharat will help cash-deprived discoms in paying the generation companies (gencos). The scheme required the first tranche, accounting for half of the total package, to be disbursed immediately and the balance upon discoms committing to operational improvements.

<https://energy.economictimes.indiatimes.com/news/power/rs-40000-crore-liquidity-boost-for-private-coal-based-power-plants/79872141>

### **Make in India: BHEL plans to shift Rs 3,000 cr worth of annual imports to local vendors**

Energy World, December 22, 2020

New Delhi: Bharat Heavy Electricals Ltd (BHEL), the country's largest power equipment manufacturer, is working on a plan to shift Rs 3,000 crore worth of imports to vendors in the local Indian market as part of a larger move towards Make in India. "BHEL is interested in indigenization of more than 300 items across nine categories, currently imported by our 16 manufacturing units, valued at over Rs 3,000 crore per annum," BHEL Chairman and Managing Director Nalin Singhal said in an interaction with local vendors from the MSME industry. He said BHEL is looking beyond power equipment into transportation, infrastructure for Oil & Gas, Defence and Aerospace and other sunrise sectors and the company intends to offer indigenous products with indigenous supply chains.

<https://energy.economictimes.indiatimes.com/news/power/make-in-india-bhel-plans-to-shift-rs-3000-cr-worth-of-annual-imports-to-local-vendors/79853149>

### **Vajpayee's Pokhran Nuclear Tests In 1998 'Most Enduring' Contribution: Jaishankar**

Outlook, December 25, 2020

Former Prime Minister Atal Bihari Vajpayee had an intuitive understanding that the post-Cold-war world required India to drastically rework its relationships and this vision led to a new beginning in ties with the United States, External Affairs Minister S Jaishankar said. Paying rich tribute to Vajpayee on his 96th birth anniversary, Jaishankar said the eminent leader warmly reached out to various regions and continents that laid the ground for the expansion of India's overall external engagements, particularly with Europe, Africa, Latin America and countries in the ASEAN region.

<https://www.outlookindia.com/website/story/vajpayees-pokhran-nuclear-tests-in-1998-most-enduring-contribution-jaishankar/368370>

### **India's first-ever privately designed and developed rocket is a step closer to becoming a reality in 2021**

Prabhjote Gill



Business Insider, December 28, 2020

India's first-ever privately designed and developed rocket, Vikram-1, is a step closer to becoming a reality. Founded by two former scientists of the Indian Space Research Organisation (ISRO) — Pawan Kumar Chandana and Naga Bharath Daka — the company behind the rocket, Skyroot Aerospace, has successfully test-fired its first solid rocket propulsion stage demonstrator called Kalam-5. Kalam-5 uses the exact same propellant, materials, and interface as the three solid propulsion stages of the Vikram-1 launch vehicle, according to Chandana. It is the first of the five Kalam engines that Skyroot plans to test.

<https://www.businessinsider.in/science/space/news/indian-space-startup-skyroot-aerospace-successfully-test-fires-first-solid-rocket-propulsion-stage-demonstrator-called-kalam-5/articleshow/79988975.cms>

### **Vikram Sarabhai death anniversary: Lesser-known facts about visionary scientist**

Free Press Journal, December 28, 2020

December 30 marks the death anniversary of legendary Indian scientist Vikram Sarabhai. Born on 12 August 1919, Sarabhai was an Indian physicist and astronomer who initiated space research and helped develop nuclear power in India. The establishment of the Indian Space Research Organization (ISRO) was one of his greatest achievements. The Sarabhai family was an influential and rich business family.

<https://www.freepressjournal.in/india/vikram-sarabhai-death-anniversary-lesser-known-facts-about-visionary-scientist>

### **Isro to launch first satellite developed entirely by Brazil's space agency**

T E Narasimhan

Business Standard, December 30, 2020

The Indian Space Research Organisation (Isro) is set to launch Amazonia-1, the first satellite to have been developed completely in Brazil by the National Institute for Space Research (INPE), the Latin American nation's apex space research body. Emirates SkyCargo, the freight division of Emirates airline, has executed a cargo charter to transport Amazonia-1 from Sao Jose dos Campos, Brazil to Chennai. This is the first time that Emirates SkyCargo has transported a space satellite from South America.

The earth Observation has been designed, assembled and tested in Brazil and took eight years to be developed. Once launched into space, it will help monitor the ecosystem of the Amazon rainforest, the world's largest tropical rainforest. The satellite is due to be sent to space in February 2021 from the Satish Dhawan Space Centre on the East coast of India. The Amazonia series satellites are composed of two independent modules: a Service Module, which is the Multi-Mission Platform (MMP), and a Payload Module, which houses image cameras and equipment for recording and transmitting image data.

[https://www.business-standard.com/article/current-affairs/isro-to-launch-first-satellite-developed-entirely-by-brazil-s-space-agency-120123000801\\_1.html](https://www.business-standard.com/article/current-affairs/isro-to-launch-first-satellite-developed-entirely-by-brazil-s-space-agency-120123000801_1.html)

### **Missiles, drones, defence shield — India has a series of military trials planned for 2021**

Snehesh Alex Philip

The Print, December 30, 2020

India has a series of military tests and trials planned for 2021, including that of the Ballistic Missile Defence (BMD) shield, an Air-Independent Propulsion (AIP) system for submarines, and drones, besides a number of missiles, including a BrahMos with an 800-km range. Sources in the defence and security establishment said one of the key systems to go under trial in the coming year would be the AIP, which is aimed for integration with India's fleet of six Scorpene submarines during refit.

The trials for the indigenous AIP, which will allow conventional submarines to stay under water for a longer duration, is to begin in the first quarter of the new year, the sources added. Another important trial that will take off is the one for phase 2 of the BMD, which aims to secure the country from all kinds of incoming missiles, including nuclear, and flying objects, through a multi-tier defence system. Phase 1 of the programme was completed last year.

<https://theprint.in/defence/missiles-drones-defence-shield-india-has-a-series-of-military-trials-planned-for-2021/575840/>

### **India and Bhutan to collaborate for outer space exploration**

Northeast Now, December 31, 2020

The Union cabinet has approved a Memorandum of Understanding (MoU) between India and Bhutan on peaceful uses of outer space. The MoU, which was signed on November 19, shall enable India and Bhutan to pursue cooperation in areas such as remote sensing of the earth, satellite communication and satellite-based navigation, space science and planetary exploration, use of spacecraft and space systems and ground system and application of space technology.

<https://nenow.in/top-news/india-and-bhutan-to-collaborate-for-outer-space-exploration.html>

### **BHEL bags order from Nuclear Power Corporation of India**

Free Press Journal, December 31, 2020

State-owned engineering firm BHEL on Wednesday said it has won an order from the Nuclear Power Corporation of India Ltd (NPCIL). It has bagged the order for supply of 32 Reactor Header Assemblies to NPCIL, a company statement said.

The order has been won under NPCIL's Fleet Mode Procurement for India's highest rated indigenously-developed 700 MWe Pressurized Heavy Water Reactors (PHWR) to be set up at four different locations in the country, BHEL said. Significantly, this is the first equipment order placed by NPCIL under the Fleet Mode Procurement programme and will give an impetus to domestic manufacturing, it said.

<https://www.freepressjournal.in/business/bhel-bags-order-from-nuclear-power-corporation-of-india>

## China

### **Irradiation technology could be used in killing coronavirus on cold chain food packaging: China National Nuclear Corporation**

Global Times, December 17, 2020

China National Nuclear Corporation and other institutions are researching irradiation technology to kill the coronavirus. Earlier stage experiments have simulated conditions under which the virus is sensitive to irradiation. Over the last three months, a series of experiments have been carried out using two simulated coronavirus, and a large amount of data has been obtained. Simulations show that a lower radiation can kill the virus without affecting food safety. According to preliminary results of the study, the irradiation technology is expected to be used eliminate the coronavirus on food packaging.

The China National Nuclear Corporation task force on coronavirus prevention will continue the study and improve technology that can be used to disinfect cold-chain food. Irradiation technology has been widely used to sterilize food. Currently, chemical and ultraviolet light is used to disinfect food. However, chemical disinfectants may leave chemical reagents in food, and ultraviolet disinfection is only applicable on the surface of food packaging, according to the China National Nuclear Corporation. Irradiation disinfection has greater penetrating power and is suitable for comprehensive virus-cleaning of a large number of cold chain foods. Across the country, stricter measures regulating imported cold-chain products are now being implemented after successive reports of imported cold-chain food samples testing positive for COVID-19 in the past few months, with experts noting that such cases could pose a risk of another outbreak in China this winter.

<https://www.globaltimes.cn/content/1210303.shtml>

### **Chang'e 5 recovery team use exoskeletons to aid mission**

Minnie Chan

South China Morning Post, December 18, 2020

Members of the team sent to recover the Chang'e 5 re-entry capsule and its precious cargo wore exoskeletons to help them trudge through the deep snows of Inner Mongolia laden with heavy packs. As soon as the capsule arrived back on Earth in the early hours of Thursday morning in the Siziwang banner of the north China region, a team from the China Aerospace Science and Technology Corporation, which was responsible for the entire lunar mission, had to race to set up a temporary

communication station to connect the landing site with its Beijing headquarters, state broadcaster CCTV reported.

<https://www.scmp.com/news/china/military/article/3114387/change-5-recovery-team-use-exoskeletons-aid-mission>

### **PLA naval brigade conducts UAV delivery training**

China Military Online, December 22, 2020

Recently, a naval observation and communication brigade under the PLA Southern Theater Command organized a flight and delivery drill with unmanned aerial vehicles (UAVs) to deliver food and medical supplies to the troops stationed on mountains and islands. Most of the observation and communication posts assigned to the brigade are located on high mountains or islands, featuring geographical remoteness and inconvenient transportation. Special circumstances such as suspension of air and shipping services caused by geological disasters or bad weather will block the supply delivery. Exploring the construction of the unmanned transport system and establishing an intelligent logistic support model are critical to meeting future battlefield needs.

In the flight and delivery drill this time, more than 20 drone sorties got involved and successfully delivered a large amount of urgently needed supplies to the guarding posts on top of mountains. Also in this drill, a variety of training subjects, including multi-batch delivery, multi-model delivery in mixed formation and night delivery in complicated weather condition have been conducted. It is said that for the next step, the unmanned platform transportation and delivery system will be developed and transformed from pilot project to normal operation, for better combat readiness.

[http://eng.chinamil.com.cn/view/2020-12/22/content\\_9956713.htm](http://eng.chinamil.com.cn/view/2020-12/22/content_9956713.htm)

### **China launches new Long March-8 rocket in step towards reusable space vehicles**

Kristin Huang

South China Morning Post, December 23, 2020

The rocket carries five satellites into space on its maiden flight after launch from Hainan. Future variant of the rocket will be reusable, enabling cheaper, more frequent launches as China seeks to grow its share of the space launch market. China launched its latest rocket from its southern island of Hainan on Tuesday, as it progresses towards its target of developing reusable launch vehicles. The Long March-8 rocket's maiden flight, carrying five satellites into space, came five days after the return of the Chang'e 5 mission from the moon. A future variant of the new rocket, the Long March-8R, will be reusable, putting it on a par with the Falcon series made by American aerospace company SpaceX.

<https://www.scmp.com/news/china/science/article/3114956/china-launches-new-long-march-8-rocket-step-towards-reusable>

**China aims for commercial race with at least 20 Long March-8 rocket launches a year**

Kristin Huang

South China Morning Post, December 23, 2020

Programme's commander-in-chief says he is confident goal to launch rockets simply, quickly and often is achievable. Reduced costs and future reusability aimed at making Chinese launches economical service for governments and companies. China will streamline assembly of its Long March-8 rocket and aim to make more than 20 launches a year, according to the programme's chief officer.

Commander-in-chief Xiao Yun said on an official government WeChat account that China's goal was to launch rockets as simply and quickly as possible. His remarks were published on Tuesday, hours after the new rocket's maiden launch from the southern island of Hainan. The short preparation time, high launch frequency and planned future reusability would help reduce costs and create a competitive commercial launching service.

<https://www.scmp.com/news/china/military/article/3115067/china-aims-commercial-race-least-20-long-march-8-rocket>

### **China says reports of demands on nuclear power complicating EU talks are fake**

Reuters, December 24, 2020

China's foreign ministry said on Thursday that media reports of Chinese demands on nuclear power investment complicating bilateral talks with the European Union are "fake". Discussions on the China-EU investment pact are proceeding "smoothly", Wang Wenbin, a spokesman at the Chinese foreign ministry, said at a regular briefing. Negotiations have stalled at the last stretch because China is raising additional demands on nuclear energy, German magazine WirtschaftsWoche reported

<https://www.reuters.com/article/idUSB9N2I6000>

## USA

### **U.S. Nuclear Weapons Agency Hacked as Part of Massive Cyber-Attack**

William Turton, Michael Riley And Jennifer Jacobs

Time, December 17, 2020

The U.S. nuclear weapons agency and at least three states were hacked as part of a suspected Russian cyber-attack that struck a number of federal government agencies, according to people with knowledge of the matter, indicating widening reach of one of the biggest cybersecurity breaches in recent memory.

Hackers with ties to the Russian government are suspected to be behind a well coordinated attack that took advantage of weaknesses in the U.S. supply chain to penetrate several federal agencies, including departments of Homeland Security, Treasury, Commerce and State. While many details are still unclear, the hackers are believed to have gained access to networks by installing malicious code in a widely used software program from SolarWinds Corp., whose customers include government agencies and Fortune 500 companies, according to the company and cybersecurity experts.

<https://time.com/5922897/us-nuclear-weapons-energy-hacked/>

### **Trump admin releases space nuclear power and propulsion strategy**

ET Energy World, December 17, 2020

Washington: The Donald Trump administration in the US has issued a new space policy directive for the use of nuclear power and propulsion in space. NASA said that the issuance of the new Space Policy Directive - 6 (SPD-6) on Wednesday will help propel its next giant leap -- creating a sustainable presence on the Moon and sending astronauts to Mars.

Space nuclear systems power spacecraft for missions where alternative power sources are inadequate, such as environments that are too dark for solar power or too far away to carry sufficient quantities of chemical fuels.

<https://energy.economictimes.indiatimes.com/news/power/trump-admin-releases-space-nuclear-power-and-propulsion-strategy/79778141>

### **NuScale finalises agreement with Sarens**

Nuclear Engineering, December 17, 2020

US-based NuScale Power announced that it has finalised an agreement with Sarens USA to support deployment of its small modular reactor (SMR) and provide a cash investment in NuScale. Sarens USA, the global leader in crane rental services, heavy lifting, and engineered transport, will provide both heavy crane supply for construction as well as engineering, and transportation planning, and will be the key heavy haul provider that gets the NuScale Power Module™ from the factory to the first site.

As part of the agreement, Sarens will provide a long-term investment in NuScale, signalling a growing commitment from a major global strategic player as an investment partner. NuScale's exclusive engineering, procurement, and construction (EPC) contract partner and majority investor, Fluor Corporation, will also utilise Sarens for construction site cranes. Sarens is also positioned to provide additional support to both NuScale and Fluor. Sarens will also be supporting NuScale Power Module assembly work for the development of the NuScale power plant for the Utah Associated Municipal Power Systems' (UAMPS) Carbon Free Power Project (CFPP). Work with Sarens will begin over the next six months.

<https://www.neimagazine.com/news/newsnuscale-finalises-agreement-with-sarens-8415158>

### **US Administration issues Space Policy Directive**

World Nuclear News, December 17, 2020

A White House memorandum issued yesterday establishes a national strategy to ensure the development and use of SNPP systems, which can power spacecraft for missions where alternative

power sources are inadequate - for example, environments that are too dark for solar power or too far away to carry sufficient quantities of chemical fuels. SNPPs include radioisotope power systems, which use radioactive decay to generate electrical power or heat, and nuclear reactors, which generate energy through nuclear fission, typically of uranium fuel.

US space agency NASA has used radioactive power systems since the 1960s to help power spacecraft and landers in the outer solar system, the surface of Mars, and other environments where solar and other power sources are inadequate. They have been used in several Apollo missions to the Moon, and more recently in the Curiosity Mars rover, launched in 2011. NASA's Perseverance Mars rover, launched earlier this year and due to land on Mars in February, will be powered by a Multi-Mission Radioisotope Thermoelectric Generator. No space nuclear propulsion systems have been launched to date, but they are seen as necessary in the future to shorten travel times to Mars and elsewhere.

<https://world-nuclear-news.org/Articles/US-Administration-issues-Space-Policy-Directive>

### **Advanced reactor projects teams receive US federal risk reduction funding**

World Nuclear News, December 17, 2020

The US Department of Energy (DOE) Office of Nuclear Energy (NE) has selected five teams to receive USD30 million in initial funding for risk reduction projects under its Advanced Reactor Demonstration Program (ARDP). All five of the selected designs have the potential to compete globally once deployed, DOE said. The Risk reduction programme is one of three development and demonstration pathways under the ADRP and aims to design and develop safe and affordable reactor technologies that can be licensed and deployed over the next 10 to 14 years.

The five projects chosen through a funding opportunity announcement issued in May to receive the cost-shared awards are: the BWXT Advanced Nuclear Reactor, a transportable microreactor using TRISO fuel for use in off-grid applications and remote areas; Westinghouse's eVinci Microreactor, a transportable heat pipe-cooled microreactor also using TRISO fuel; the Hermes Reduced-Scale Test Reactor, a scaled-down version of Kairos Power's fluoride salt-cooled high temperature reactor (KP-FHR); the Holtec SMR-160 light-water small modular reactor; and the Molten Chloride Reactor Experiment, a project led by Southern Company Services Inc to build and operate a small reactor experiment based on TerraPower's molten chloride fast reactor technology.

<https://www.world-nuclear-news.org/Articles/Advanced-reactor-projects-teams-receive-US-federal>

### **U.S. Energy Department probes hack, says no threat to national security**

Timothy Gardner

Reuters, December 18, 2020

The U.S. Department of Energy said on Thursday it was responding to a cyber breach that was part of the suspected Russian campaign hitting other government agencies, but that the attack was isolated to its business networks. "At this point, the investigation has found that the malware has been isolated to



business networks only, and has not impacted the mission essential national security functions of the Department,” spokeswoman Shaylyn Hynes said in a statement.

The DOE is the latest U.S. federal agency that has confirmed it was attacked in hacks of SolarWinds software. Systems at the Commerce Department and Treasury Department have also been breached.

<https://www.reuters.com/article/us-usa-cyber-breach-doe/u-s-energy-department-probes-hack-says-no-threat-to-national-security-idUSKBN28R3AZ>

### **U.S. has evidence hackers accessed its nuclear networks -Politico**

Reuters, December 18, 2020

The U.S. Energy Department and National Nuclear Security Administration, which manages the country’s nuclear weapons stockpile, have evidence that hackers gained access to their networks as part of a massive cyber campaign, Politico reported on Thursday, citing officials directly familiar with the matter.

<https://www.reuters.com/article/us-usa-cyber-breach-nuclear/u-s-has-evidence-hackers-accessed-its-nuclear-networks-politico-idUSKBN28R34N>

### **Explainer-Russia's potent cyber and information warfare capabilities**

Andrew Osborn, Gabrielle Tétrault-Farber

Reuters, December 19, 2020

U.S. Secretary of State Mike Pompeo said on Friday that Russia was responsible for a cyber attack that embedded malicious code inside U.S. government software systems and those of other governments and companies across the world.

The Kremlin has always denied Moscow’s involvement in cyber attacks against the West. It has said that Russia had nothing to do with this latest assault. Here is some information about Russia’s possible motives for such an attack, and details about Russian cyber offensive and information warfare capabilities

<https://www.reuters.com/article/global-cyber-russia/explainer-russias-potent-cyber-and-information-warfare-capabilities-idUSKBN28T0ML>

### **US Navy sails nuclear submarine through Strait of Hormuz**

Ryan Browne and Barbara Starr

CNN Politics, December 21, 2020



The US Navy nuclear-powered guided-missile submarine USS Georgia transited the Strait of Hormuz Monday accompanied by two additional American warships, the Navy said Monday in a rare public announcement of a nuclear submarine's movements. "The nuclear-power Ohio-class guided-missile submarine USS Georgia (SSGN 729), along with the guided-missile cruisers USS Port Royal (CG 73) and USS Philippine Sea (CG 58), transited the Strait of Hormuz entering the Arabian Gulf, Dec. 21," the Navy said in a statement using an alternative name for the Persian Gulf.

The vessels' entrance into the area comes amid heightened tensions with Iran, with Secretary of State Mike Pompeo blaming Iranian backed militias for a rocket attack on the US Embassy compound in Baghdad, on Sunday. Some US officials have expressed concern that Iran may use the anniversary of the killing of General Qasem Solemani to carry out a strike on the US.

<https://edition.cnn.com/2020/12/21/politics/us-nuclear-sub-hormuz/index.html>

### **DOE selects advanced reactor concepts for funding**

World Nuclear News, 23 December 2020

The US Department of Energy (DOE) has announced USD20 million in awards for the third of three programmes under its new Advanced Reactor Demonstration Program (ARDP). DOE's Office of Nuclear Energy has selected three teams to receive FY2020 funding for the ARDP's Advanced Reactor Concepts-20 (ARC-20) programme. DOE expects to invest about USD600 million over the next seven years in ARDP, which aims to help domestic private industry demonstrate advanced nuclear reactors in the USA.

The department issued an ARDP funding opportunity announcement in May this year, which included the ARC-20 awards, the Advanced Reactor Demonstration awards, and the Risk Reduction for Future Demonstration awards. For the ARC-20 projects, DOE expects to invest a total of about USD56 million over four years with its industry partners providing at least 20% in matching funds. The goal of the ARC-20 programme is to assist the progression of advanced reactor designs in their earliest phases.

<https://www.world-nuclear-news.org/Articles/DOE-selects-advanced-reactor-concepts-for-funding>

### **Congress approves nuclear energy funding for FY2021**

World Nuclear News, 23 December 2020

The US Congress voted to approve appropriations for fiscal year 2021 that includes USD1.5 billion for the Department of Energy's Office of Nuclear Energy. The appropriations also include USD150 million to initiate the uranium reserve programme to address challenges to the production of domestic uranium.

The Consolidated Appropriations Act of 2021, approved by Congress on 21 December, funds USD900 billion in coronavirus relief and appropriates USD1.4 trillion in government spending for fiscal year 2021 (1 October 2020-30 September 2021). The total appropriation for the Department of Energy (DOE) is USD42.04 billion, which is USD3.45 billion above the FY2020-enacted level and USD6.31

billion above the budget request. This includes USD1.5 billion allocated for nuclear energy research, development and demonstration activities, including USD280 million for the Advanced Reactors Demonstration Program, which was announced in May.

<https://www.world-nuclear-news.org/Articles/Congress-approves-nuclear-energy-funding-for-FY202>

### **US uranium miners ready to support nuclear power, says Uranium Committee**

World Nuclear News, 24 December 2020

"The US uranium mining industry has the personnel and yellowcake processing plants on standby, and is ready to expand into new areas with discoveries that will provide hundreds of years of available uranium resources from a variety of secure sources," says Michael D. Campbell, chairman of the Uranium (Nuclear & REE) Committee of the Energy Minerals Division of the American Association of Petroleum Geologists (AAPG). "So let the drilling and processing begin."

In the Uranium Committee's latest report for the AAPG, Campbell notes that, over the past 40 years, uranium typically has been imported to the USA from Russia, China, Uzbekistan, Kazakhstan, Niger, Namibia, among other countries, but adds that efforts are currently under way to produce more of the fuel locally for utilities from "more secure sources", such as in the USA and, if necessary, from Canada and Australia. In his report - Beyond Hydrocarbons? The Rest of the Story - Campbell explains the state of play for the USA's uranium needs and potential since the expiry in 2013 of the Megatons-to-Megawatts programme it had with Russia.

"The reason the American utilities have chosen overseas sources of uranium in the past is because the uranium could be obtained at a lower price than that produced by American mining companies. Why? Because some of the countries produce uranium by their governments underwriting the production with direct and indirect financial support, allowing them to produce cheap uranium, relative to American uranium mines. If this sounds familiar, it should because China is doing something similar in rare-earth metals, although the federal government has also taken steps to increase mining and processing of rare earths in the US to meet strategic and industrial requirements," Campbell said.

<https://www.world-nuclear-news.org/Articles/US-uranium-miners-ready-to-support-nuclear-power>,

## Europe

### **French power production cut by latest strike over nuclear reform**

Reuters, December 16, 2020

Strikes by workers protesting against a French nuclear reform plan reduced nuclear power generation by more than 1.7 gigawatts (GW) by 1614 GMT Wednesday plus 1 GW at hydropower stations, data from power group EDF showed. The Penly 1 and Civaux 1 reactors are operating at limited capacity due to the strike, reducing available production by 1,715 megawatts (MW).

The Penly 1 reactor, with a capacity loss of 1,070 MW, is expected back online by 2100 GMT, while the Civaux 1 reactor, accounting for 645 MW of lost production, is expected to remain offline for the duration of the strike, the data showed.

<https://www.reuters.com/article/idUSKBN28Q2GC>

### **French power production cut by workers protesting nuclear reform**

Reuters, December 17, 2020

Strikes by workers protesting against a French nuclear reform plan reduced nuclear power generation by about 9.5 gigawatts (GW) by 1800 GMT Thursday, power group EDF data showed. Fourteen reactors are now operating at limited capacity due to the strike, reducing available output by 9.54 GW. That represented around 13.8% of available production capacity as of Thursday evening, data from RTE and EDF showed.

<https://www.reuters.com/article/idUSL1N2IX0G4>

### **British nuclear firm Sellafield Ltd fined over electrical safety incident**

Reuters, December 18, 2020

Sellafield Ltd was fined £320,000 on Friday after pleading guilty in a court case related to an incident at one of its sites where an employee sustained injuries, Britain's Office for Nuclear Regulation (ONR) said. The incident took place on 24 April 2020 at the Sellafield site which resulted in a worker sustaining 15-20% burns while working with high voltage electrical equipment, according to ONR.

Sellafield is on the coast of Cumbria, northwest England. Activities at the site include nuclear fuel reprocessing, nuclear waste storage and nuclear decommissioning, and it is a former nuclear power generating site. ONR said the incident posed no radiological risk to workers or the public.

<https://www.reuters.com/article/idUSL1N2IY1OF>

### **EU foreign ministers pave way for revival of Iran nuclear deal**

The Guardian, December 21, 2020

EU foreign ministers have agreed not to set fresh preconditions on a revival of the Iran nuclear deal, believing Tehran and Washington should be able to come back into full compliance with the agreement without at this stage needing to accept to extend or strengthen it. The step removes one of the potential roadblocks to Iran coming back into compliance with the existing deal, so long as the US lifts its sanctions and complies with UN resolutions. The UK is understood to believe the issue of extending the deal need not be raised until "significant progress" has been made on the US and Iran coming back into compliance.

<https://www.theguardian.com/world/2020/dec/21/eu-foreign-ministers-pave-way-for-revival-of-iran-nuclear-deal>

### **Climate could pay the price as Europe's nuclear plants age**

Nina Chestney, Susanna Twidale  
Reuters, December 22, 2020

Nuclear power capacity able to supply roughly 60 million homes is scheduled to close this decade as utilities struggle to replace northwest Europe's ageing reactors, raising the risk of higher carbon emissions as fossil fuels plug the gap. Nuclear power provides around a quarter of the European Union's electricity generation, with 15 of the 27 nations hosting 107 reactors that provide total capacity of around 100 gigawatts (GW). For Britain, which left the European Union at the end of January, nuclear provides around 20% of electricity, and the Conservative government has vaunted the energy form's role in curbing global warming.

But 90 of Europe's reactors are at least 31 years old as of December 2020, data from this year's World Nuclear Industry Status Report showed. On average, they were designed to last 40 years. Precise data on decommissioning is hard to obtain as plans can be revised as economics change. Consultancy Timera Energy says that by 2030, regulatory timetables show around 29 GW of nuclear closures in seven European countries (Belgium, Britain, France, Germany, Italy, the Netherlands and Spain). Assuming some plants will get extensions, Timera estimates around 21 GW of that capacity will be taken offline. While an average nuclear plant has a capacity of around 1 GW, EDF Energy says its 1.2 GW British plants can each power more than 2 million homes.

<https://www.reuters.com/article/idUSL1N2J11RF>

### **UK and Euratom sign Nuclear Cooperation Agreement**

World Nuclear News, December 29, 2020

The UK and the European Atomic Energy Community (Euratom) have signed a Nuclear Cooperation Agreement (NCA). This is separate from the wider UK-EU Trade and Cooperation Agreement that was also announced on 24 December and which has since been approved by ambassadors from the 27 EU Member States, paving the way for it to take effect on 1 January. UK lawmakers will tomorrow return to the House of Commons, the lower chamber of parliament, to vote on the so-called post-Brexit trade deal. A majority of UK MPs are expected to vote in favour of the UK-EU Trade and Cooperation Agreement. The deal sets the framework for trade once the UK leaves the EU single market and customs union on 31 December. Under EU rules, the deal can take effect provisionally, though the European Parliament will vote on it in January. Outlined in a 1246-page document, the agreement ends nearly 50 years of UK membership of the EU. Announcing the NCA with Euratom on 24 December, the Department for Business, Energy and Industrial Strategy (BEIS) noted that an NCA is a commonly used international treaty which gives a legal underpinning to civil nuclear cooperation, and that both Euratom and the UK already have such agreements with a number of other countries.

"The UK and Euratom are global leaders in supporting responsible practices in civil nuclear, particularly non-proliferation of nuclear weapons," BEIS said. "This UK-Euratom NCA sends a clear message to the wider international community, the nuclear sector, and the public that both parties are fully committed to cooperation on civil nuclear, including safeguards, safety and security. It provides a framework for trade in nuclear materials and technology, facilitates research and development, and enables exchange of information and expertise including on medical radioisotopes." Articles 7 and 8 of the UK-EU joint declarations refer, respectively, to the specific terms and conditions of participation in the Euratom Programme, and in ITER and the development of fusion energy.

<https://world-nuclear-news.org/Articles/UK-and-Euratom-sign-Nuclear-Cooperation-Agreement>

## Russia

### **Putin instructs to focus on developing all components of nuclear triad**

TASS News Agency, December 21, 2020

Russian President Vladimir Putin gave instructions on Monday to focus on developing all the components of Russia's nuclear triad. "I instruct to focus on dealing with the next key tasks. First, maintaining the nuclear forces' high combat readiness and developing all the components of the nuclear triad. This is fundamentally important to reliably guarantee the security of our country and keep strategic parity in the world," Putin said at a board meeting of the Defense Ministry.

Russia's approaches in this sphere are "completely defensive and were outlined in the document adopted in 2020 on the fundamentals of the state policy in the sphere of nuclear deterrence," the Russian leader said.

<https://tass.com/defense/1237867>

### **Russia to place 13 Yars and Avangard ICBM launchers on combat alert next year**

TASS News Agency, December 21, 2020

Russia's Strategic Missile Force will get 13 launchers with Yars and Avangard intercontinental ballistic missiles (ICBMs) in 2021, Russian Defense Minister Sergei Shoigu said at the ministry's enlarged board meeting on Monday. "In 2021, the Defense Ministry will deal with a number of priority rearmament tasks. It will have to put 13 launchers with Yars and Avangard intercontinental ballistic missiles on combat duty in the Strategic Missile Force," the defense chief said.

Russia also plans to complete the construction of the necessary infrastructure for Yars and Avangard ICBMs in Kozelsk, Yasny, Uzhur, Novosibirsk and Yoshkar-Ola, Shoigu said. "Additional funds allocated for the production of these systems, will help reach the level of the strategic nuclear forces' provision with advanced weapons at 88.3%," the defense chief stressed.

<https://tass.com/defense/1238007>

### **Russia urges US to extend New START for the benefit of whole world**

TASS News Agency, December 23, 2020

Russia is calling on Washington to use the little time that is left and extend the Strategic Arms Reduction Treaty (New START) for the benefit of the two countries and the whole world, the Russian Embassy in the US said in a comment on the 10th anniversary of the document's ratification by the US Senate.

According to the diplomatic mission, New START is the last bilateral agreement verifiably and transparently limiting world's two largest nuclear arsenals. As of December 2020, Russian and US teams have carried out 328 on-site inspections, visiting each other's missile, submarine, and bomber bases. The two sides have also exchanged over 21,000 notifications on the status of their strategic offensive arms.

<https://tass.com/politics/1238713>

### **Rosatom launches Russian additive manufacturing**

World Nuclear News, December 24, 2020

Rosatom - Additive Technologies (RosAT) has opened its first Additive Technologies Centre (ATC) as the only such facility in Russia using domestic equipment. Located at the site of the Moscow Polymetal Plant, the ATC will mainly test additive manufacturing technologies and demonstrate their capabilities for industrial enterprises. RosAT plans to launch full production of additive manufacturing equipment by the end of 2021 and expects to have a turnover of RUB300 million (USD3 million) from this business by 2030, the company's director general, Mikhail Turundaev, said.

RosAT is a subsidiary of Russian nuclear fuel manufacturer TVEL, which is itself a subsidiary of Russian state nuclear corporation Rosatom. TVEL said the ATC in Moscow combines development, engineering and manufacturing, which means RosAT will be able to check designs and technological solutions "immediately after equipment launch and make adjustments promptly".

<https://www.world-nuclear-news.org/Articles/Rosatom-launches-Russian-additive-manufacturing>

### **Rosatom may put stages I, II of nuclear center in Bolivia into operation in 2021**

TASS News Agency, December 25, 2020

The Rosatom State Nuclear Energy Corporation is continuing the construction of the Center for Nuclear Research and Technologies in Bolivia, despite the difficult political situation in that country. Next year the company plans to commission the first and second stages of the facility, Head of Rosatom Alexey Likhachev said on Friday. "Despite two revolutions, work continues in Bolivia. Next year we will start commissioning facilities of the first and second stages of the Center for Nuclear Research and Technologies," he said.

In mid-February, spokesperson for the state corporation told TASS that Rosatom continues its project to build the Center for Nuclear Research and Technologies in Bolivia. "Rosatom goes ahead with implementing the project to build the Center for Nuclear Research and Technologies in Bolivia. We have received no official notifications about the project's suspension from our Bolivian partners," the Russian state corporation said.

<https://tass.com/economy/1239807>



**Russian Defense Ministry does not rule out US might revise its stance on New START**

TASS News Agency, December 28, 2020

The United States' attitude to prolonging the Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) may change by virtue of political reasons, Russia's Deputy Defense Minister Alexander Fomin told the government-published daily Rossiiskaya Gazeta in an interview on Sunday. "Russia invited the United States to prolong the New START and simultaneously get down to joint work to draft a new agreement that would take into account all factors influencing strategic stability. At the same time, as I have already said, the American side has different priorities, for which reason it has shown no interest in extending the treaty. In the light of the current political situation in the United States we do not rule out that the US stance on this issue may change," Fomin said. He recalled that the current treaty would stay effective until February 5, 2021.

<https://tass.com/defense/1240279>

**Even if extended, New START will have to be changed considering nuclear powers – senator**

TASS News Agency, December 29, 2020

The Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) between Russia and the United States will still have to be dismantled and changed for another similar treaty due to military breakthroughs in nuclear powers even if its extension can be secured now, Russian senator Viktor Bondarev said in an interview with TASS.

"New START remains in force until February 5, 2021 if it's not substituted by another agreement. It can be extended until 2026 at the most under mutual agreement. In any case, it will have to be annulled with time and changed for a more updated document that is similar in contents, will reflect changes in geopolitical realities and will take into account the breakthroughs in the military and technical equipment of certain third parties. I mean hypothetical involvement of China and other nuclear club members in the new treaty," Bondarev underlined.

<https://tass.com/defense/1240741>

**Russia set to work out new 'security equation' with US — Lavrov.**

TASS News Agency, December 30, 2020

Moscow is ready to work out a new 'security equation' in talks with Washington, which will take into account all strategic stability factors, Russian Foreign Minister Sergey Lavrov said in an interview with TASS.

"When the global situation continues to deteriorate, we want Russia and the US, [as countries] bearing special responsibility for maintaining international security, to sit down at the negotiating table to come up with a new 'security equation' that will take into account all strategic stability factors and modern military technologies," he underscored. Lavrov underlined that Russia is waiting for the next US

administration to determine its approach to the future of the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) and the arms control negotiations in general.

<https://tass.com/politics/1241279>

### **The barrier to nuclear is perception, says panel**

World Nuclear News, December 31, 2020

As policymakers grapple with the twin challenges of climate change and a post-COVID economic recovery, the benefits of nuclear power are clearer than ever, but the industry still has some way to go in addressing perceptions of its alleged drawbacks with cost, safety and radioactive waste. This was the overriding message of the three panellists in a webinar held last week by Utilities Middle East in partnership with Russian state nuclear corporation Rosatom. The 24 December event - Nuclear Energy: Accelerating a clean energy future - included Mohamed Al Hammadi, CEO of Emirates Nuclear Energy Corporation; Alexander Voronkov, regional vice-president and director of Rosatom's Middle East and North Africa division; and Sama Bilbao y León, director general of World Nuclear Association. It was moderated by Martin Menachery, editor of Refining & Petrochemicals Middle East.

#### Benefits

Barakah unit 1 - the first nuclear reactor in the Arab world - will be the single largest power generator in the UAE when it begins commercial operations early next year. "The UAE will benefit from this clean source of baseload energy and we are expecting that once we have all four units in operation about 25% of the nation's electricity will be generated from nuclear. That's equivalent to taking 3.2 million cars off the road annually," Al Hammadi said. To match the energy density of nuclear power with solar panels would require "covering a major part of the country", and "other than hydropower, nuclear is the only form of clean energy that can work 24/7".

<https://www.world-nuclear-news.org/Articles/The-barrier-to-nuclear-is-perception,-says-panel>

### **Leningrad II-1 completes safety tests**

World Nuclear News, December 31, 2020

Unit 1 of the Leningrad Phase II nuclear power plant has successfully completed tests on the strength of the internal protective shell of the reactor building, Russian state nuclear corporation Rosatom said today. When it was connected to the grid on 9 March 2018, the unit became the second VVER-1200 reactor to start up, following the launch in 2016 of Novovoronezh unit 6. "The results of the tests confirmed that after the first two years of industrial operation of the unit, since October 2018, the reactor building's shell is still strong and airtight, and it is able to continue to withstand significant mechanical, thermal and other project loads," Alexander Belyaev, chief engineer of Leningrad II, said. "There are no defects, cracks or deformations in it."



The inner protective shell is one of the unit's safety systems. It is made of reinforced concrete up to 1200 mm thick and lined with 6-mm carbon steel. It prevents radioactive substances from entering the reactor building in all modes of operation of the nuclear power plant, including emergency operation, thus ensuring the safety of personnel, the local population and the environment, Rosatom said.

<https://www.world-nuclear-news.org/Articles/Leningrad-II-1-completes-safety-tests>

## West Asia Iran

### **JCPOA Joint Commission holds online meeting**

Tehran Times, December 16, 2020

The Joint Commission of the JCPOA was convened in Vienna on Wednesday. It was attended online by deputy foreign ministers and political directors from Iran, Russia, China, Britain, Germany, France and the European Union. The EU was represented by Helga Schmid, the secretary general of the European External Action Service. Chaired by Schmid, the meeting was meant to prepare informal talks among the foreign ministers on December 21. It was the first meeting of the Joint Commission since Joe Biden won the U.S. presidential election. Biden has promised to return to the JCPOA. The JCPOA, commonly known as the Iran nuclear deal, was inked in Vienna on July 14, 2015, between Iran and the five permanent members of the UN Security Council – China, France, Russia, the UK and U.S. – plus Germany, together with the European Union. According to the JCPOA, Iran agreed to scale back its nuclear activities in exchange for termination of economic and financial sanctions. Iran has repeatedly said if the remaining parties to the deal honor their commitments, it will immediately reverse its decision.

The meeting also took place more than two weeks after the assassination of Iranian nuclear scientist Mohsen Fakhrizadeh, mainly blamed on Israel through a collusion with the Trump administration. It came also after the Iranian parliament approved a legislation obliging the government to accelerate nuclear activities if the signatories to the JCPOA refuse to resume economic and financial trade with Iran. “The government of the Islamic Republic of Iran is committed and obligated to implement legislation approved by the parliament after they have undergone legal processes,” Iran’s Deputy Foreign Minister Abbas Araghchi, who represented Iran in the Joint Commission, said after the online meeting. “Instead of condemning the cowardly assassination of Iran’s prominent nuclear scientist, the three European governments condemned the legal punishment of a guilty individual,” added Araghchi in an open reference to the execution of Rouhollah Zam, the operator of the Amad News website which incited violence in the 2017 riots.

<https://www.tehrantimes.com/news/455878/JCPOA-Joint-Commission-holds-online-meeting>

### **JCPOA Joint Commission meeting is regular and usual: Iran**

Tehran Times, December 16, 2020

Saeed Khatibzadeh, spokesman for Iran’s Foreign Ministry, says the Joint Commission of the JCPOA (the official name for the 2015 Iran nuclear deal) is going to hold a normal and usual meeting.

“This meeting is one of the regular and usual meetings of the Joint Commission of the JCPOA, which is held every three months at the level of deputy ministers and political directors of JCPOA parties to review the implementation process and obstacles to the implementation of commitments by the parties,” Khatibzadeh said in a statement on Wednesday morning. He also said that the meeting will be held via videoconference due to Covid-19. “Given the considerations related to Covid-19, this meeting will be held according to the schedule and via videoconference like many international meetings today, Wednesday, December 17, at 13:30 Tehran time,” the spokesman noted.

<https://www.tehrantimes.com/news/455845/JCPOA-Joint-Commission-meeting-is-regular-and-usual-Iran>

### **Nullifying rather than removing sanctions: Ayatollah Khamenei**

Tehran Times, December 16, 2020

Leader of the Islamic Revolution of Iran Ayatollah Seyed Ali Khamenei has addressed a range of domestic and foreign policy issues in a meeting with a group of the organizers for commemorating the anniversary of the martyrdom of the martyrs of resistance Lieutenant General Haj Qasem Soleimani and Abu Mahdi al-Muhandis. The meeting came a few weeks before the first anniversary of the assassination of General Soleimani and his comrade al-Muhandis near Baghdad’s international airport earlier this year. The two martyrs were assassinated in an American drone strike on January 3 that was ordered by U.S. President Donald Trump. The strike brought Iran and the United States close to an all-out war as General Soleimani was an influential figure in Iran and beyond. In response, Iran showered a U.S. airbase in western Iran with missiles, causing brain injury among dozens of American servicemen.

However, Iran said time and again that the ultimate revenge for the assassination of General Soleimani would be far more important than a missile strike on a U.S. base. It would be the withdrawal of U.S. forces from the region. Ayatollah Khamenei said the missile strike on the American airbase of Ain al-Asad was another slap on the face of America. But the tougher slap, the Leader said, would be the soft victory over the superficial hegemony of arrogance and the expulsion of the Americas from the region. The former needs the determination of our young revolutionaries and devoted elites, and the latter needs the determination of all nations and the resistance policies, the Leader pointed out. Ayatollah Khamenei stated, “Millions attending Martyrs Soleimani and Abu Mahdi’s funerals in Iraq and Iran was the first severe slap to the U.S. But the worse one is overcoming the hegemony of arrogance and expelling the U.S. from the region. Of course, revenge will be taken on those who ordered it and the murderers.”

<https://www.tehrantimes.com/news/455844/Nullifying-rather-than-removing-sanctions-Ayatollah-Khamenei>

### **11 Europeans’ JCPOA commitments that were reneged on**

Tehran Times, December 16, 2020

As the European signatories to the 2015 nuclear deal move to turn the heat on Iran by trying to widen the scope of the nuclear deal, a publication close to the office of the Leader of the Islamic Revolution put the spotlight on the Leader’s remarks on the European non-compliance with the nuclear deal. The publication, Khatt-e Hezbollah (the Hezbollah Line), said Europe has effectively withdrawn from the nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA). First of all, the publications quoted the Leader as questioning European compliance with the JCPOA.

“Do you notice Europe? And how did they act on the issue of the JCPOA and their commitments? Now, it’s interesting that they reiterate all the time that ‘we are committed to the JCPOA.’ What is the compliance of Germany, France and Britain? Someone should ask that how are you committed [to the JCPOA]? What kind of commitment do you have to the JCPOA? Which commitment did you comply with?” Ayatollah Seyed Ali Khamenei said in a mid-May, 2019 speech, according to Khatt-e Hezbollah. Nearly two months after that speech, the Leader once again castigated the Europeans for their non-compliance with the JCPOA, saying that the Europeans have reneged on 11 commitments under the nuclear deal.

<https://www.tehrantimes.com/news/455833/11-Europeans-JCPOA-commitments-that-were-reneged-on>

### **Iran's president says "no doubt" U.S. will return to nuclear deal commitments**

Reuters, December 17, 2020

Iran’s President Hassan Rouhani said on Thursday he was certain the incoming U.S. administration will return to its nuclear deal commitments and lift crippling sanctions on his country. “I have no doubt that the three-year resistance of the Iranian people will persuade the future American government to return to its commitments and the sanctions will be broken,” Rouhani said.

<https://www.reuters.com/article/idUSKBN28R0UI>

### **New agreement needed to revive Iran nuclear deal under Biden, IAEA chief says**

Francois Murphy

Reuters, December 17, 2020

Reviving Iran’s nuclear deal under U.S. President-elect Joe Biden would require striking a new agreement setting out how Iran’s breaches should be reversed, U.N. atomic watchdog chief Rafael Grossi said. Iran has breached many of the deal’s limits on its nuclear activities in response to U.S. President Donald Trump’s withdrawal from the deal and the reimposition of U.S. sanctions against Tehran that the deal lifted. Tehran often says it can quickly reverse its breaches if U.S. sanctions are removed.

Biden, who takes office on Jan. 20, has said the United States will rejoin the deal “if Iran resumes strict compliance” with the agreement that imposed strict curbs on its nuclear activities in return for the lifting of sanctions. In an interview with Reuters, Grossi, who heads the International Atomic Energy Agency that polices the deal, said there had been too many breaches for the agreement to simply fall back into place. “I cannot imagine that they are going simply to say, ‘We are back to square one’ because square one is no longer there,” Grossi said at IAEA headquarters. “There is more (nuclear) material, ... there is more activity, there are more centrifuges, and more are being announced. So what happens with all this? This is the question for them at the political level to decide,” said Grossi, an Argentine who took office as IAEA director general a year ago. Asked if that meant there would have to be a ‘deal within the deal’, he said: “Oh yes, oh yes. Undoubtedly. “It is clear that there will have to be a protocol or an agreement or an understanding or some ancillary document which will stipulate clearly what we do,” he said.

<https://www.reuters.com/article/idUSKBN28R1V9>

**Iran rejects IAEA chief's call that new agreement needed after Biden takes office -tweet**

Reuters, December 18, 2020

Iran's ambassador to the International Atomic Energy Agency on Friday rejected the UN atomic watchdog chief's suggestion that reviving Iran's nuclear deal after a new U.S. administration comes to power would require striking a new agreement. In an interview with Reuters on Thursday, Rafael Grossi, who heads the IAEA that polices Iran's compliance to the 2015 nuclear deal, said there had been too many breaches by Iran for the agreement to simply snap back into place when U.S. President-elect Joe Biden takes office next month. Biden has said the United States will rejoin the deal "if Iran resumes strict compliance."

"Presenting any assessment on how the commitments are implemented is absolutely beyond the mandate of the agency and should be avoided," Kazem Gharibabadi, Iran's ambassador to IAEA in Vienna, tweeted. "@iaeaorg played its part during negotiations on the JCPOA."

<https://www.reuters.com/article/idUSKBN28S0OW>

**China rejects possibility of JCPOA renegotiation**

Tehran Times, December 18, 2020

The director-general of the department of arms control in China's Foreign Ministry, Fu Cong, has said China does not support any renegotiation of the Iran nuclear pact, formally known as the Joint Comprehensive Plan of Action (JCPOA). "Iran has made it explicitly clear that once the U.S. returns to the JCPOA and lifts all the sanctions they are ready to reverse all the steps they have taken, to reduce their commitment," he said. "I think that is a major indication on the part of Iran and we have no reason to doubt that, because before the U.S. withdrew from the agreement Iran was exemplary in its implementation of the agreement."

The outgoing administration of U.S. President Donald Trump reimposed sanctions on Iran after he pulled out of the JCPOA, which was signed under his predecessor Barack Obama. With Joe Biden's victory, however, hopes were raised over the survival of the nuclear deal. Biden has promised to return the United States into the JCPOA if Iran returns to compliance with the deal.

During the Wednesday interview, Fu said the key to unlocking the current situation surrounding the Iranian nuclear issue is the U.S. return to the JCPOA commitments. "We believe that the key to breaking this stalemate is for the U.S to return to the JCPOA," he remarked. "Of course, by that we mean that the U.S. comes back to its commitments under the JCPOA and lifts all the sanctions related to the JCPOA. Both on Iran and third-party entities and individuals." "And, of course, on that basis, Iran should also come back to full compliance with the JCPOA. That's our view. And I would say that is a unanimous view of all the participants to the JCPOA," he added.

<https://www.tehrantimes.com/news/455903/China-rejects-possibility-of-JCPOA-renegotiation>

**Iran hits back at IAEA chief's call for new agreement, says JCPOA not renegotiable**

Tehran Times, December 18, 2020

There will be no renegotiations on the 2015 Iran nuclear deal and even if the deal is revived there would also be no need for a new document on the UN atomic watchdog's role in implementing the deal, Iran said in response to UN atomic watchdog chief Rafael Grossi's remarks on the need to strike a new agreement to revive the Iran deal. Iran has called on the new U.S. administration to unconditionally return to its commitments under the nuclear deal –officially called the Joint Comprehensive Plan of Action (JCPOA) – and avoid any attempts to expand it.

During his election campaign, U.S. President-elect Joe Biden has said that he will return to the JCPOA if he is elected president. After winning the November election, he said he still stands by his promise to return to the deal but doing so would be hard and difficult. Biden has not officially called for a new agreement with Iran, nor has he said the deal should be expanded. But the European signatories to the JCPOA – France, Germany and the UK (E3) – have called for a new nuclear deal with Iran that includes, inter alia, Iran's missile program and its influence in the region. Grossi, who heads the International Atomic Energy Agency (IAEA), has echoed a similar call although he didn't refer to Iran's missile program and its regional influence. In an interview with Reuters, Grossi claimed there had been too many breaches for the JCPOA to simply fall back into place. "I cannot imagine that they are going simply to say, 'We are back to square one' because square one is no longer there," he said, adding, "There is more (nuclear) material, ... there is more activity, there are more centrifuges, and more are being announced. So what happens with all this? This is the question for them at the political level to decide." Asked if that meant there would have to be a 'deal within the deal', he said: "Oh yes, oh yes. Undoubtedly.

<https://www.tehrantimes.com/news/455910/Iran-hits-back-at-IAEA-chief-s-call-for-new-agreement-says-JCPOA>

### **Iran has inked arms deal with other countries: defense minister**

Tehran Times, December 18, 2020

Iran is moving forward with its arms cooperation with various countries and it has signed deals with other countries on arms export, Iranian Defense Minister Brigadier General Amir Hatami has said. Commenting on Iran's defense cooperation with other countries, the defense minister told the Parliament news agency ICANA that "the arms cooperation of the Islamic Republic of Iran with some countries during the period when the Americans tried and imposed arms embargo against us, and after the lifting of sanctions, is well pursued." He added that Iran has made efforts to export arms and has made progress in this regard.

"During this period, the Islamic Republic of Iran has reached good positions in the field of arms exports to some countries and contracts have been concluded in this field. In the field of arms purchase, negotiations are also underway with various countries," Hatami stated. The defense chief did not elaborate on the countries with which Iran has signed arms deals. The UN arms embargo on Iran expired in mid-October though the United States sought to extend it. The expiration of the arms embargo was part of the 2015 Iran nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA). Iran has called the expiration of the UN arms embargo a "major victory".

<https://www.tehrantimes.com/news/455914/Iran-has-inked-arms-deal-with-other-countries-defense-minister>

### **Zarif reminds Pompeo of his self-sanctioning lunacy**

Tehran Times, December 18, 2020

Foreign Minister Mohammad Javad Zarif has reminded his American counterpart, Mike Pompeo, about the failure of U.S. sanctions against Iran under his term, which have even targeted U.S. companies. “@SecPompeo Your own restrictions actually sanctioned US companies out of Iran's market with its unparalleled natural & human resources,” Zarif tweeted on Thursday. “And your illicit #MaximumFailure policy cancelled Boeing's contract for 88 civilian aircraft—costing Iranian lives, but also American jobs,” he added.

It came after Pompeo claimed that Iran’s Islamic Revolution Guards Corps (IRGC) has become infinitely poorer under the Trump administration. “The [IRGC] is infinitely poorer than it would have been had the administration’s policies before us stayed in place,” the U.S. secretary of state said in an interview with Washington Examiner. “That money is not in their hands,” he said, adding, “To back and reward the Iranians? To give them any economic relief? To allow the French or British to trade there? Remember, even during the [Iran deal], American businesses weren’t permitted to trade there. How bizarre is that?”

<https://www.tehrantimes.com/news/455884/Zarif-reminds-Pompeo-of-his-self-sanctioning-lunacy>

### **Zarif: E3 share blame with U.S. for ‘irreparable harm’ to Iranians**

Tehran Times, December 22, 2020

Foreign Minister Mohammad Javad Zarif has said the E3, namely Britain, France and Germany, share the blame with the United States for irreparable harm to the Iranian people. Zarif made the remarks in a tweet on Monday night, in which he enumerated seven points that he emphasized during a ministerial meeting of the remaining participants to the Iran nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA).

“At Ministerial Meeting of remaining JCPOA participants, I emphasized: Last chance for E3/EU to save the JCPOA; Iran-EU 2014-2019 trade data proves E3/EU have gravely breached their JCPOA obligations,” Zarif wrote ; E3 share the blame with US for irreparable harm to Iranians; JCPOA timetable is inseparable from the accord. Renegotiation is out of question; Our region's crises & arms are mainly imported from US/E3. But we collectively decided to exclude these issues.” He said, "Democracies" cannot ask Iran to violate parliamentary legislation; And last but not least: 7. ALL must return to effective JCPOA compliance. Iran will rapidly reverse remedial measures in response to US unlawful withdrawal—and blatant E3 breaches—when US/E3 perform their duties.” Zarif also stressed that the Iranian people must feel the effects of the lifting of sanctions.

<https://www.tehrantimes.com/news/456073/Zarif-E3-share-blame-with-U-S-for-irreparable-harm-to-Iranians>

### **IAEA Grossi not in position to demand new agreement with Iran**

Payman Yazdani

Tehran Times, December 22, 2020

Political scientist says IAEA is under pressure by the US and E3, adding that the IAEA head is not in a position to demand a new nuclear deal with Iran. Recently the IAEA Director General Rafael Mariano Grossi in surprise remarks called for a new nuclear agreement between Iran and the US under the Biden



administration. Following his unexpected remarks, Iran has called on the International Atomic Energy Organization (IAEA) to remain professional and impartial.

To know more about the issue we reached out to Nader Entessar, professor emeritus of political science from the University of South Alabama.

IAEA Director General Rafael Mariano Grossi has recently asked for a new nuclear agreement with Iran during Biden's term in office. Is Mr. Grossi in a position to set conditions for the renewal of the JCPOA? How do you assess his comments? Rafael Grossi is not in a position to demand a new nuclear agreement with Iran. He is the head of a technical international organization whose powers are determined by the IAEA's charter and regulations as well as the IAEA's agreements with the member states. I am not sure why Mr. Grossi decided to overstep his authority by making provocative political statements that do not serve any positive purpose. Perhaps he has delusions of grandeur.

Do you think that he is looking for a new mechanism for monitoring Iran's nuclear program? I think he is under pressure by both the United States and E3 countries to bring the IAEA's position on Iran with the latest turns and twists in the West's confrontation with Tehran and thus put more pressure on Iran to give the IAEA carte blanche in its already intrusive inspection activities inside the country. Iran should respond formally and unambiguously to Mr. Grossi's latest utterance and disabuse him of his illusions.

<https://www.tehrantimes.com/news/456068/IAEA-Grossi-not-in-position-to-demand-new-agreement-with-Iran>

### **UN calls for efforts to preserve JCPOA**

Tehran Times, December 23, 2020

A senior United Nations official has called on signatories to a 2015 nuclear deal between Iran and world powers to make efforts to preserve the agreement. "The Iranian nuclear issue is an important non-proliferation subject, with consequences for regional and global peace and security. In achieving the JCPOA, the concerned countries had shown that their dialogue and diplomacy, supported by a united Security Council, could forge a path to resolving this issue. We hope that these countries and the council can do so again," said UN Undersecretary-General for Political and Peacebuilding Affairs Rosemary DiCarlo. The JCPOA - the Joint Comprehensive Plan of Action - is the official name for the Iran nuclear deal.

DiCarlo made the remarks on Tuesday during a Security Council briefing on non-proliferation during which the implementation of UN Resolution 2231 (2015) was discussed in detail. She said the full implementation of the JCPOA and Resolution 2231 can contribute to regional stability. She expressed regret over the escalation of tensions over the past years, saying the escalation of tensions "deepen the differences related to the Plan, and render efforts to address other regional conflicts more difficult." "We call on all concerned to avoid any actions that may result in further escalation of tensions," DiCarlo said, noting that "The Secretary-General has consistently underscored the importance of the JCPOA and has encouraged all States to support it."

<https://www.tehrantimes.com/news/456141/UN-calls-for-efforts-to-preserve-JCPOA>

**Rouhani: We're seriously after nullifying sanctions**

Tehran Times, December 27, 2020

President Hassan Rouhani said on Saturday that his administration is seriously pursuing the nullification of the sanctions. “That the Leader told [us] to neutralize the sanctions, we are pursuing this moment by moment. Every time money enters the country and goods are exported, you should know that hours of fights have been behind it,” Rouhani pointed out. He explained that this is something that has been done for hours and moments since two years ago, when the U.S. withdrew from the nuclear agreement, IRNA reported.

The U.S. government, under Donald Trump, has implemented a “maximum pressure” policy against Iran, including the targeting of Iran’s economy with harsh sanctions. The maximum pressure campaign was launched after Trump withdrew the U.S. from the multilateral Iran nuclear deal. The United States’ sanctions have severely hampered Iran’s power to contain the coronavirus outbreak, which has so far claimed the lives of over 54,000. President Rouhani also said the sanctions have prevented Iran’s access to the coronavirus vaccines, adding that this is the case for all drugs and goods that Iran wants to import. “But we overcome this problem, and we are overcoming this problem on a daily basis, and we are nullifying sanctions on both exports and imports,” he added. Leader of the Islamic Revolution Ayatollah Ali Khamenei said in remarks on December 16 that the officials should refrain from pinning hope on the lifting of sanctions and, instead, work to nullify the sanctions. “Lifting sanctions is in the enemy’s hands. Nullifying them is in ours. We should work more on nullifying than removing them. I don’t say we shouldn’t pursue removing sanctions. But sanctions that were supposed to be lifted according to the JCPOA, 4 years ago, have intensified,” the Leader said.

<https://www.tehrantimes.com/news/456225/Rouhani-We-re-seriously-after-nullifying-sanctions>

### **Arrival of Israeli submarine in Persian Gulf ‘act of aggression,’ Iran says**

Tehran Times, December 27, 2020

Iran will consider the arrival of an Israeli submarine to the Persian Gulf “an act of aggression” and that it will have the right to respond, a senior Iranian lawmaker says. If an Israeli submarine arrives in the [Persian] Gulf, Iran will consider that an act of aggression and “in this case, we will have the right to take revenge,” Abolfazl Amouei, spokesman for the Iranian Parliament’s National Security and Foreign Policy Committee, told Aljazeera on Saturday night, just a few days after Israeli and American news media reported that an Israeli submarine has openly crossed the Suez Canal en route to Iran. Amouei directly addresses the Israelis, saying that he is sending a clear message to them that they must be cautious and if the Israeli submarine arrives in the Persian Gulf, “it would be an amazing target for us.”

In what appeared to be a warning to Iran’s neighbors, the Iranian lawmaker underlined that bringing the Israelis near Iran might create problems for neighboring countries. The Iranian warning comes after Israel’s public broadcaster Kan reported on Monday last week that an Israeli submarine crosses the Suez Canal in a show of force against Iran. The Israeli channel said the submarine was heading toward the Persian Gulf, and by exposing itself above sea level it was sending a warning message to the Islamic Republic of Iran. Israel’s army declined to comment on the matter.

<https://www.tehrantimes.com/news/456268/Arrival-of-Israeli-submarine-in-Persian-Gulf-act-of-aggression>

### **Ireland to do everything it can to preserve JCPOA at UN Security Council**



Tehran Times, December 29, 2020

Ireland has said it will work to preserve a 2015 nuclear deal between Iran and major world powers when it secures a seat on the UN Security Council in early January, vowing to do everything in its power to preserve the nuclear deal. Ireland will become a UN Security Council member from January 1 alongside Norway. Two weeks before Ireland takes its seat on the Security Council, Geraldine Byrne Nason, Ireland's permanent representative to the UN, told the Oireachtas foreign affairs committee that Ireland will work to preserve the Iran nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA).

"One key area we will watch very carefully will be Iran, and the future of the JCPOA nuclear deal, in the context of possible U.S. re-engagement," Nason said, adding that 2021 is "likely to be a critical year and a difficult year for the Iran nuclear deal," given Iran's next presidential election. "The window for both sides to re-engage is narrowing," she continued. Nason vowed that Ireland will work at the UN body to ensure the survival of the JCPOA. "As an EU country, Ireland will, of course, do everything it can at the Security Council to preserve the JCPOA agreement," she pointed out, noting that Ireland sees the JCPOA as a major diplomatic achievement and the best way to constrain Iran's nuclear program and to help bring peace to the region. Nason stated, "Our long history of support for nuclear disarmament and non-proliferation allows us to play an impartial but principled role in the Council's role on this issue."

The Irish diplomat also addressed other issues related to the West Asia region. She said that Ireland's approach on the Security Council will be guided by three key principles: building peace, strengthening conflict prevention, and ensuring accountability.

<https://www.tehrantimes.com/news/456356/Ireland-to-do-everything-it-can-to-preserve-JCPOA-at-UN-Security>

### **Iran's foreign minister says Trump trying to fabricate pretext to attack Iran**

Reuters, December 31, 2020

Iranian Foreign Minister Mohammad Javad Zarif on Thursday accused U.S. President Donald Trump of attempting to fabricate a pretext to attack Iran, and said Tehran would defend itself forcefully. Zarif said in a tweet: "Instead of fighting Covid in US, @realDonaldTrump & cohorts waste billions to fly B52s & send armadas to OUR region. Intelligence from Iraq indicate plot to FABRICATE pretext for war."

The U.S. military flew two nuclear-capable B-52 bombers to the Middle East in a message of deterrence to Iran, but the bombers have since left the region. The Pentagon announced that the Nimitz aircraft carrier, which was off the coast of Somalia, would be heading back to its homeport. Previously operating in the Middle East, some U.S. officials said the move could be seen as an attempt to reduce tensions in the region. In recent days there has been increased concern and vigilance about what Iranian-backed forces might do in the lead up to the anniversary of a Jan. 3 U.S. drone strike in Iraq that killed top Iranian general Qassem Soleimani, the official said. Washington blames Iran-backed militia for regular rocket attacks on U.S. facilities in Iraq, including near the embassy. No known Iran-backed groups have claimed responsibility.

<https://www.reuters.com/article/idUSKBN29515B>

East Asia

## North Korea

### **Former US nuclear negotiator says N. Korea's ultimate goal is to secure regime**

Yonhap

Korea Herald, December 17, 2020

A former US nuclear negotiator said Thursday that Washington needs to push for normalizing relations with North Korea and make efforts to sign a peace treaty that ends the 1950-53 Korean War, as Pyongyang's ultimate goal is to secure its regime and leadership. Joseph DeTrani also said during a virtual seminar that recognizing North Korea as a nuclear weapons state is not a "viable option" because such recognition would facilitate an arms race and cause instability in the region. "We know it's security for the regime, security for the leadership. That's the ultimate objective," said the former US special envoy for six-party nuclear talks during the conference hosted by the state-run Institute for National Security Strategy (INSS). "So when, once, we can build some trust and move forward with security assurances and then move toward the path toward normalization of relations and the peace treaty that finally ends the Korean War -- these are positive things," he said. DeTrani said that the North has conducted nuclear weapons and intercontinental ballistic missiles (ICBMs) tests for years and showcased a new and large ICBM during a massive military parade in October, but the regime sees those weapons as a deterrent as it worries about regime change. "Having negotiated with North Korea for a number of years and having had contact with North Korea for a number of years, they see it very clearly as a deterrent and they are concerned about regime change," he said.

He called for continued efforts to resolve the North's nuclear issue through diplomatic efforts but stood firm against the idea of recognizing North Korea as a nuclear state, saying that it could spark an arms race and instability in the region. "North Korea with nuclear weapons will facilitate and will encourage others, whether it's Republic of Korea, whether it's Japan, whether it's Taiwan," he said. "A number of other countries would seek their nuclear weapons capability regardless of US extended nuclear deterrence commitment to these countries, allies and partners." "I think North Korea retaining nuclear weapons, which is their goal, and being accepted as a nuclear weapon state like we, the US accepted, recognized Pakistan, should not be a viable option. It should not be an option per se because of the likelihood of proliferation in the region," he added.

[http://www.koreaherald.com/view.php?ud=20201217000587&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201217000587&ACE_SEARCH=1)

### **Mysterious N.Korea site may be building nuclear components, report says**

Josh Smith

Reuters, December 18, 2020

A mysterious North Korean facility may be producing components for building nuclear bombs, a new report suggests, offering clues to understanding the site near the capital that has perplexed experts and policymakers. The nondescript cluster of buildings called Kangson on the southwest outskirts of Pyongyang was first publicly identified in 2018 by a team of open-source analysts as the possible location of a facility for secretly enriching uranium, a fuel for nuclear bombs. But the report by North Korea watchers at the 38 North project, reviewed by Reuters before its release on Friday, says satellite imagery points to the facility making components for centrifuges, the high-tech spinners used to enrich uranium, rather than enriching the fuel itself. "The characteristics of the site are more consistent with a plant that could manufacture components for centrifuges," writes former International Atomic Energy Agency (IAEA) official Olli Heinonen in the report. The imagery suggests the site lacks the infrastructure needed for enrichment, writes Heinonen, a distinguished fellow with the Stimson Center, the Washington think-tank that runs the project.

Pyongyang has denied having secret nuclear sites, an issue that contributed to the failure of a 2019 Hanoi summit between U.S. President Donald Trump and North Korean leader Kim Jong Un. Denuclearisation talks have remained stalled in part over U.S. assertions that the North is not fully declaring the extent of its programme. "If the issue of undeclared facilities is going to be a factor in U.S.-North Korea negotiations, as it was in Hanoi, the more we can learn about these suspected facilities, the better we can assess their role and value to North Korea's overall nuclear weapons development," said Jenny Town, deputy director of 38 North. Friday's report could advance the debate on whether the Kangson site is building machines or using them to create bomb material.

<https://www.reuters.com/article/idUSKBN28S1SC>

### **N. Korea's Kangson facility may not be uranium enrichment plant: Heinonen**

Yonhap

Korea Herald, December 19, 2020

North Korea's long suspected uranium enrichment facility in Kangson may instead be dedicated to producing related components, a former official of the International Atomic Energy Agency said Friday. Olli Heinonen, former IAEA deputy director-general for safeguards, noted the facility appears to be linked to the North's uranium program, but not in a way that had been suspected. "The available evidence suggests that Kangson is not a uranium enrichment plant, although it is likely still tied to North Korea's uranium enrichment program, just in a different role," Heinonen said in an op-ed piece published by 38 North, a website run by Washington-based think tank Stimson Center. "Its characteristics are consistent with a large-scale machine tool workshop suitable for the production and testing of centrifuge components," he added. The Kangson facility has been suspected of being North Korea's second uranium-enrichment plant after its well-known facility in Yongbyon.

[http://www.koreaherald.com/view.php?ud=20201219000044&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201219000044&ACE_SEARCH=1)

### **N. Korea could conduct ICBM test early next year: think tank**

Yonhap

Korea Herald, December 29, 2020

North Korea could test-fire an intercontinental ballistic missile (ICBM) in the early months of the incoming US administration of Joe Biden if nuclear talks between the two countries remain stalled, a local think tank said. The North has undertaken military provocations in the past to test Washington's approach or grab its attention when a new US administration took office. President-elect Joe Biden is set to be inaugurated on Jan. 20. Biden has called for "principled diplomacy" favoring working-level discussions over President Donald Trump's "top-down" diplomacy with North Korean leader Kim Jong-un, suggesting that nuclear talks could move at a slower pace. "Biden's formation of his foreign policy lineup and basic policy approach suggest that it is clear the administration will make a 180-degree turn to the bottom-up method based on working-level meetings, as opposed to the top-down method," the Asan Institute for Policy Studies said in its 2021 forecast on international affairs.

"Therefore, the North will consider playing the card of an ICBM launch in a desperate measure to break the deadlock that could get even more serious than it has been under the Trump administration," it said. Denuclearization talks between the United States and the North remain stalled after the Trump-Kim summit in Hanoi in early 2019 produced no deal.

[http://www.koreaherald.com/view.php?ud=20201229000787&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201229000787&ACE_SEARCH=1)

## South Korea

### **Presidential secretary for peace planning tapped as new chief nuclear envoy**

Yonhap

Korea Herald, December 21, 2020

South Korea replaced its chief nuclear envoy Monday, naming a seasoned diplomat and presidential aide to take on the job, as the country prepares to work with the incoming US administration of Joe Biden to move the stalled nuclear talks with North Korea forward. Noh Kyu-duk, a career diplomat serving as presidential secretary for peace planning, was named to replace Lee Do-hoon as the special representative for Korean Peninsula peace and security affairs, the foreign ministry announced in a press release.

[http://www.koreaherald.com/view.php?ud=20201221000253&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201221000253&ACE_SEARCH=1)

### **Seoul's new nuclear envoy holds phone calls with US, Japan counterparts**

Ahn Sung-mi

Korea Herald, December 23, 2020

Noh Kyu-duk, South Korea's new top nuclear negotiator, spoke on the phone with counterparts in Washington and Tokyo, in his first such talks since his appointment this week, the Foreign Ministry said. On Tuesday evening, Noh held phone talks with US Deputy Secretary of State Stephen Biegun, who doubles as Washington's point person on North Korea. During the conversation, Biegun congratulated Noh on his appointment and reaffirmed the US' commitment to resuming talks with North Korea. The US envoy also said he will work closely with Noh on coordinating and cooperating with Seoul over policy on Pyongyang. Noh, in response, said the two countries should continue communication and cooperation to stably manage the situation during the transition period in Washington.

On Wednesday morning, Noh talked on the phone with Takehiro Funakoshi, the new director general of the Asian and Oceanian Affairs Bureau at Japan's Foreign Ministry. The two sides shared assessments on the Korean Peninsula situation and exchanged views on ways to cooperate between Korea and Japan, as well as between the two countries and the US to bring progress in achieving complete denuclearization and permanent peace on the Korean Peninsula, the Foreign Ministry said.

[http://www.koreaherald.com/view.php?ud=20201223000734&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201223000734&ACE_SEARCH=1)

### **Seoul finalizes energy mix, to invest in nuclear decommissioning**

Shim Woo-hyun

Korea Herald, December 29, 2020

The government has finalized its energy mix for 2020-2034, aiming to increase the use of renewables while reducing the dependence on nuclear and coal-fired power plants. According to the Ninth Basic Plan for Electricity Supply and Demand approved by a review committee affiliated with the Ministry of Trade, Industry and Energy, renewable energy will account for 40.3 percent of South Korea's nameplate capacity in 2034, reaching 77.8 gigawatts, from 20.2 gigawatts in 2020. Renewables' actual contribution to the nation's power generation in 2034 is expected to extend to 8.6 percent, up from 3.3 percent this year.

A total of 30 coal-fired power plants will be closed by 2034 upon completion of their 30-year operational life spans. Some 24 of them will be repurposed into liquefied natural gas power facilities, the ministry said.

[http://www.koreaherald.com/view.php?ud=20201228000974&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201228000974&ACE_SEARCH=1)

## Japan

### **Japan regulator appeals court ruling on two nuclear reactors**

Reuters, December 17, 2020

Japan's nuclear regulator said on Thursday it had filed an appeal to overturn a court ruling requiring two reactors operated by Kansai Electric Power Co be kept shut. The decision by Osaka district court earlier this month underlined the fraught conditions facing Japan's beleaguered nuclear sector, which has been mostly shutdown since the Fukushima catastrophe nearly 10 years ago.

The Osaka court ruled in favour of about 130 plaintiffs who said that the Ohi No. 3 and No. 4 reactors in Fukui prefecture, western Japan, were vulnerable to major earthquakes. The Nuclear Regulation Authority (NRA) filed the appeal at the Osaka high court, a spokesman told Reuters. Kansai Electric said in a statement it would strive to show that the Ohi reactors were safe to operate to get the appealed overturned.

<https://www.reuters.com/article/idUSKBN28R0L9>

## Misc/ World

### **New agreement needed to revive Iran nuclear deal under Biden, IAEA chief says**

Francois Murphy

Reuters, December 17, 2020

Reviving Iran's nuclear deal under U.S. President-elect Joe Biden would require striking a new agreement setting out how Iran's breaches should be reversed, U.N. atomic watchdog chief Rafael Grossi said.

Iran has breached many of the deal's limits on its nuclear activities in response to U.S. President Donald Trump's withdrawal from the deal and the reimposition of U.S. sanctions against Tehran that the deal lifted. Tehran often says it can quickly reverse its breaches if U.S. sanctions are removed. Biden, who takes office on Jan. 20, has said the United States will rejoin the deal "if Iran resumes strict compliance" with the agreement that imposed strict curbs on its nuclear activities in return for the lifting of sanctions.

<https://www.reuters.com/article/iran-nuclear-iaea/exclusive-new-agreement-needed-to-revive-iran-nuclear-deal-under-biden-iaea-chief-says-idINKBN28R1VE?edition-redirect=in>

## Op-ed India

### **India should focus on multilateral partnerships to counter China, experts say**

The Print, December 19, 2020

Underlining brazen military manoeuvres and unprecedented scale of challenge” from China, security experts on Saturday suggested India must adopt a more aggressive demeanour to forge issue-based geo-strategic multilateral partnerships like Quad to leverage country’s full potential in checking the dragon in its rank. The views were expressed by a group of panelists including former Navy Chief Admiral Sunil Lanba during an exchange held virtually on the second day of the Military Literary Festival 2020 on The Quad: The Emerging Indo-Pacific Naval Alliance.

Sharing his thoughts, noted defence commentator and the Director of the Institute of South Asian Studies, National University of Singapore, C Raja Mohan, said Delhi must learn from the past in not letting the academic debates about alliances tarnish its judgment about extraordinary economic and security challenges staring India. India faces growing threats and it needs more partnerships than it has ever needed before globally, Raja Mohan said while pointing out India’s traditional reluctance to be an active Quadrilateral Security Dialogue or Quad partner due to fear of being perceived as taking a side.

<https://theprint.in/india/india-should-focus-on-multilateral-partnerships-to-counter-china-experts-say/570288/>

### **Need to bring space, aeronautical sectors closer, have long-term vision: Veteran scientist**

Financial Express, December 20, 2020

Nair expressed the view that India's new policy, as envisaged in the reforms push announced in June, virtually takes away that "single point authority and control (from ISRO)" and shakes up its managerial set-up. ISRO needs to draw up a ten-year vision plan, veteran space scientist G Madhavan Nair said on Sunday and batted for bringing space and aeronautical sectors closer like in China for greater success. He said the Bengaluru-headquartered space agency under the Department of Space (DOS) used to have such a document earlier but he hasn't seen one extending up to the year 2030.

<https://www.financialexpress.com/lifestyle/science/need-to-bring-space-aeronautical-sectors-closer-have-long-term-vision-veteran-scientist/2153669/>

### **Credibilising India’s strategic deterrence**

Commodore Anil Jai Singh

Financial Express, December 22, 2020



Recent reports suggesting that India's second indigenously built nuclear powered strategic missile submarine (SSBN) Arighat is likely to get commissioned in early 2021 is extremely encouraging news. The presence of a second SSBN will not only demonstrate India's strategic intent, industrial and technological prowess but will also enhance the credibility of India's nuclear posture.

The Indian nuclear doctrine released in 2003, is anchored in 'No First Use', 'minimum credible deterrence' and 'maximum assured destruction'. An invulnerable capability to deliver a retaliatory strike is therefore integral to this posture for it to be credible. It should be able to deter an adversary in the first place but if the adversary is foolish enough to launch the first strike, it should be able to deliver a second strike with 'maximum assured destruction'. It is the fear of the retaliatory strike that underlines the concept of strategic deterrence. In the nuclear triad of strategic weapon delivery platforms from land, air and the sea, the submarine-launched sea-based element is most effective as a deterrent and offers the most credible second-strike capability. While a nuclear first strike could incapacitate the land and air-launched capability thus neutralising the possibility of an effective second strike, it is only the sea-based element onboard a submarine operating stealthily and silently deep below the surface somewhere in the vast ocean spaces from a position unknown to the enemy, which can be relied upon to deliver an effective second strike. It is this capability which also makes a submarine the most effective deterrent. An SSBN carries an impressive arsenal of nuclear ballistic missiles of ranges in thousands of kilometres with independently targetable warheads which have the ability to destroy the world several times over. During the Cold war which 'ragged' for over four decades through the second half of the 20th century, it was the destructive capability of the SSBNs of both the protagonists which deterred a nuclear armageddon despite numerous provocations.

<https://www.financialexpress.com/defence/credibilising-indias-strategic-deterrence/2155017/>

## China

### **Is China really ready to back a nuclear arms-free Southeast Asia?**

Laura Zhou

South China Morning Post, December 16, 2020

A senior Chinese official says Beijing is prepared to back Asean's 25-year-old treaty on the weapons. But this is not the first time this has happened and could be part of a bigger power play, observers say. China has signalled that it is ready to work with its neighbours to create a nuclear weapons-free zone in Southeast Asia, after more than two decades of objections to a regional agreement. But observers said the move was part of China's growing rivalry with the United States and an attempt to expand its influence in the region. The agreement, the Southeast Asian Nuclear-Weapon-Free-Zone Treaty, was signed by the 10 members of the Association of Southeast Asian Nations (Asean) 25 years ago to establish an area in the region free of nuclear weapons and to bolster its neutrality in great-power competition.

Nuclear powers like China and the United States are free to sign a protocol to not violate the treaty but so far none of them have, largely because of differences over security assurances and the definitions of territory, much of which involves the disputed South China Sea. In the past, Beijing has said it disagrees with the geographic delimitation of the zone but is willing to continue talks with Asean. Fu Cong, director of the Chinese foreign ministry's arms control department, said Beijing was prepared to

endorse the protocol. “Yes, China is ready to be the first to sign the Protocol to the Southeast Asian Nuclear-Weapon-Free-Zone Treaty,” Fu said in a tweet in response to a question by Hans Kristensen, director of the Nuclear Information Project at the Federation of American Scientists in Washington.

Under the protocol, signatories would be obliged not to develop, manufacture or otherwise acquire, possess or have control over nuclear weapons in the treaty zone. Testing or using nuclear weapons is also prohibited anywhere inside or outside the treaty zone that covers the continental shelf and exclusive economic zones – the boundaries of which are fiercely disputed by China and some Asean members.

<https://www.scmp.com/news/china/diplomacy/article/3114218/china-really-ready-back-nuclear-arms-free-southeast-asia>

## West Asia Iran

### **Serious doubts about Grossi’s intentions**

M.A. Saki

Tehran Times, December 18, 2020

Rafael Grossi, the director general of the Atomic Energy Agency, has said reviving Iran’s nuclear deal under U.S. President-elect Joe Biden would require striking a new agreement setting out how Iran’s reduction of commitments should be reversed. Iran has removed some of the nuclear deal’s limits in response to U.S. President Donald Trump’s withdrawal from the agreement and the reimposition of sanctions against Tehran that were lifted under the 2015 the deal. Iran did this after waiting for a full year. Iran removed limits gradually – at bi-monthly times. It even insisted that if the other remaining members of the deal – Germany, Britain, France, Russia and China – compensate Iran for the sanctions it will immediately reverse its decisions. However, the remaining members, especially the European trio (E3), did not honor their commitments. Even the INSTEX - the Instrument in Support of Trade Exchanges - that the E3 announced after a long time proved to be a tiger paper.

Also, Trump violated the legally-binding deal while the IAEA, before Grossi took over as the UN body’s director, was repeatedly confirming Iran’s full compliance with the terms of the deal. In an interview with Reuters, Grossi said there had been too many breaches for the agreement to simply fall back into place. “I cannot imagine that they are going simply to say, ‘We are back to square one’ because square one is no longer there,” Grossi said at IAEA headquarters. “There is more (nuclear) material, ... there is more activity, there are more centrifuges, and more are being announced. So what happens with all this? This is the question for them at the political level to decide,” said Grossi, an Argentine who took office as IAEA director general a year ago. Asked if that meant there would have to be a ‘deal within the deal’, he said: “Oh yes, oh yes. Undoubtedly. “It is clear that there will have to be a protocol or an agreement or an understanding or some ancillary document which will stipulate clearly what we do,” he said.

<https://www.tehrantimes.com/news/455922/Serious-doubts-about-Grossi-s-intentions>

### **Iran N-deal: Heated rhetoric, heightened risk of miscalculation widen differences**

Saudi Gazette, December 23, 2020

Although the landmark Iran nuclear deal could improve regional stability if fully implemented, increased tensions have highlighted the risks posed by escalation, the UN’s Political and Peacebuilding



Affairs chief told the Security Council on Tuesday. Under-Secretary-General Rosemary DiCarlo was speaking during a virtual meeting on the Joint Comprehensive Plan of Action (JCPOA), the July 2015 accord that set out rules for monitoring Iran's nuclear program and a pathway to easing sanctions.

The JCPOA was signed by Iran alongside the European Union and five permanent members of the Security Council: China, France, Russia, the United Kingdom, and the United States. However, Washington withdrew in May 2018. DiCarlo noted that recent years have been characterized by "attacks on critical infrastructure, heated rhetoric and heightened risk of miscalculation "Such actions deepen the differences related to the Plan and render efforts to address other regional conflicts more difficult", she said. "We call on all concerned to avoid any actions that may result in further escalation of tensions."

<https://saudigazette.com.sa/article/601737/World/Europe/Iran-N-deal-Heated-rhetoric-heightened-risk-of-miscalculation-widen-differences>

### **E3 forced to back down**

Tehran Times, December 26, 2020

The nuclear law passed by the Iranian Parliament has forced the West to change course on Iran in the nuclear issue, Abolfazl Amouei, the spokesman for the Iranian Parliament's National Security and Foreign Policy Committee, says. Amouei said he believes that there are signs that the Western parties to the 2015 Iran nuclear deal – officially known as the Joint Comprehensive Plan of Action (JCPOA) – have put aside their preconditions and claims.

"We are currently witnessing signs of a change in the behavior of the Europeans but they are still far from our demands. Therefore, the Parliament will seriously pursue the implementation of the strategic law on lifting sanctions," Amouei told Iran's Parliament news agency ICANA. The senior lawmaker was referring to a recent law passed by the Parliament that, if implemented, would substantially increase Iran's nuclear activities. The nuclear law, officially called "Strategic Action to Lift Sanctions and Protect Nation's Rights," introduces a step-by-step strategy for the Iranian government to increase nuclear activities in few months if the other side failed to implement certain commitments. The law is part of a broader strategy that aims to lift the United States sanctions on Iran and was put forward by the lawmakers in early November. It aims to force the United States into lifting sanctions on Iran by doubling down on nuclear activities. The law obliges the government to considerably speed up nuclear activities such as increasing uranium enrichment level to 20% and employing more advanced centrifuges. It also requires the government to suspend the voluntary implementation of the Additional Protocol to the nuclear Non-Proliferation Treaty (NPT) a few months after the ratification of it if the parties to the nuclear deal between Iran and world powers failed to uphold their obligations under the JCPOA.

<https://www.tehrantimes.com/news/456224/E3-forced-to-back-down>

### **EU, Germany and Biden administration agree that JCPOA is a win-win: Kimball**

Hamid Bayati

Tehran Times, December 30, 2020

Daryl G. Kimball, the executive director of the Arms Control Association, says the European Union, Germany, and the Biden administration are united in their positions that a full implementation of the

Iran nuclear deal by each side is a “win-win”. “The EU and Germany and the Biden administration all agree that that full implementation and compliance with the JCPOA is a win-win,” Kimball tells the Tehran Times as German Foreign Minister Heiko Maas has called for a “nuclear agreement plus”. The nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA), was signed on July 14, 2015, between Iran, the five permanent members of the UN Security Council (Russia, China, France, Britain, and the U.S.) as well as Germany and the European Union. It went into effect on January 16, 2016.

However, during his presidential campaigns in 2016, Donald Trump launched intensive campaigns against the multilateral agreement and threatened to tear it up if he is elected president. On May 8, 2018, Trump officially pulled the U.S. out of the landmark agreement and returned nuclear sanctions, and added new harsh ones under his administration’s “maximum pressure” campaign against Tehran. Trump imposed a total ban on Iran’s oil export and even made the import essential commodities such medicine and medical supplies very difficult. He even disregarded demands by the United Nations to loosen sanctions during the coronavirus pandemic. Now hopes are rising for the reactivation of the nuclear deal as President-elect Joe Biden will enter the White House on January 20. Biden served as vice president under President Barack Obama, when the JCPOA was inked. Kimball says each side of the nuclear deal “must avoid provocations and statements and threats that could derail” the revitalization of the JCPOA.

<https://www.tehrantimes.com/news/456390/EU-Germany-and-Biden-administration-agree-that-JCPOA-is-a-win-win>

### **The Importance of International Law – the JCPOA must be upheld**

Professor Khawar Qureshi

Tehran Times, December 29, 2020

It often said that International Law is predominantly a tool for some States to pursue their own aims and justify their actions against others. However, whilst International Law and its institutions are far from perfect, they provide the only viable means through which States can interact with each other on a basis of mutual respect and co-operation.

In recent years, Iran has been the subject of sanctions (sometimes known as restrictive measures) imposed by each of the USA, the EU and the UN concerning Iran’s nuclear-related activities. Whilst the USA’s nuclear-related sanctions against Iran were imposed as early as 1995 under the Clinton Administration, the UN’s nuclear-related sanctions against Iran were first imposed in 2006 by UN Security Council Resolution 1737. The EU strengthened its own sanctions program concerning Iran in 2012 and afterwards. The overall effect of the collective sanctions regime has caused massive economic damage to Iran, greatly restricting the country’s potential for growth and development. It is not the purpose of this article to analyse the positions being adopted “pro-sanction” or the responses thereto. First and foremost, all States must abide by International Law.

The Joint Comprehensive Plan of Action (“JCPOA”) is a detailed agreement reached between Iran and the E3/EU+3 (comprising China, France, Germany, Russia, the UK and the USA, together with the EU) on 14 July 2015. Its Preface shows that it was intended to adequately address the concerns on both sides: whilst Iran envisioned that “the JCPOA will allow it to move forward with an exclusively peaceful, indigenous nuclear programme, in line with scientific and economic considerations...and with a view to building confidence and encouraging international cooperation”, the E3/EU+3 countries

envisioned that “the implementation of this JCPOA will progressively allow them to gain confidence in the exclusively peaceful nature of Iran’s programme”.

<https://www.tehrantimes.com/news/456349/The-Importance-of-International-Law-the-JCPOA-must-be-upheld>

## South Korea

### **Unnecessary price**

Korea Herald, December 21, 2020

The Korea Electric Power Corp., the state-run electricity provider, last week unveiled a plan to revamp its billing system by adopting flexible rates linked to global prices of fossil fuel resources next year. Under the new plan endorsed by the government, electricity fees will be adjusted every three months, reflecting changes in the prices of oil, liquefied natural gas and coal. Kepco said in a statement that the current fixed-rate billing system has failed to reflect fluctuations in production costs in a timely manner.

The new system is expected to encourage users to cut their electricity consumption when the prices of resources are high, while providing it at more affordable rates when the costs fall, according to the company. But critics say it is designed primarily to put the burden of the ill-conceived energy policy pursued by President Moon Jae-in’s government on the shoulders of consumers.

[http://www.koreaherald.com/view.php?ud=20201220000167&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20201220000167&ACE_SEARCH=1)

## Think Tanks

### **The India-China Nuclear Dynamic: India’s Options**

Rajesh Basrur

Observer Research Foundation, December 22, 2020

The ongoing India-China face-off in Eastern Ladakh may appear to be a small-scale confrontation between conventional forces. But it is still one between nuclear-armed states, and the threat of escalation cannot be denied. In its wake, India has carried out a series of missile tests, while China too has fired a number of ballistic missiles near the Paracel and Spratly Islands, apparently to warn the US, but hardly something New Delhi can ignore. This analysis makes three key points: the threat from China is likely to persist; India needs to adapt balancing responses to the threat to the requirements of a nuclear weapons environment; and Indian policymakers should be mindful of the possibilities of actual military combat, be it a marginal war, or a trans-domain conflict that involves use of advanced technologies influencing both the nuclear and conventional spheres.

<https://www.orfonline.org/research/india-china-nuclear-dynamic-india-options/>

### **Nuclear Deterrence 3.0**

Rakesh Sood

Observer Research Foundation. December 23, 2020

When Trump leaves office and Biden takes over, humanity should breathe a huge sigh of relief. Trump is the only recent President to threaten the use of nuclear weapons. In August 2017, Trump warned North Korea, “They will be met with fire and fury like the world has never seen...” Even as President-elect, Trump had already put the nuclear option on the table. Responding to a question on whether he would rule out using nuclear weapons, in April 2016, he said, “Would there be a time when it could be used? Possibly. Possibly.” This is one reason why the Doomsday Clock, established in 1947 by a group of scientists who developed the first nuclear weapons but now wanted to convey the risk it posed to humanity, was calibrated in 2020 to 100 seconds to midnight, the closest to a global catastrophe that it has ever been.

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) may well be the most universal treaty but it has reached the limits of its success. The five nuclear-weapon-states party to it (USA, Russia, UK, France and China) blithely ignore their responsibility for nuclear disarmament, convinced that NPT legitimises their possession of nuclear weapons and the four non-NPT countries (Israel, Pakistan, India and North Korea) have built weapons for their own security reasons. Indeed, in a direct violation of the spirit of the NPT, Trump said blithely to Bob Woodward, “I have built a nuclear — a weapons system that nobody’s ever had in this country before. We have stuff that you haven’t seen or heard about.” William Lambers, a nuclear weapons specialist, has observed that “while for over 60 years presidents in both parties worked to reduce nuclear weapons and the likelihood of their use, Trump has begun unravelling these efforts.”

<https://www.orfonline.org/research/nuclear-deterrence-3/>

### **NATO Completes Annual Nuclear Exercise**

Arms Control Association, December, 2020

The Netherlands hosted NATO’s annual nuclear exercise in October, which included the German Air Force practicing delivery of U.S. nuclear bombs believed to be stored at Büchel Air Base, according to reports. “Today’s exercise shows that allies are determined to ensure that NATO’s nuclear deterrent remains safe, secure, and effective,” said NATO Secretary-General Jens Stoltenberg while visiting Volkel Air Base in the Netherlands for the exercise on Oct. 16. “The purpose of NATO’s nuclear deterrent is not to provoke a conflict but to preserve peace, deter aggression, and prevent coercion.”

<https://www.armscontrol.org/act/2020-12/news-briefs/nato-completes-annual-nuclear-exercise>

## Interviews/ Reports

### **No guarantee a Republican administration won't quit nuclear deal again: expert**

Mohammad Mazhari

Tehran Times, December 20, 2020

A defense editor at the Economist says that there is no guarantee that a possible Republican administration in the U.S. will not breach the nuclear deal again. “There is no guarantee of this. Iran must contend with the risk that a Republican administration in 2024 will once more walk away from a deal,” Shashank Joshi tells the Tehran Times. President-elect Joe Biden has pledged to rejoin the JCPOA that was signed when he was vice president if Iran also agrees to return to full compliance.

However, diplomats and analysts say it is unlikely to happen smoothly because skeptical adversaries want additional commitments from each other.

The lesson of the Trump era is that America is highly polarized and that diplomatic agreements may be less enduring and stable than they were in the past. Joshi, who served as a senior research fellow at the Royal United Services Institute (RUSI), also says “the assassination of Mr. Fakhrizadeh was probably conducted by Israel, and follows several other killings over the past decade.” Iranian scientist Mohsen Fakhrizadeh was assassinated outside Tehran on November 27. Iranian officials were quick to point the finger at Israel for the assassination. “The assassination was a highly provocative move and probably aimed at disrupting the incoming Biden administration's effort to re-join the JCPOA,” notes Joshi, who also worked as a research associate at Oxford University's Changing Character of War Program.

The following is the text of the interview:

**Q:** Would you expect the incoming Biden administration to reach a consensus with Iran to revitalize the JCPOA as some argue that it is a tough project?

**A:** I think it is very likely that a Biden administration will reach a deal with Iran. But there are two questions. One is whether it will be a U.S. return to the JCPOA, or something more limited involving U.S. sanctions relief and Iran returning to compliance. The second question is whether a follow-on deal, covering, for instance, sunset clauses and further economic assistance for Iran, can be agreed upon. A follow-on deal seems more difficult at this stage, particularly in light of next year's Iranian elections and the contentiousness of the issues.

**Q:** How do you measure the November 27 assassination of Iranian nuclear scientist Mohsen Fakhrizadeh? Why do Western countries don't expect Iran to respond to the assassination?

**A:** The assassination of Mr. Fakhrizadeh was probably conducted by Israel, and follows several other killings over the past decade. The assassination was a highly provocative move and probably aimed at disrupting the incoming Biden administration's effort to re-join the JCPOA. From Israel's perspective, it is worth understanding that Mr. Fakhrizadeh probably continued his involvement in some weapons-related activities, although I do not endorse his killing. In the longer-term, I doubt that the killing will significantly affect Iran's ability to develop its nuclear program and even nuclear weapons if it chose to do so. On the second point: Western countries do not want Iran to respond violently because they fear that it may cause a spiral of escalation, culminating in military action. I think that many Iranian officials share this concern, too. This is not just Western logic. But I think most Western countries also realize that Iran may have to demonstrate some sort of response, such as the parliamentary bill that was passed two weeks ago. The aim is to ensure that tensions do not rise in a way that might make it impossible for both sides to restore the JCPOA after January 20th.

<https://www.tehrantimes.com/news/455969/No-guarantee-a-Republican-administration-won-t-quit-nuclear-deal>

### **Contribute Articles**

Indian Pugwash Society welcomes research articles from students, researchers and faculties on Space, Missile, nuclear technology, WMD proliferation, arms control, disarmament, export controls and other related issues. Articles should be crisply written and should address contemporary debates in the policy arena. Manuscripts submitted for the consideration of the Indian Pugwash Society should be original contributions and should not have been submitted for consideration anywhere else. For further assistance, please contact us at: [indianpugwashsociety@gmail.com](mailto:indianpugwashsociety@gmail.com)

The Indian Pugwash Society aims to promote the study, discussion, and knowledge of and to stimulate general interest in, and to diffuse knowledge in regards to problems relating on WMD proliferation, arms control, disarmament, space security, export controls, nuclear technology and other related issues. This newsletter is part of the project "Emerging Nuclear Order in Asia: Implications for India" sanctioned to us by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS).

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