

# Nuclear, Missile & Space Digest

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- Russia to count US, British, French nuclear potentials in deciding fate of New START – MFA
- First load of equipment for El Dabaa NPP arrives in Egypt – Rosatom
- Russia, Burundi working on agreement on peaceful use of nuclear energy, Lavrov says
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- Govt vows no compromise on nukes amid IMF deal delay
- US Centcom chief expresses trust in Pakistan's nuclear agenda amid political unrest
- Base for Poseidon nuclear super-torpedoes to go on stream in Kamchatka next year – source
- Rosatom denies reports that Hungary considering kicking company out of Paks-2 NPP project
- Nuclear fuel to be loaded at Akkuyu NPP on April 27, says Erdogan

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- Nuclear 'partially' included in EU's Net-Zero Industry Act
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- G7 Foreign Ministers' Statement on the launch of an Intercontinental Ballistic Missile by North Korea
- UK Defense Ministry calls depleted uranium 'standard component' of its munitions
- Nuclearelectrica and ENEC sign MoU on cooperation
- Bulgaria authorizes Kozloduy NPP to buy equipment in Russia – Energy Minister
- France looking to liberal Netherlands in push for nuclear revival
- Hungary does not support UK's decision to ship depleted uranium shells to Kiev – official
- Russia gave Belarus Iskander system that can carry nuclear weapons, Putin says
- Russia to deploy its tactical nuclear weapons in Belarus at request of Minsk, says Putin
- EU ready to respond to placing nuke weapons in Belarus with further sanctions – Borrell
- France calls on Russia to revise decision on nuke arms deployment in Belarus
- EU threatens response if Belarus confirms deployment of Russian nuclear weapons
- NATO criticises Putin's 'dangerous and irresponsible' nuclear rhetoric
- Nuclear row threatens EU deal on renewable energy goals
- Germany criticizes Russian role in French nuclear fuel plant
- EU agrees compromise on nuclear energy amid French pressure

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- IAEA director general meets chief of Ukraine's nuclear inspectorate
- Update 151 - IAEA Director General Statement on Situation in Ukraine
- Depleted uranium plans for Kiev show West's ambitions to destroy Ukraine – diplomat
- Talks for demilitarized zone around Zaporozhye nuclear plant have been halted – IAEA chief
- Effects of depleted uranium munitions in Ukraine cannot be controlled – Russian MFA
- Ukraine should weigh consequences of using depleted uranium rounds – Medvedev
- IAEA Director General Grossi Travels to Zaporizhzhya Nuclear Power Plant Next Week
- Ukraine calls for UNSC emergency meeting over deployment of tactical nuke arms in Belarus
- Situation at Zaporozhye nuclear plant under firm control, says Russian envoy
- Ukraine fears nuclear plant could face dangerous water cooling shortage
- Update 152 - IAEA Director General Statement on Situation in Ukraine

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- Nuclear Plant Near Minneapolis Reports Leak of Tainted Water
- Government signs £2.9m Moon base nuclear power deal with Rolls-Royce
- New Mexico opts for veto power on spent nuclear fuel debate
- USA, Indonesia announce partnership on SMRs
- US regulators delay decision on nuclear fuel storage license
- US Announces Charges for Attempts to Help Iranian Weapons Program
- Canadian, Polish, US companies in 'unprecedented' SMR collaboration
- US has no indications Russia is preparing to use a nuclear weapon – Pentagon
- Ukraine war: US reacts cautiously as Russia agrees deal to move nuclear weapons to Belarus
- U.S. renewable electricity surpassed coal in 2022

- US, Russia stop sharing nuke data under faltering New START
- US Westinghouse to supply fuel to both Czech nuclear plants

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- Iran, China, Russia successfully conduct night time shooting operations
- FM: Iran-IAEA Cooperation on Right Track
- Iran asks the West to press Ukraine to verify drone supply charges
- Iran's top security official to visit Iraq
- Iran, China, Russia conduct joint naval operations
- N. Chief: Iran Exporting Nuclear Medicine to 9 States
- SNSC Spokesman Denies US Claim about Iran's Involvement in Syria Attack
- Tehran warns US of swift response to any attack on bases in Syria
- Iran to invite Saudi king to Tehran as Raisi invited to Riyadh
- Iran hopes strategic pact with Russia finalized 'in a month'
- China hails joint military exercises with Iran and Russia

### H. Israel

- ULTRASAT program: Israel Aerospace Industries to develop, build country's first astronomical observation satellite
- Dubai Police to purchase Airobotics's Iron-Drone systems
- New discoveries and advances ranging from the BRICS countries to Israel, Japan and South Korea
- BIRD Aerosystems delivers Falcon 7X with AMPS, AeroShield-M POD to undisclosed customer
- Controp to start local manufacturing of its products in India
- Israel successfully launches "Ofek 13" satellite

### I. Saudi Arabia

- Saudi Arabia Aiming for Complete Nuclear Fuel Cycle
- India, Saudi Arabia to explore new cooperation in space

### J. United Arab Emirates

- Nuclearelectrica and ENEC sign MoU on cooperation

### K. Türkiye

- Historic: Türkiye-made 5th gen fighter jet leaves hangar
- Embargos fuel rapid Turkish defense industry localization
- Türkiye develops new 'Azab' kamikaze drone
- Hold the line: Türkiye touts new defense tech to build up border security
- Türkiye reveals its 1st flying-wing unmanned fighter Anka-3
- Türkiye's renewed main battle tank Altay ready for army tests
- US believes Türkiye should get F-16 jets: Blinken
- Turkish drone magnate to unveil sea-based aircraft before test flight
- Turkish unmanned vessel test-fires with guided cruise missile
- Turkish defense firm Havelsan counts days for 'digital troops'
- Türkiye's unmanned fighter jet Kızılelma completes another test

## **L. East Asia**

- U.S., South Korea conduct military exercises as North Korea ramps up missile testing
- Philippines: The 70s nuclear relic that may open at last
- IAEA Mission Says Viet Nam is Committed to Nuclear Security, Encourages Further Strengthening of the National Nuclear Security Regime

## **M. Japan**

- AUKUS sub deal is one pillar of regional security
- Nuclear power plant leaks 400,000 gallons of radioactive water
- Japan begins preparation works for nuclear-contaminated wastewater dump with 'greater price to pay'
- Japan Prime Minister Fumio Kishida announces new Indo-Pacific plan during India visit
- North Korea's Kim oversees missile drill with mock nuclear warhead
- Russia Flies Nuclear-Capable Bombers over Sea of Japan
- UK-Japanese partnership to develop fusion materials

## **N. North Korea**

- North Korea launches missile into sea amid US-SKorea drills
- North Korea simulates nuclear counterattack against US and South Korea
- North Korea tested robotic sub capable of causing 'radioactive tsunami' — state radio
- North Korea asserts first evidence of tactical nuclear weapons
- North Korea Reveals And Tests Nuclear Capable UUV 'Haeil-1'
- As missile tests escalate, North Korea plays cyberespionage long game

## **O. South Korea**

- South Korea says North Korea test-fired multiple cruise missiles days after North conducted what it called simulated nuclear strike on South
- South Korea, US To Hold Largest-Ever Military Drills Amid N Korea Tension

## **P. Australia**

- Australia to buy up to 220 Tomahawk missiles from the US
- China says Australia-Britain-US nuclear submarine cooperation may spark arms race



## A. India

### Defence Acquisition Council approves proposals worth Rs 70,500 crore for the Armed Forces & Indian Coast Guard under Buy (Indian-IDDMM) category

PIB, March 16, 2023

A meeting of Defence Acquisition Council (DAC), held on March 16, 2023 under the chairmanship of Raksha Mantri Shri Rajnath Singh, has accorded Acceptance of Necessity (AoN) for capital acquisition amounting to over Rs 70,500 crore under Buy {Indian-IDDMM (Indigenously Designed, Developed and Manufactured)}. Out of the total proposals, Indian Navy proposals constitute more than Rs 56,000 crore, which largely includes indigenous BrahMos missiles, Shakti Electronic Warfare (EW) systems, Utility Helicopters-Maritime etc. While this additional procurement of BrahMos missile system will enhance the maritime strike capabilities & Anti-Surface Warfare Operation, the addition of Utility Helicopters will multiply the operational readiness of the Indian Navy in the domain of Search & Rescue operations, Casualty Evacuation, Humanitarian Assistance Disaster Relief (HADR) etc. Similarly, Shakti EW systems will equip and modernise the frontline Naval ships to counter any Naval Operations by the adversaries.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1907642>

### Current status of Gorakhpur Atomic Power Plant, Haryana

PIB, March 16, 2023

The Gorakhpur Nuclear Power Project comprises of two twin units of 700 MW each viz. GHAVP-1&2 (2X700 MW) and GHAVP-3&4 (2X700MW). Land acquisition has been completed at the Gorakhpur site in Haryana and Environmental clearance has been obtained for project. In respect of GHAVP-1&2, the piles for nuclear buildings 1&2 have been cast and poised for concreting of raft foundation. Construction works are underway in respect of other plant buildings,

tunnels and trenches, water conveyance system, ware houses, township buildings etc. Purchase orders for critical equipment and major packages have been placed and some major equipment have been received at site. In respect of GHAVP-3&4, pre-project activities at site and placement of orders for long delivery equipment are underway.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1907704>

### Nuclear power saving 41mt of CO2 emissions annually: Minister Jitendra Singh

The Times of India, March 17, 2023

Nuclear power is saving 41 million tonnes of carbon dioxide emissions annually compared to the volume that would be generated by equivalent electricity generation from coal-based power plants, junior atomic energy minister Jitendra Singh informed the Lok Sabha on Wednesday. In a written reply to a question in the House, Singh said that as part of the low-carbon development of electricity systems consistent with enhanced development benefits, the government is exploring a significantly greater role for nuclear power. He said nuclear power currently provides 3% of electricity generation and that sufficient production and share of nuclear power is essential for ensuring the country's energy security. According to the current nuclear energy policy, the country is targeting a three-fold rise in nuclear-installed capacity by 2032.

<https://timesofindia.indiatimes.com/india/nuclear-power-saving-41mt-of-co2-emissions-annually-minister-jitendra-singh/articleshow/98720017.cms>

### Rules of nuclear wargame are changing. India's role, China's intent is in spotlight

WION, March 17, 2023

The leaders of Australia, United Kingdom and United States (AUKUS) stood

together in San Diego earlier this week, and Prime Minister Anthony Albanese of Australia unveiled a four-phase plan to acquire up to eight nuclear-powered submarines from the UK and US. The deal translates into transfer of nuclear technology from a nuclear weapons state to a non-weapons state, and has prompted nuclear proliferation fears worldwide. "The fact that you have Highly Enriched Uranium reactors that are not easy to control when they are coming from a nuclear power to a non-nuclear power. So that is certainly an issue to be followed up," Professor Alexander Harang, Co-President of Oslo-headquartered International Peace and Understanding told WION, at the sidelines of India Centre Foundation's roundtable in New Delhi.

<https://www.wionews.com/india-news/exclusive-rules-of-nuclear-wargame-are-changing-indias-role-chinas-intent-is-in-spotlight-572723>

### **Not 6, now India to buy only 3 nuclear submarines as cost escalates**

*Firstpost, March 17, 2023*

The Indian Navy has decided to scale down its plans of procuring nuclear submarines.

According to media reports, the Indian Navy may receive approval to purchase only three nuclear submarines during the initial stage. The original plan, which envisaged the procurement of six submarines in the initial lot has been scrapped by the defence ministry due to high procurement costs. The defence ministry had approved the Indian Navy's plans to acquire nuclear submarines in 2016. It was decided in 2019 that only three submarines will be developed as part of Project-77, which had been launched with the goal of modernising the Indian Navy.

<https://www.firstpost.com/world/not-6-now-india-to-buy-only-3-nuclear-submarines-as-cost-escalates-12308242.html>

### **Aatmanirbhar Bharat: MoD inks Rs 3,700 crore contracts with BEL for**

### **Medium Power Radars 'Arudhra' & 129 DR-118 Radar Warning Receivers**

*PIB, March 23, 2023*

Ministry of Defence, on March 23, 2023, signed two separate contracts with Bharat Electronics Limited (BEL), at a total cost of over Rs 3,700 crore, to enhance the operational capabilities of the Indian Air Force. The first contract, worth over Rs 2,800 crore, pertains to the supply of Medium Power Radars (MPR) 'Arudhra' for the Indian Air Force. The second contract, at an overall cost of approx. Rs 950 crore, relates to 129 DR-118 Radar Warning Receivers (RWR). Both projects are under Buy {Indian - IDMM (Indigenously Designed Developed and Manufactured)} category. These essentially embody the spirit of 'Aatmanirbhar Bharat' and will help facilitate the realisation of the country's journey to achieve self-reliance in defence manufacturing.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1910065>

### **India needs capabilities to tackle 'grey zone' warfare from China, Pakistan: Army chief**

*The Times of India, March 23, 2023*

India needs capabilities to not just negate or mitigate the 'grey zone' warfare being pursued by China and Pakistan but also to keep them on the backfoot, General Manoj Pande said on Wednesday, while also underlining the criticality of "strategic deterrence instruments" to ward off full-blown wars. "Our legacy challenges of unsettled borders continue to engage us. It is important to recognise that infirmities in border management can lead to wider conflict. Therefore, the first imperative that comes across is that - possession of strategic deterrence instruments is essential," the Army chief said.

Though Gen Pande did not elaborate on this point while speaking at a conference here, it was an obvious reference to the sheer utility of India's nuclear weapons in deterring China and Pakistan. Grey zone warfare, in turn, is to exploit the operational space between peace and war to change the status quo or coerce an adversary, which China has mastered over the years with its salami-slicing and other tactics.

<https://timesofindia.indiatimes.com/india/india-needs-capabilities-to-tackle-grey-zone-warfare-from-china-pakistan-army-chief/articleshow/98923368.cms?from=mdr>

### **Union Minister Dr Jitendra Singh informs that NASA and ISRO have jointly manufactured an earth science satellite named, NISAR (NASA-ISRO Synthetic Aperture Radar) at a cost of about Rs 470 crore**

*PIB, March 23, 2023*

Union Minister of State (Independent Charge) Atomic Energy and Space, Dr. Jitendra Singh today informed the Rajya Sabha that National Aeronautics and Space Administration (NASA) and the Indian Space Research Organization (ISRO) have jointly manufactured an earth science satellite named, NISAR (NASA-ISRO Synthetic Aperture Radar). In a written reply to a question in the Rajya Sabha, Dr Jitendra Singh said, the mission objectives of the satellite are- Design, Develop and launch Dual Frequency (L and S band) Radar Imaging Satellite and to Explore newer applications areas using L & S Band microwave data especially in surface deformation studies, terrestrial biomass structure, natural resource mapping and monitoring and studies related to dynamics of ice-sheets, glaciers, forests, oil slick etc.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1909922>

### **Aatmanirbhar Bharat: MoD signs Rs 3,000 crore contract with BEL for procurement of two Integrated**

### **Electronic Warfare Systems 'Project Himshakti'**

*PIB, March 24, 2023*

Ministry of Defence, on March 24, 2023, signed a contract with Bharat Electronics Limited (BEL), Hyderabad for procurement of two Integrated Electronic Warfare Systems 'Project Himshakti' at an overall cost of approximately Rs 3,000 crore. The project is under the Buy {Indian - IDMM (Indigenously Designed Developed and Manufactured)} category comprising contemporary and niche technologies. 'Project Himshakti' will encourage participation of Indian Electronics and associated industries, including MSMEs, which are sub vendors of BEL. It will generate employment of approximately three lakh man-days over a period of two years. The project is a significant leap forward in developing indigenous capabilities making the country 'Aatmanirbhar', in consonance with the Make-in-India initiative of the Government.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1910337>

### **Aatmanirbhar Bharat: MoD inks two contracts with BEL, worth Rs 2,400 crore, for procurement of Automated Air Defence Control & Reporting System 'Project Akashteer' for Indian Army & Sarang Electronic Support Measure systems for Indian Navy**

*PIB, March 29, 2023*

In yet another boost to 'Aatmanirbharta' in defence, Ministry of Defence, on March 29, 2023, signed three contracts - two with Bharat Electronics Limited (BEL), Ghaziabad and one with NewSpace India Limited (NSIL) - at a total cost nearly Rs 5,400 crore, to bolster the defence capabilities of the country. The first contract with BEL pertains to procurement of Automated Air Defence Control & Reporting System 'Project Akashteer' worth Rs 1,982 crore for the Indian Army.



The second contract with BEL relates to acquisition of Sarang Electronic Support Measure (ESM) systems along with associated Engineering Support Package from BEL, Hyderabad at an overall cost of Rs 412 crore for the Indian Navy.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1911937>

### **Aatmanirbhar Bharat: MoD signs contract with BEL for 13 Lynx-U2 Fire Control Systems for Indian Navy worth Rs 1,700 crore**

PIB, March 30, 2023

Ministry of Defence, on March 30, 2023, signed a contract with Bharat Electronics Limited, Bangalore for procurement of 13 Lynx-U2 Fire Control Systems for Indian Navy at a total cost of over Rs 1,700 crore under Buy {Indian - IDMM (Indigenously Designed Developed and Manufactured)} category. The Lynx-U2 System is a Naval Gun Fire Control System designed and developed indigenously. It is capable of accurately tracking and engaging targets amidst sea clutter as well as air/surface targets.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1912193>

### **Aatmanirbhar Bharat: MoD signs Rs 19,600 crore contracts with Indian shipyards for acquisition of 11 Next Generation Offshore Patrol Vessels & six Next Generation Missile Vessels for Indian Navy**

PIB, March 30, 2023

In a huge boost to achieve 'Aatmanirbharta' in defence, Ministry of Defence, on March 30, 2023, signed contracts with Indian shipyards for acquisition of 11 Next Generation Offshore Patrol Vessels and six Next Generation Missile Vessels at an overall cost of approx. Rs 19,600 crore. The contract for acquisition of 11 Next Generation Offshore Patrol Vessels under Buy (Indian-IDDM) category was signed with Goa Shipyard Ltd (GSL) and Garden Reach Shipbuilders and Engineers (GRSE), Kolkata at a total cost of Rs 9,781 crore. Of the 11

ships, seven will be indigenously designed, developed & manufactured by GSL and four by GRSE. The delivery of the ships is scheduled to commence from September 2026.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1912286>

### **Aatmanirbhar Bharat: MoD inks contract with BrahMos Aerospace Private Limited for Next Generation Maritime Mobile Coastal Batteries (Long range) & BrahMos Missiles worth Rs 1,700 crore**

PIB, March 30, 2023

Ministry of Defence, on March 30, 2023, inked a contract with BrahMos Aerospace Private Limited (BAPL) for procurement of Next Generation Maritime Mobile Coastal Batteries (Long range) {NGMMCB (LR)} and BrahMos Missiles at an approximate cost of over Rs 1,700 crore under Buy (Indian) Category. The delivery of NGMMCBs is scheduled to commence from 2027. These systems will be equipped with supersonic BrahMos Missiles and will significantly enhance multi-directional maritime strike capability of Indian Navy.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1912292>

### **Aatmanirbhar Bharat: MoD inks over Rs 9,100 crore contracts for improved Akash Weapon System & 12 Weapon Locating Radars Swathi (Plains) for Indian Army**

PIB, March 30, 2023

Providing a further boost to 'Aatmanirbharta' in defence, Ministry of Defence, on March 30, 2023, signed contracts for procurement of improved Akash Weapon System and 12 Weapon Locating Radars, WLR Swathi (Plains) for the Indian Army at an overall cost of over Rs 9,100 crore. The contract for procurement of improved Akash Weapon System (AWS) for 3rd & 4th Regiments of Army Air Defence, comprising live Missiles & Launchers with upgrades, Ground

Support Equipment, Vehicles and Infrastructure was signed with Bharat Dynamics Limited, worth over Rs 8,160 crore.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1912309>

## **B. Russia**

### **Sevmash building two groups of Borei-A, Yasen-M project nuclear-powered submarines**

*TASS, March 16, 2023*

The Northern Machine-Building Enterprise (Sevmash, an affiliate of the United Shipbuilding Corporation, USC) is building two groups of Project 955A (Borei-A) strategic nuclear-powered submarine cruisers and Project 885M (Yasen-M) multi-purpose nuclear-powered submarines, Sevmash Director General Mikhail Budnichenko said in an interview with TASS ahead of Submariner Day marked in Russia on March 19. "Sevmash's key task for 2023 is absolutely clear - to implement the program of the state defense order. It is going to be more laborious this year. Sevmash is building two groups of submarines of the Borei-A and Yasen-M projects," he said.

<https://tass.com/defense/1589399>

### **US calls for not cooperating with Russian in nuke sphere seen as dishonest competition**

*TASS, March 16, 2023*

Russian Ambassador to the United States Anatoly Antonov has slammed US Secretary of Energy Jennifer Granholm's calls for a refusal to cooperate with Russian in the sphere of peaceful uses of nuclear energy as a manifestation of dishonest competition. The Russian ambassador on Wednesday commented on Granholm's article in The Hill newspaper where she called on the world to "penalize" our country with a refusal to cooperate in the sphere of peaceful uses of nuclear energy.

<https://tass.com/politics/1589413>

### **Russia's latest strategic nuclear-powered sub preparing for testing – Shipyard**

*TASS, March 16, 2023*

The Project 955A (Borei-A) strategic nuclear-powered submarine cruiser Emperor Alexander III is preparing for shipbuilders' and state testing, CEO of the Sevmash Shipyard (part of the United Shipbuilding Corporation) Mikhail Budnichenko told TASS on Thursday. "The third serial-built strategic nuclear-powered submarine cruiser Emperor Alexander III will undergo shipbuilders' and state trials that will be carried out by the vessel's crew and the Sevmash delivery team," the chief executive said on the eve of Russia's Submariner Day celebrated on March 19.

<https://tass.com/defense/1589451>

### **Sevmash Shipyard ready to continue construction of Borei-A nuclear subs – CEO**

*TASS, March 16, 2023*

The Sevmash Shipyard (part of the United Shipbuilding Corporation) is ready to continue the construction of Project 955A (Borei-A) strategic nuclear powered submarines after finishing the series of 12 subs, Sevmash CEO Mikhail Budnichenko told TASS on Thursday. "Over the past ten years, we have prioritized hiring personnel and upgrading the enterprise's capacities to further fulfill the defense procurement plan," the chief executive said on the eve of Submariner Day celebrated in Russia on March 19.

<https://tass.com/defense/1589473>

### **Kremlin declines to comment on US statement about Russia's suspension of New START**

*TASS, March 16, 2023*

It is up to the Russian Foreign Ministry to comment on the US Department of State's statement that Moscow's suspension of the New Strategic Arms Reduction Treaty

(New START) is legally invalid, Kremlin Spokesman Dmitry Peskov told reporters on Thursday. "I think that our Foreign Ministry will probably explain the Department of State's statement. It is their prerogative after all," Peskov said in response to a question. "We can only reiterate that Russia suspended its participation based on the president's decision," he added.

<https://tass.com/politics/1589583>

### **Russia, China scrutinize West's moves to advance AUKUS in Asia-Pacific region – MFA**

*TASS, March 16, 2023*

Russia and China are thoroughly analyzing the actions of Western countries to advance the AUKUS alliance in the Asia-Pacific region, Russian Foreign Ministry Spokeswoman Maria Zakharova told a briefing on Thursday. "Russia and China closely coordinate their positions in the international arena; we are closely analyzing the actions of the West in the Asia-Pacific region, including their efforts to advance AUKUS under the auspices of Washington," she said.

<https://tass.com/politics/1589913>

### **All Russian subs can be fitted with Kalibr missiles – Russian navy commander**

*TASS, March 17, 2023*

All Russian submarines, including strategic missile carriers, can be fitted with Kalibr-PL cruise missiles, Russian Navy Commander Adm. Nikolay Yevmenov said in an interview, published on Friday. "Second-generation submarines were used to test Kalibr cruise missiles. At present, practically all submarines in service, including strategic underwater cruisers, can be armed with them," he told the Krasnaya Zvezda newspaper in the run-up to the Day of the Submariner, marked on March 19. In his words, the next logical step would be to equip all submarines with hypersonic missiles.

<https://tass.com/defense/1589983>

### **Russian nuclear subs to conduct volley fires by ballistic missiles for testing purposes**

*TASS, March 17, 2023*

The Russian Navy's nuclear-powered submarines will conduct volley fires by ballistic missiles for testing purposes, Navy Commander-in-Chief Admiral Nikolay Yevmenov said on Friday. "Five years ago, the first Borei-class strategic missile-carrying submarine cruiser Yury Dolgoruky successfully performed a salvo of four Bulava ballistic missiles. From now on, we will conduct volley fires by ballistic missiles for testing purposes, when necessary. The submariners are ready to accomplish such objectives," the Navy chief said in an interview with the Defense Ministry's Krasnaya Zvezda newspaper on the eve of Submariner Day celebrated in Russia on March 19.

<https://tass.com/defense/1590073>

### **Russian submarines to practice surfacing in Arctic ice – Navy chief**

*TASS, March 17, 2023*

The Russian Navy will continue conducting drills in the Arctic and is set to practice submarine surfacing in the North Pole, Navy Commander-in-Chief Admiral Nikolay Yevmenov said on Friday. "The drills in the Arctic region involving submarines and other naval forces will certainly be conducted. We will practice the surfacing of submarines in ice openings in polar areas, rescue operations employing naval aircraft, military-technical and scientific experiments," the Navy chief in an interview with the Defense Ministry's Krasnaya Zvezda newspaper on the eve of Submariner Day celebrated in Russia on March 19. The Russian Navy has a lot of plans on this score, he added.

<https://tass.com/defense/1590111>



## Ukraine plans nuclear fuel production to replace Russian fuel – energy ministry

*TASS, March 17, 2023*

Ukraine plans to start producing its own nuclear fuel for nuclear power plants to potentially replace Russian fuel, including on the European market, within three years, the press service of the country's Energy Ministry said in a statement. "Energoatom (Ukrainian company, operator of national NPPs - TASS) plans to create its own nuclear fuel production line within three years," according to the statement released on the ministry's website. Ukraine has already started producing components for VVER-1000-type fuel assemblies, the ministry said, adding that the plan is to launch the production of assemblies for VVER-440 reactors. The project is being implemented by Energoatom in cooperation with the US' Westinghouse Corporation, the press service noted.

<https://tass.com/politics/1590421>

## EU mulls sanctions against Rosatom – source

*TASS, March 17, 2023*

Sanctions against the Russian nuclear corporation Rosatom remain on the table but it is difficult to find a replacement for the Russian supplier, a source in the European External Action Service said. "The matter of sanctions against Rosatom remains on the table but it is difficult to find an alternative to the Russian nuclear fuel in the EU," the diplomat said. "This is a complicated issue. It is related to the nuclear industry of certain EU countries. Unlike gas and oil, there are no simple replacement for the nuclear fuel and maintenance for facilities built by Rosatom under its technologies," he noted.

<https://tass.com/economy/1590521>

## Akkuyu NPP to make major contribution to uninterrupted power supplies in Turkey - Erdogan

*TASS, March 19, 2023*

The commissioning of the Akkuyu nuclear power plant will make a major contribution to uninterrupted electricity supplies in Turkey,

Turkish President Recep Tayyip Erdogan said on Sunday. "In the coming months, we will commission the Akkuyu NPP's first power unit. The commissioning of all power units, the nuclear plant will make a major contribution to uninterrupted and balanced supplies of electricity in our country," the TRT television channel quoted him as saying. According to Erdogan, Turkey is developing solar and wind power engineering.

<https://tass.com/economy/1590939>

## Construction of El-Dabaa NPP in Egypt proceeding ahead of schedule – Russian deputy PM

*TASS, March 19, 2023*

The El-Dabaa nuclear power plant project implemented by Russia's Rosatom corporation in Egypt is proceeding ahead of the schedule, Russian Deputy Prime Minister and Minister of Industry and Trade Denis Manturov said on Sunday. "So far, we are ahead of the schedule," he told journalists responding to the relevant question. El Dabaa will be the first nuclear power plant in Egypt and Rosatom's first major project in Africa.

<https://tass.com/economy/1590973>

## Russia concerned over irresponsible attempts to undermine nuclear security – Putin

*TASS, March 20, 2023*

Moscow is committed to the principle of the indivisibility of security and is concerned over irresponsible actions that jeopardize nuclear security, Russian President Vladimir Putin wrote in his article for China's The People's Daily. The article was posted on the Kremlin website on Sunday.

<https://tass.com/politics/1591061>

## Russia, China convinced that nuclear war must never be unleashed – joint statement

*TASS, March 22, 2023*

Russia and China are convinced that a nuclear war cannot be won and must



never be unleashed, according to the Joint Statement on Deepening the Comprehensive Strategic Partnership of Coordination for the New Era signed by Russian and Chinese Presidents, Vladimir Putin and Xi Jinping, on Tuesday after their talks in Moscow. "Stressing the importance of the joint statement by the leaders of the five countries, which possess nuclear weapons, on the prevention of a nuclear war and an arms race, the sides once again state that there can be no winners in a nuclear war and it must never be unleashed," the document reads.

<https://tass.com/russia/1592589>

### **Risk of nuclear conflict at record-high over decades – MFA**

*TASS, March 22, 2023*

The risk of a nuclear conflict is now at a record-high over decades, Russia's Deputy Foreign Minister Sergey Ryabkov said during a discussion entitled A World without START: What's Next? on the platform of the Valdai discussion club.

"I would not like to indulge in a discussion whether the probability of a nuclear conflict is high today, but in any case it is higher than anything that we have seen over the past decades, let's put it this way," he said.

<https://tass.com/politics/1593075>

### **Sino-Russian roadmap on fast reactors to be prepared by late 2024 – Rosatom**

*TASS, March 22, 2023*

The roadmap to implement the program of cooperation between Russia and China in the sphere of fast neutron reactors and nuclear fuel cycle closing will be prepared by the end of 2024, press service of the Russian nuclear corporation Rosatom said on Wednesday. The long-term cooperation program was signed the day before during the visit of President of China Xi Jinping to Russia, the press service noted.

<https://tass.com/economy/1593089>

### **Russia to count US, British, French nuclear potentials in deciding fate of New START – MFA**

*TASS, March 22, 2023*

In determining the fate of the strategic arms reduction treaty (New START) Russia will take into account the ability of the United States, France and Britain to jointly use their nuclear potentials against Moscow, Russia's Deputy Foreign Minister Sergey Ryabkov has said. "We can no longer ignore the factor of the combined arsenal of the United States, Britain and France. Amid the current realities, in determining the fate of New START we will without fail take into account the ability of these countries to jointly use their nuclear potentials against Russia," Ryabkov said during the discussion entitled A World without START: What's Next? on the platform of the international discussion club Valdai.

<https://tass.com/politics/1593095>

### **First load of equipment for El Dabaa NPP arrives in Egypt – Rosatom**

*TASS, March 22, 2023*

A cargo vessel carrying the first load of oversized equipment for construction of the El Dabaa Nuclear Power Plant (NPP) has arrived in Egypt, Russian state nuclear corporation Rosatom told TASS. The official ceremony for acceptance of the plant's melt trap took place on Tuesday at the power plant construction site. "Two years ago, we were at the plant in Syzran, where fabrication of this technologically complex piece equipment started. The trap has now finally arrived at the site. This is one of the most important elements of the plant in terms of the safety of an NPP with a Generation 3+ PWR reactor, and this confirms that we are building the safest NPP in the world," Atomstroieksport Vice President Grigory Sosnin said.

<https://tass.com/economy/1593121>

## Russia, Burundi working on agreement on peaceful use of nuclear energy, Lavrov says

TASS, March 23, 2023

Russia and Burundi are working on an intergovernmental agreement on the peaceful use of nuclear energy, Russian Foreign Minister Sergey Lavrov said at a press conference following talks with the African nation's top diplomat Albert Shingiro on Thursday. "We had a specific discussion of promising areas such as the peaceful use of nuclear energy. Our countries have joint roadmaps in this area and work is underway on an intergovernmental agreement, as well as on a memorandum on the training of personnel in the field of nuclear energy," Lavrov pointed out.

<https://tass.com/economy/1593421>

## UK wanted to hamper Russia-China talks by announcing uranium shell supplies – diplomat

TASS, March 23, 2023

The UK statement on supplies of depleted uranium shells to Ukraine was aimed at throwing a wrench into the agenda of talks between Chinese President Xi Jinping and his Russian counterpart Vladimir Putin, Russian Foreign Ministry Spokeswoman Maria Zakharova said on Thursday during a Solovyov live TV broadcast. "They (the British - TASS) cannot understand that it is impossible to interrupt the constructive and creative agenda with any propaganda or manipulation of the mainstream. <...> No PR campaigns, no anti-ads and no hysterics will be able to kill it," she said, adding that China-Russia cooperation set the "right tone for international relations."

<https://tass.com/politics/1593647>

## Russian space industry should be more commercially driven, taking page from US – Medvedev

TASS, March 23, 2023

State funding for the space industry must be provided in a sensible, but sufficient

amount, and the space industry must be more commercially driven, similar to the US practice, says Russian Security Council Deputy Chairman Dmitry Medvedev. "Of course, it would be nice to have more money; the Soviet Union often spent money on space for the sake of prestige, and we have achieved amazing results. But we cannot afford that now; therefore, money must be provided, but in a sensible yet sufficient manner," Medvedev said in an interview for the Russian press and social media users.

<https://tass.com/science/1593665>

## IAEA mission to Zaporozhye NPP was initiated by Russia – Rosenergoatom official

TASS, March 24, 2023

The deployment of a permanent mission of the International Atomic Energy Agency (IAEA) at the Zaporozhye Nuclear Power Plant (ZNPP) was Russia's initiative, driven by Moscow's consistent prioritization of nuclear safety and security, a senior official of the Rosenergoatom nuclear power concern told TASS on Friday. Renat Karchaa, an adviser to Rosenergoatom's CEO, dismissed speculation by IAEA Director General Rafael Grossi to the effect that the agency's monitors had made the decision to remain at the Zaporozhye NPP of their own accord without asking for the consent of Moscow or Kiev.

<https://tass.com/world/1594193>

### C. Pakistan

## Pakistan dismisses speculations about compromise on nuclear program

Anadolu Agency, March 16, 2023

Pakistan on Thursday dismissed "speculations" about any external pressure to compromise on its nuclear program amid a sputtering economy. The rare explanation came directly from the prime minister's office, reflecting the gravity of speculations that Islamabad

might “compromise” or “roll back” its nuclear program in exchange for financial assistance from the US, Europe, and international lending agencies to shore up its tottering economy. An official statement said: “In the wake of all the recent statements, press releases, queries and various assertions regarding Pakistan’s nuclear and missile program, being circulated on social and print media, wherein even a traditional routine visit of DG (director general) IAEA (International Atomic Energy Agency) Rafael Mariano Grossi for peaceful nuclear program was portrayed in negative spotlight.

<https://www.aa.com.tr/en/asia-pacific/pakistan-dismisses-speculations-about-compromise-on-nuclear-program/2847591#>

### **Pakistan PM Sharif says nuclear programme ‘completely foolproof’ amid concern over its safety**

*India Today, March 16, 2023*

Prime Minister Shehbaz Sharif on Thursday asserted that Pakistan’s nuclear programme was “safe”, “completely foolproof” and “jealously guarded” by the state, amid concerns by the international community about its safety in the debt-ridden country. In a statement, the Prime Minister’s Office noted that press releases, queries and various assertions regarding Pakistan’s nuclear and missile programme were being circulated on social and print media. It said that even a “traditional routine visit” of International Atomic Energy Agency Director General Rafael Mariano Grossi was portrayed in a “negative spotlight”. “It is emphasised that Pakistan’s nuclear and missile programme is a national asset, which is jealously guarded by the state. The complete programme is totally secure, foolproof and under no stress or pressure whatsoever,” the statement said.

<https://www.indiatoday.in/world/story/pakistan-pm-shehbaz-sharif-says-nuclear-programme-completely-foolproof-amid-concern-over-its-safety-2347672-2023-03-16>

### **Govt vows no compromise on nukes amid IMF deal delay**

*Dawn, March 17, 2023*

The premier and the finance minister asserted on Thursday that there would be “no compromise” on the country’s nuclear and missile programme and they are “jealously guarded by the state”. The statements from the top came amid concerns raised by some quarters after the visit of the International Atomic Energy Agency’s (IAEA) head to Pakistan last month and the government’s failure to strike a deal with IMF to resume a stalled loan programme, which would offer a critical lifeline to avert an economic meltdown. A statement issued by the Prime Minister’s Office on Thursday noted that press releases, queries and various assertions regarding Pakistan’s nuclear and missile programme were being circulated on social and print media.

<https://www.dawn.com/news/1742660>

### **US Centcom chief expresses trust in Pakistan’s nuclear agenda amid political unrest**

*ANI, March 20, 2023*

Notwithstanding political unrest and concerns about an impending economic collapse, US Centcom commander General Michael E Kurilla has voiced trust in the command-and-control structure of Pakistan’s nuclear programme, reported The News International.

The US general’s statement is a relief ahead of Finance Minister Ishaq Dar’s remarks last week in the Senate regarding the International Monetary Fund (IMF) bailout programme. “I am confident in their nuclear security procedures,” said the Centcom chief responding to a query before the US Senate Armed Services Committee. A committee member had spoken about the political problems in Pakistan and asked the Centcom commander for his opinion, according to The News International.

<https://www.aninews.in/news/world/asia/us-centcom-chief-expresses-trust-in-pakistans-nuclear-agenda-amid-political-unrest20230320224350/>



## Base for Poseidon nuclear super-torpedoes to go on stream in Kamchatka next year – source

TASS, March 27, 2023

The construction of coastal infrastructure facilities for a new naval base to accommodate the Belgorod and Khabarovsk special-purpose nuclear-powered submarines carrying Poseidon nuclear-capable super-torpedoes will be completed early next year, a source close to Russia's Defense Ministry told TASS on Monday. "The construction of coastal infrastructure facilities for accommodating two special-purpose submarines in Kamchatka is set to be finished at the beginning of next year," the source said.

<https://tass.com/defense/1594763>

## Rosatom denies reports that Hungary considering kicking company out of Paks-2 NPP project

TASS, March 27, 2023

Rosatom has denied reports that Hungary was considering terminating cooperation with the Russian nuclear state corporation to build the second stage of the Paks nuclear power plant. Earlier, the Financial Times wrote that Budapest was forced to consider a scenario in which Moscow would withdraw from the Paks-2 project due to the influence of Western sanctions. When asked to comment on this report, a representative of Rosatom-Central Europe told TASS that during consultations with Rosatom, Hungarian partners did not raise the issue of possibly terminating cooperation.

<https://tass.com/economy/1595015>

## Nuclear fuel to be loaded at Akkuyu NPP on April 27, says Erdogan

TASS, March 29, 2023

Nuclear fuel will be loaded into the first power unit of the Akkuyu nuclear power plant on April 27, Turkish President Tayyip Erdogan said on Wednesday.

"After fuel is loaded at the Akkuyu nuclear power plant on April 27, this facility will

officially be considered nuclear," he said during his speech in the parliament.

<https://tass.com/economy/1596127>

### D. Europe

## Germany, Spain push to keep nuclear out of EU renewable energy goals

Reuters, March 16, 2023

Seven EU states including Germany, Spain and Denmark have strengthened their resistance to efforts by France to count nuclear energy towards EU renewable energy targets, according to a letter seen by Reuters.

<https://www.reuters.com/business/energy/germany-spain-push-keep-nuclear-out-eu-renewable-energy-goals-2023-03-16/>

## Nuclear 'partially' included in EU's Net-Zero Industry Act

World Nuclear News, March 16, 2023

The European Commission (EC) has proposed the Net-Zero Industry Act (NZIA) to scale up manufacturing of clean technologies in the EU and make sure it is well-equipped for the clean-energy transition. However, nuclear trade body Nucleareurope said it fails to recognise the sector's full potential contribution. The Commission said the NZIA - part of the EU's Green Deal Industrial Plan and seen as a response to the USA's Inflation Reduction Act - will "strengthen the resilience and competitiveness of net-zero technologies manufacturing in the EU, and make our energy system more secure and sustainable. It will create better conditions to set up net-zero projects in Europe and attract investments, with the aim that the Union's overall strategic net-zero technologies manufacturing capacity approaches or reaches at least 40% of the Union's deployment needs by 2030.

<https://www.world-nuclear-news.org/Articles/Nuclear-partially-included-in-EU-s-Net-Zero-Indust>



## Rolls-Royce to develop nuclear reactor to power UK base on the Moon

*ABC News, March 18, 2023*

The UK's Space Agency (UKSA) has commissioned Rolls-Royce to develop nuclear reactors that could power a base on the Moon. Rolls-Royce was awarded £2.9 million (\$5.26 million) to fund research into developing nuclear power that would operate in the desolate, low-gravity environment. The company's research centres around the concept of a micro-reactor, a portable power source that could operate in any environment. The lunar modular reactor would power space missions, as well as support humans living and working on the Moon. "This innovative research by Rolls-Royce could lay the groundwork for powering continuous human presence on the Moon, while enhancing the wider UK space sector, creating jobs and generating further investment," said UKSA chief executive Dr Paul Bate.

<https://www.abc.net.au/news/2023-03-18/uk-funding-rolls-royce-nuclear-on-moon/102114662>

## G7 Foreign Ministers' Statement on the launch of an Intercontinental Ballistic Missile by North Korea

*France Diplomacy, March 19, 2023*

We, the G7 Foreign Ministers of Canada, France, Germany, Italy, Japan, the United Kingdom, the United States of America, and the High Representative of the European Union, condemn in the strongest terms North Korea's March 16 launch of yet another Intercontinental Ballistic Missile (ICBM), which undermines regional and international peace and security. Since last year, North Korea has intensified its escalatory actions through a record number of ballistic missile launches and its continued irresponsible and destabilizing rhetoric regarding the use of nuclear weapons. Earlier this year, North Korea publicly stated its intent to further expand and enhance its unlawful nuclear and missile programs.

<https://www.diplomatie.gouv.fr/en/french-foreign-policy/security-disarmament-and-non-prolifera->

[tion/news/2023/article/g7-foreign-ministers-statement-on-the-launch-of-an-intercontinental-ballistic](https://www.diplomatie.gouv.fr/en/french-foreign-policy/security-disarmament-and-non-prolifera-tion/news/2023/article/g7-foreign-ministers-statement-on-the-launch-of-an-intercontinental-ballistic)

## UK Defense Ministry calls depleted uranium 'standard component' of its munitions

*TASS, March 22, 2023*

The Defense Ministry of the United Kingdom said depleted uranium was a standard component of its armor-piercing munitions, claiming that Moscow's response to the news of their possible supplies to Ukraine was an attempt to "deliberately <...> disinform" the public. "It is a standard component and has nothing to do with nuclear weapons or capabilities. Russia knows this but is deliberately trying to disinform," the ministry said in a statement. According to the document, such rounds are "highly effective" against tanks and armored vehicles.

<https://tass.com/world/1592609>

## Nuclearelectrica and ENEC sign MoU on cooperation

*World Nuclear News, March 22, 2023*

Romania's Nuclearelectrica and Emirates Nuclear Energy Corporation (ENEC) have signed a memorandum of understanding (MoU) to cooperate on the "potential development and expansion of nuclear energy programmes in the United Arab Emirates and Romania as well as within central and eastern Europe". The two companies said the MoU would see them "work together to assess potential partnerships in operations and maintenance support of nuclear energy plants, capacity building and human capital development, as well as synergies in research and development. The two parties will share experience in developing financing and commercial frameworks of nuclear programmes, as well as exchanging knowledge on project management capabilities".

<https://www.world-nuclear-news.org/Articles/Nuclearelectrica-and-ENEC-sign-MoU-on-cooperation>

## **Bulgaria authorizes Kozloduy NPP to buy equipment in Russia – Energy Minister**

*TASS, March 22, 2023*

The caretaker government of Bulgaria authorized the Kozloduy nuclear power plant (NPP) to continue purchases of required equipment and materials in Russia at the meeting of Wednesday as a matter of exception, Energy Minister Rossen Hristov said at a briefing. “The government approved an exception from EU sanctions imposed on Russia. This pertains to procurement of required materials, spares and services for scheduled annual turnarounds of the Kozloduy NPP.

<https://tass.com/economy/1593007>

## **France looking to liberal Netherlands in push for nuclear revival**

*Euractiv, March 22, 2023*

The French National Assembly approved the bill on Tuesday (21 March) with 402 votes in favour and 130 against, scrapping a 50% limit on the share of nuclear in France’s electricity mix. While the bill still needs a second vote of approval to go through, the numbers suggest parliament will most likely rubberstamp the new law. “We are moving forward on the third pillar of our energy transition,” Energy Minister Agnès Pannier-Runacher said after the vote, in reference to French efforts at reducing energy consumption and building more renewables.

<https://www.euractiv.com/section/energy-environment/news/france-looking-to-liberal-netherlands-in-push-for-nuclear-revival/>

## **Hungary does not support UK’s decision to ship depleted uranium shells to Kiev – official**

*TASS, March 23, 2023*

Hungary considers the UK’s decision to ship depleted uranium shells to Ukraine wrong, Hungarian Minister of the Prime Minister’s Office Gergely Gulyas told reported Thursday. This step does not lead towards de-escalation of the Ukrainian conflict, Gulyas said, adding that Hungary would

not recommend anyone to use depleted uranium shells. “Hungary does not support any actions that could lead to an escalation of the war,” the Minister said.

<https://tass.com/world/1593643>

## **Russia gave Belarus Iskander system that can carry nuclear weapons, Putin says**

*TASS, March 26, 2023*

Russia has handed over to Belarus the Iskander missile system that is capable of carrying nuclear weapons, and on July 1 it will complete the construction of a storage for tactical nuclear weapons on the republic’s soil, Russian President Vladimir Putin told Rossiya-24 TV channel. “We have handed over to Belarus our well-known and very effective Iskander system that can carry [nuclear weapons].

<https://tass.com/defense/1594437>

## **Russia to deploy its tactical nuclear weapons in Belarus at request of Minsk, says Putin**

*TASS, March 26, 2023*

Russia, at the request of the Belarusian side, will deploy its tactical nuclear weapons in Belarus, just as the United States has been doing on the territories of its allies, Russian President Vladimir Putin said on the Rossiya-24 news channel on Saturday. “Even out of the context of these events, this statement (about the possible supply of depleted uranium shells by the UK to Ukraine - TASS), Alexander Grigorievich Lukashenko has long raised the issue of deploying Russian tactical nuclear weapons on the territory of Belarus,” Putin said.

<https://tass.com/russia/1594483>

## **EU ready to respond to placing nuke weapons in Belarus with further sanctions – Borrell**

*Tass, March 26, 2023*

The European Union is ready to impose further sanctions if Russia deploys its

tactical nuclear weapons in Belarus, EU foreign policy chief, Josep Borrell, said on Sunday. "Belarus hosting Russian nuclear weapons would mean an irresponsible escalation & threat to European security. Belarus can still stop it, it is their choice. The EU stands ready to respond with further sanctions," he wrote on his Twitter account.

<https://tass.com/world/1594613>

### **France calls on Russia to revise decision on nuke arms deployment in Belarus**

*TASS, March 26, 2023*

The French foreign ministry has called on Russia to revise its agreement with Belarus on the deployment of nuclear weapons as having a destabilizing character. "France attaches great significance to the commitment to the January 3, 2022 statement on the inadmissibility of a nuclear war and an arms race, which was approved by both [Russian President] Vladimir Putin and all the heads of state and government of the five permanent members of the UN Security Council. It calls on Russia to demonstrate responsibility, which is expected from a state possessing nuclear weapons, and revise this destabilizing agreement," it said.

<https://tass.com/world/1594659>

### **EU threatens response if Belarus confirms deployment of Russian nuclear weapons**

*TASS, March 27, 2023*

The European Union will respond if Belarus confirms the deployment of tactical nuclear weapons by Russia on its territory, Peter Stano, lead spokesperson for the external affairs of the EU, said at a news conference in Brussels on Monday. "That would be further escalation and direct threat to the European security," Stano said. "We haven't seen any confirmation from the Belarusian side about this being on the agenda. But if it would happen, then of course there would be consequences," he assured.

<https://tass.com/defense/1594901>

### **NATO criticises Putin's 'dangerous and irresponsible' nuclear rhetoric**

*Reuters, March 27, 2023*

NATO on Sunday criticised Vladimir Putin for what it called his "dangerous and irresponsible" nuclear rhetoric, a day after the Russian president said he planned to station tactical nuclear weapons in Belarus.

<https://www.reuters.com/world/europe/ukraine-security-chief-says-basing-russian-nuclear-weapons-belarus-will-2023-03-26/>

### **Nuclear row threatens EU deal on renewable energy goals**

*Economic Times, March 28, 2023*

European Union countries are split over whether to allow nuclear energy to contribute to meeting their renewable energy targets, a dispute threatening to delay one of the EU's main climate policies. Negotiators from EU countries and the European Parliament hold their final scheduled round of negotiations on Wednesday, to set more ambitious EU goals to expand renewable energy this decade.

<https://energy.economictimes.indiatimes.com/news/renewable/nuclear-row-threatens-eu-deal-on-renewable-energy-goals/99052800>

### **Germany criticizes Russian role in French nuclear fuel plant**

*ABC News, March 30, 2023*

German officials have criticized plans by French firm Framatome to produce nuclear fuel in a joint venture with Russia's Rosatom at a facility in western Germany, and said Thursday that they will consider whether an application to do so can be rejected. Officials in the state of Lower Saxony have received a request for the Framatome-owned ANF facility in Lingen, near the German-Dutch border, to be allowed to produce hexagonal fuel rod arrangements used in Soviet-designed water-water energetic reactors. Such

reactors, known by the Russian acronym VVER, are common in Eastern Europe and the fuel production would take place under license from state-owned Rosatom.

<https://abcnews.go.com/International/wireStory/germany-criticizes-russian-role-french-nuclear-fuel-plant-98234310>

## EU agrees compromise on nuclear energy amid French pressure

*Financial Times, March 30, 2023*

The EU has reached a compromise on new targets for renewable energy after agreeing to make an exception for nuclear power in certain sectors amid pressure from France.

Negotiators from member states and the European parliament agreed to increase the overall binding target of renewable energy consumed in the EU to 42.5 per cent by 2030, up from 32 per cent, according to a statement. They also set an “indicative” target of reaching 45 per cent by the end of the decade.

<https://www.ft.com/content/02adde01-3b27-4743-8c17-2e39ab682660>

### E. Ukraine

## IAEA director general meets chief of Ukraine’s nuclear inspectorate

*TASS, March 21, 2023*

Director General of the International Atomic Energy Agency (IAEA) Rafael Grossi on Monday met with chief of Ukraine’s State Nuclear Regulatory Inspectorate Oleg Korikov. “A pleasure to meet again Oleg Korikov, Chair of the State Nuclear Regulatory Inspectorate of Ukraine. <...> The agency is providing indispensable support to Ukraine’s NPPs in nuclear safety and security and we will still strengthen this support,” he wrote on his Twitter account.

<https://tass.com/world/1591709>

## Update 151 – IAEA Director General Statement on Situation in Ukraine

*IAEA, March 22, 2023*

The last remaining back up 330 kilovolt (kV) power line at the Zaporizhzhya Nuclear

Power Plant (ZNPP), damaged since 1 March, remains disconnected and under repair, again highlighting the fragility of nuclear safety and security at Europe’s largest nuclear power plant (NPP), Director General Rafael Mariano Grossi of the International Atomic Energy Agency (IAEA) said. For three weeks, the ZNPP has received off-site electricity from only one remaining 750 kV main external power line. Though all six reactors at the ZNPP are in shutdown, with two in hot shutdown, the plant needs off-site power to perform essential nuclear safety and security functions. Without the back-up line, any damage to the 750 kV line will result in total loss of all off-site power to the plant.

<https://www.iaea.org/newscenter/pressreleases/update-151-iaea-director-general-statement-on-situation-in-ukraine>

## Depleted uranium plans for Kiev show West’s ambitions to destroy Ukraine – diplomat

*TASS, March 22, 2023*

British plans to supply depleted uranium shells to Kiev are a clear indication that the West is seeking to completely destroy Ukraine, Russian Foreign Ministry Spokeswoman Maria Zakharova told Sputnik radio on Wednesday. “The most important thing I’d like to say is today, there is no doubt that the collective West, led by the United States and Great Britain, is clearly seeking to destroy Ukraine once and for all,” she emphasized. Zakharova blasted London’s plans as a provocation with a view to “causing a new round of aggression, conflict and confrontation in the situation around Ukraine.”

<https://tass.com/politics/1592701>

## Talks for demilitarized zone around Zaporozhye nuclear plant have been halted – IAEA chief

*TASS, March 22, 2023*

Talks to establish a demilitarized zone around the Zaporozhye nuclear power plant have been halted and the IAEA is



instead pushing for other ways to safeguard the plant, IAEA Director General Rafael Grossi said on Wednesday. The chief of the International Atomic Energy Agency was asked at a workshop at the US Council on Foreign Relations if his idea to establish a demilitarized zone around the ZNPP gained sufficient international support.

<https://tass.com/world/1593203>

### **Effects of depleted uranium munitions in Ukraine cannot be controlled – Russian MFA**

*TASS, March 23, 2023*

Radiation effects of depleted uranium shells, should these be used on the territory of Ukraine, will be impossible to control, Russian Foreign Ministry spokeswoman Maria Zakharova told a news briefing on Thursday. “Now the impact of used weapons and shells will be impossible to control either for neighboring states or for the states of the region. This simply cannot be done,” she said, while commenting on London’s intention to provide shells with depleted uranium to Kiev.

<https://tass.com/politics/1593393>

### **Ukraine should weigh consequences of using depleted uranium rounds – Medvedev**

*TASS, March 24, 2023*

Russian Security Council Deputy Chairman Dmitry Medvedev called upon Ukrainians to ponder on whether they want to ‘open the Pandora box,’ by using depleted uranium rounds supplied by their Western allies. “I think that at the moment, the people who still remain in the state of Ukraine to ponder on the question of whether they want such weapons to be used. It is them who are opening the Pandora box. They are the ones doing it, not vice versa,” the official said in an interview to Russian media and VKontakte users, answering to a question from TASS.

<https://tass.com/politics/1593823>

### **IAEA Director General Grossi Travels to Zaporizhzhya Nuclear Power Plant Next Week**

*IAEA, March 25, 2023*

The Director General of the International Atomic Energy Agency (IAEA), Rafael Mariano Grossi, travels to Ukraine’s Zaporizhzhya Nuclear Power Plant (ZNPP) next week to assess first-hand the serious nuclear safety and security situation at the facility and underline the urgent need to protect it during the ongoing military conflict in the country. It will be the second time Director General Grossi crosses the frontline in order to reach Europe’s largest nuclear power plant and the first since he established a permanent presence of IAEA experts at the site in southern Ukraine on 1 September last year.

<https://www.iaea.org/newscenter/pressreleases/iaea-director-general-grossi-travels-to-zaporizhzhya-nuclear-power-plant-next-week>

### **Ukraine calls for UNSC emergency meeting over deployment of tactical nuke arms in Belarus**

*TASS, March 26, 2023*

Ukraine has urged for calling an extraordinary meeting of the United Nations Security Council over possible deployment of Russian tactical nuclear weapons in Belarus, the Ukrainian foreign ministry said on Sunday. “Ukraine expects the United Kingdom, China, the United States, and France to take effective actions to counter the nuclear threat from the Kremlin,” it said. “For these ends, we demand a UN Security Council call an extraordinary meeting.”

<https://tass.com/world/1594611>

### **Situation at Zaporozhye nuclear plant under firm control, says Russian envoy**

*TASS, March 27, 2023*

The Russian operator and the personnel of the Zaporozhye Nuclear Power Plant

(ZNPP) are in firm control of the situation at the facility, Russian Permanent Representative to International Organizations in Vienna Mikhail Ulyanov told TASS on Monday. "Of course, the situation at the plant is not entirely perfect but the Russian operator and the personnel are in firm control," he said. "If the [IAEA] director general sees it with his own eyes, future reports will hopefully be more objective," Ulyanov added.

<https://tass.com/politics/1595091>

### **Ukraine fears nuclear plant could face dangerous water cooling shortage**

*Reuters, March 27, 2023*

Ukraine fears its Zaporizhzhia nuclear power station could by late summer face a shortage of water to cool reactors because Russian forces have let water out of a reservoir that supplies the plant.

<https://www.reuters.com/world/europe/ukraine-fears-nuclear-plant-could-face-dangerous-water-cooling-shortage-2023-03-27/>

### **Update 152 - IAEA Director General Statement on Situation in Ukraine**

*TASS, March 30, 2023*

The Director General of the International Atomic Energy Agency (IAEA), Rafael Mariano Grossi, said his visit to Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) this week had confirmed his assessment of the seriousness of the nuclear safety and security situation at Europe's largest such facility at a time of increased military activity in the region.

In view of the persistent risks facing the ZNPP during the armed conflict in Ukraine, Director General Grossi said he remained determined to press ahead with his diplomatic efforts to protect the six-reactor plant and help prevent a nuclear accident that could have severe consequences on people and the environment in Ukraine and elsewhere.

<https://www.iaea.org/newscenter/pressreleases/>

*update-152-iaea-director-general-statement-on-situation-in-ukraine*

### **F. United States of America**

#### **Nuclear Plant Near Minneapolis Reports Leak of Tainted Water**

*Bloomberg, March 17, 2023*

Xcel Energy found and contained a leak of water laced with the radioactive isotope tritium at its Monticello Nuclear Generating Plant near Minneapolis, saying the November spill posed no threat to the environment. The leak was confirmed Nov. 22 and immediately reported to the Nuclear Regulatory Commission and state officials, according to a press release. The company and state officials did not make the incident public until Thursday.

<https://www.bloomberg.com/news/articles/2023-03-16/nuclear-plant-near-minneapolis-reports-leak-of-tainted-water#xj4y7vzkg>

#### **Government signs £2.9m Moon base nuclear power deal with Rolls-Royce**

*BBC, March 17, 2023*

Rolls-Royce scientists and engineers are to research how nuclear power could be used to support a future Moon base. The UK Space Agency has given the Derby-based firm £2.9m to look at ways of powering future lunar settlements. The company has been asked to demonstrate how nuclear micro-reactors could extend the duration of future missions to the Moon. The government said the deal would boost the UK's space industry and create skilled jobs. The UK Space Agency said it wanted to establish a new power source to support systems for communications, life-support and scientific experiments on the Moon.

<https://www.bbc.com/news/uk-england-derbyshire-64982477>

#### **New Mexico opts for veto power on spent nuclear fuel debate**

*AP News, March 18, 2023*

New Mexico's governor on Friday signed legislation aimed at keeping spent nuclear

fuel produced by commercial U.S. nuclear power plants from being shipped to the state, just hours after the measure cleared its final legislative hurdle. Democratic Gov. Michelle Lujan Grisham wasted no time adding her signature after the New Mexico House voted 35-28 in favor of the bill following a lengthy debate. Five Democrats joined Republicans in opposition, arguing that the measure would challenge longstanding federal authority over nuclear safety matters and lead to new court challenges.

<https://apnews.com/article/nuclear-fuel-waste-new-mexico-b49566ab7d4832e714698d92b005f9f5>

### **USA, Indonesia announce partnership on SMRs**

*World Nuclear News, March 20, 2023*

The USA and Indonesia have announced a strategic partnership to help Indonesia develop its nuclear energy programme, supporting Indonesia's interest in deploying small modular reactor (SMR) technology to meet its energy security and climate goals. A Memorandum of Agreement, as well as affiliated grants and contracts, was signed during the *Indo-Pacific Business Dialogue* in Bali, Indonesia. The agreement advances the goals of the Just Energy Transition Partnership (JETP) and will strengthen Indonesia's leadership in the ASEAN region on the deployment of advanced, safe and secure nuclear energy technologies, working toward the goal of net-zero emissions in Indonesia by 2060.

<https://www.world-nuclear-news.org/Articles/USA,-Indonesia-announce-partnership-on-SMRs>

### **US regulators delay decision on nuclear fuel storage license**

*AP News, March 22, 2023*

U.S. regulators say they need more time to wrap up a final safety report and make a decision on whether to license a multibillion-dollar complex meant to temporarily store tons of spent fuel from commercial nuclear power plants around the nation. The Nuclear Regulatory Commission issued a new schedule Monday, citing unforeseen

staffing constraints. The agency was initially expected to issue a decision by the end of March. It will now be the end of May.

<https://apnews.com/article/nuclear-fuel-storage-license-new-mexico-7c11d989aace79bd1075015f5d6a9176>

### **US Announces Charges for Attempts to Help Iranian Weapons Program**

*VOA News, March 22, 2023*

A U.S. federal court unsealed indictments Tuesday charging Iranian and Turkish defendants with conspiring to procure and export U.S. technology to support Iran's weapons programs. The U.S. Justice Department said that between 2012-2013 Amanallah Paidar, of Iran, and Murat Bükey, of Turkey, sent a device used to test fuel cells from the United States through Turkey, and tried to obtain a bio-detection system that can be used in the research and use of weapons of mass destruction. Bükey was sentenced Monday to 28 months in prison after being extradited from Spain to the United States in July 2022 and pleading guilty to conspiracy charges in December. Paidar is still at large, the Justice Department said.

<https://www.voanews.com/a/us-announces-charges-for-attempts-to-help-iranian-weapons-program/7015949.html>

### **Canadian, Polish, US companies in 'unprecedented' SMR collaboration**

*World Nuclear News, March 24, 2023*

GE Hitachi Nuclear Energy (GEH), Tennessee Valley Authority (TVA), Ontario Power Generation (OPG) and Synthos Green Energy (SGE) have agreed to work together to advance the global deployment of the GEH BWRX-300 small modular reactor (SMR) through collaboration on development of a standard design. The CEOs of the companies signed a technical collaboration agreement at an event in Washington DC, attended by representatives of the

governments of all three countries. TVA, OPG and SGE will invest in the development of the BWRX-300 standard design and detailed design for key components, including reactor pressure vessel and internals. Each contributor has agreed to fund a portion of the overall cost of development of a standard design, which GEH anticipates will require a total investment of around USD400 million.

<https://www.world-nuclear-news.org/Articles/Canadian,-Polish,-US-companies-in-unprecedented-SM>

### **US has no indications Russia is preparing to use a nuclear weapon – Pentagon**

*TASS, March 26, 2023*

The United States administration does not have any intelligence information that would indicate Russia's intention to use nuclear weapons, it sees no reason to adjust the deployment of its nuclear forces. The press service of the Pentagon released such a statement on Saturday commenting on Moscow's decision to deploy its tactical nuclear weapons in Belarus. at the request of Minsk. "We have seen reports of Russia's announcement and will continue to monitor this situation. We have not seen any reason to adjust our own strategic nuclear posture nor any indications Russia is preparing to use a nuclear weapon. We remain committed to the collective defense of the NATO alliance," the statement says. In turn, the White House issued a similar written statement.

<https://tass.com/world/1594489>

### **Ukraine war: US reacts cautiously as Russia agrees deal to move nuclear weapons to Belarus**

*Sky News, March 26, 2023*

The United States has reacted cautiously to Russia's decision to place nuclear weapons in Belarus. On Saturday it was reported by a Russian news agency that Vladimir Putin has signed a deal to station tactical nuclear weapons in Belarus. Ten aircraft capable of carrying the armaments - which are

designed for use on the battlefield, rather than to wipe out cities - have reportedly already been moved there. It is the first time since the mid-1990s that Russia has based such weaponry outside the country. But a senior US administration official told the Reuters news agency there are no signs Moscow plans to use the weapons.

<https://news.sky.com/story/ukraine-war-us-reacts-cautiously-as-russia-agrees-deal-to-move-nuclear-weapons-to-belarus-12842775>

### **U.S. renewable electricity surpassed coal in 2022**

*AP News, March 28, 2023*

Electricity generated from renewables surpassed coal in the United States for the first time in 2022, the U.S. Energy Information Administration announced Monday. Renewables also surpassed nuclear generation in 2022 after first doing so last year. Growth in wind and solar significantly drove the increase in renewable energy and contributed 14% of the electricity produced domestically in 2022. Hydropower contributed 6%, and biomass and geothermal sources generated less than 1%. "I'm happy to see we've crossed that threshold, but that is only a step in what has to be a very rapid and much cheaper journey," said Stephen Porder, a professor of ecology and assistant provost for sustainability at Brown University.

<https://apnews.com/article/renewable-energy-coal-nuclear-climate-change-dd4a0b168fe057f430e37398615155a0>

### **US, Russia stop sharing nuke data under faltering New START**

*AP News, March 29, 2023*

The United States and Russia have stopped sharing biannual nuclear weapons data under the faltering New START treaty, the last arms control pact between the two countries, U.S. officials said Tuesday. Officials at the White House, Pentagon and State Department said the U.S. had offered to continue providing this information to Russia even after President



Vladimir Putin suspended Russia's participation in the treaty last month, but Moscow informed Washington that it would not be sharing its own data.

<https://apnews.com/article/us-russia-new-start-nuclear-treaty-1e165bfac0cb3c3074de9ace11e38d87>

## US Westinghouse to supply fuel to both Czech nuclear plants

*AP News, March 29, 2023*

The Czech Republic's power company on Wednesday signed a deal with U.S. energy giant Westinghouse Electric Co. to supply nuclear fuel for the Dukovany nuclear plant, eliminating the country's dependence on Russia for such fuel. State-controlled power company CEZ said that Pennsylvania-based Westinghouse will start fuel deliveries to Dukovany next year.

Russia's TVEL, which is part of Russian energy giant Rosatom, was previously the sole supplier of fuel for the Soviet-era plant.

CEZ said Westinghouse expedited fuel development for Dokovany at the behest of the Czech government following Russia's invasion of Ukraine 13 months ago.

<https://apnews.com/article/czech-westinghouse-nuclear-fuel-cez-rosatom-42bd1f8b2be09fa9cb218157bfd122c3>

## West Asia

### G. Iran

## Iran, China, Russia successfully conduct night time shooting operations

*Tehran Times, March 17, 2023*

The participating troops from Iran, China, and Russia have successfully completed nighttime shooting operations against aerial targets, the exercise's spokesperson Rear Admiral Mostafa Tajeddini said on Friday. In the northern Indian Ocean, the Joint Maritime Security Belt Exercise 2023, which includes the participation of surface and aerial forces from the three nations, got underway on Thursday night. Based on the

remarks by Tajeddini, the drill was based on a common tactical language used by Iranian naval forces, including the Iranian Army and IRGC naval forces as well as Chinese and Russian ones. He emphasized the need for cooperation and specific directions during midnight firing operations against airborne targets.

<https://www.tehrantimes.com/news/483014/Iran-China-Russia-successfully-conduct-nighttime-shooting-operations>

## FM: Iran-IAEA Cooperation on Right Track

*Fars News Agency, March 17, 2023*

Iranian Foreign Minister Hossein Amir Abdollahian in a telephone conversation with EU Foreign Policy Chief Josep Borrell underlined that the cooperation between Tehran and the International Atomic Energy Agency (IAEA) is moving on the right track. During his Thursday night phone conversation with Borrell, Amir Abdollahian discussed the nuclear talks to remove sanctions, the Ukraine war, and the cooperation between the IAEA and Iran.

The top Iranian diplomat said that Iran has stressed its opposition to the ongoing war in Ukraine, and Tehran's readiness for contributing to any peace talk, which he said he will also pursue in his upcoming Moscow visit.

<https://www.farsnews.ir/en/news/14011226000129/FM-Iran-IAEA-Cperain-n-Righ-Track>

## Iran asks the West to press Ukraine to verify drone supply charges

*Tehran Times, March 17, 2023*

The Iranian foreign minister on Thursday asked the West to press Kiev to hold "formal dialogue" rather than continuing to level "unsubstantiated charges" that Tehran is providing drones to Russia in its war against Ukraine. "We have previously addressed the core cause of the present crisis in Ukraine as well as Iran's

opposition to war," Hossein Amir Abdollahian told Josep Borrell, the head of the EU foreign policy, over the phone. Iran has been charged with supplying Russia with military drones for use in the conflict with Ukraine by Western nations. The accusations have been unequivocally denied by Tehran.

<https://www.tehrantimes.com/news/483012/Iran-asks-the-West-to-press-Ukraine-to-verify-drone-supply-charges>

### **Iran's top security official to visit Iraq**

*Tehran Times, March 18, 2023*

Ali Shamkhani, the secretary of Iran's Supreme National Security Council, is set to travel to Iraq, after visiting China and the United Arab Emirates (UAE). Iraq is Iran's second trading partner. Iran's trade with Iraq stands at \$10 billion and maintaining this volume of trade requires addressing some "security challenges" imposed on the relations between the two countries, accelerating economic agreements, and facilitating banking cooperation, IRNA said. Earlier, Iranian Foreign Minister Hossein Amir Abdollahian had said that Shamkhani would pay a visit to Iraq. Amir Abdollahian implied that the visits by Shamkhani to the United Arab Emirates and Iraq were done in full coordination with the foreign ministry.

<https://www.tehrantimes.com/news/483060/Iran-s-top-security-official-to-visit-Iraq>

### **Iran, China, Russia conduct joint naval operations**

*Tehran Times, March 18, 2023*

During a coordinated naval war exercise in the northern Indian Ocean, the armed forces of Iran, China, and Russia have conducted a variety of tactics and operations, including rescuing hijacked vessels. On Friday, the Iranian, Chinese, and Russian navies participated in the major stage of the 2023 Maritime Security Belt naval drills in the northern Indian Ocean. Rear Admiral Mostafa Tajoddini, a spokesman for the exercises, said that the naval forces of the

three nations had trained under realistic circumstances in a coordinated effort to free two trade boats that had been seized in international seas by pirates. An Iranian Navy SH-3 helicopter was dispatched for reconnaissance and search after the two target liners sent mayday signals to the Maritime Rescue and Coordination Centre (MRCC) of Chabahar port in southeast Iran, he added.

<https://www.tehrantimes.com/news/483062/Iran-China-Russia-conduct-joint-naval-operations>

### **N. Chief: Iran Exporting Nuclear Medicine to 9 States**

*Fars News Agency, March 22, 2023*

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami lauded the country's astonishing achievements in nuclear medicine technologies, and said that nine states have purchased Tehran-made nuclear medicine products. Eslami made the remarks in an interview with the IRIB's Arabic service, Al-Alam. Referring to messages Iran has received from the Saudi side that shows Riyadh is pleased with the recent rapprochement with Tehran, the AEOI head said the country will definitely engage in nuclear cooperation with Saudi Arabia. He added in order to serve the people of Saudi Arabia, the two countries will work in the field of radio medicine.

<https://www.farsnews.ir/en/news/14020102000205/N-Chief-Iran-Exporting-Nuclear-Medicine-9-Saes>

### **SNSC Spokesman Denies US Claim about Iran's Involvement in Syria Attack**

*Fars News Agency, March 26, 2023*

Iran's Supreme National Security Council (SNSC) Spokesman Keyvan Khosravi rejected the US allegation about Tehran's involvement air raids on the US bases in Syria, and further warned of his country's prompt response to any attack by the US occupation forces on the bases that have been established at the Damascus

government's request for fighting terror groups. The SNSC spokesman issued the warning on Saturday after Washington claimed that Tehran has been involved in air raids on the US bases in Syria. In response, US Defense Secretary Lloyd Austin confirmed that, at President Joe Biden's direction, he had ordered the "precision airstrikes in Eastern Syria" against "facilities used by groups affiliated with Iran".

<https://www.farsnews.ir/en/news/14020106000072/SNSC-Spkesman-Denies-US-Claim-ab-Iran's-Involvement-in-Syria-Aack>

### **Tehran warns US of swift response to any attack on bases in Syria**

*Tehran Times, March 26, 2023*

Iran warned on Saturday that it will give a quick response to "any pretext" for an attack on its bases inside Syria established at the request of the Damascus government to fight terrorism. Keyvan Khosravi, spokesman for Iran's Supreme National Security Council (SNSC), made the warning after U.S. officials claimed that Iran has been involved in attacks on U.S. bases inside Syria. According to Iran's Arabic-language Al-Alam TV, more than 20 rockets were reportedly fired on Saturday against two illegal bases belonging to American occupation forces in eastern Syria. The television specified the targets as American outposts based near the al-Omar oilfield and the Koniko gas field in Syria's Dayr al-Zawr Province.

<https://www.tehrantimes.com/news/483152/Tehran-warns-US-of-swift-response-to-any-attack-on-bases-in-Syria>

### **Iran to invite Saudi king to Tehran as Raisi invited to Riyadh**

*Tehran Times, March 28, 2023*

Iranian Foreign Minister Hossein Amir Abdollahian has said like Saudi Arabia his country also intends to invite the Saudi king to visit Iran. Saudi King Salman bin Abdulaziz has sent an invitation letter to Iranian President Ebrahim Raisi asking him to pay a visit to Riyadh. "We will also send

a similar invitation to the King of Saudi Arabia," Amir Abdollahian told Al Jazeera on Monday. Tehran and Riyadh reached an agreement in early March to resume diplomatic relations after years of hostility. The talks were brokered by China. According to the National, Chinese President Xi Jinping said on Tuesday that his country is ready to support a follow-up process between Saudi Arabia and Iran to restore diplomatic relations.

<https://www.tehrantimes.com/news/483198/Iran-to-invite-Saudi-king-to-Tehran-as-Raisi-invited-to-Riyadh>

### **Iran hopes strategic pact with Russia finalized 'in a month'**

*Tehran Times, March 30, 2023*

Iranian Foreign Minister Hossein Amir Abdollahian on Wednesday expressed hope that the long-term strategic cooperation agreement between Tehran and Moscow will be finalized in "less than a month." "Reviews on the long-term strategic cooperation agreement between the two countries have been finalized in Russia. Iran has also examined it. I hope that in less than a month, the final revision of the agreement will be carried out by Iran's Foreign Ministry," Amir Abdollahian said in a joint press conference in Moscow with his Russian counterpart Sergei Lavrov, Press TV reported. In his visit to Moscow which began on Tuesday night, Amir Abdollahian was accompanied by a high-level economic and political team. Tehran and Moscow signed a 10-year cooperation deal in 2001 that was lengthened to 20 years through two five-year extensions.

<https://www.tehrantimes.com/news/483220/Iran-hopes-strategic-pact-with-Russia-finalized-in-a-month>

### **China hails joint military exercises with Iran and Russia**

*Tehran Times, March 30, 2023*

China on Thursday hailed the recent joint naval exercises with Russia and Iran in the Sea of Oman, saying the drills boosted the

ability of their navies to conduct diversified maritime missions. The military drills further deepened friendship and practical cooperation among the three countries, Chinese defense ministry spokesman Tan Kefei told a news briefing. Senior Colonel Tan said the three nations sent forces including 12 ships, special operations and diving units to participate in the drills. China, Iran and Russia conducted joint naval exercises in the Sea of Oman from March 15-19. The military maneuver, dubbed the Marine Security Belt 2023, aimed to strengthen regional security. Observers from Pakistan and Kazakhstan also participated in the drills.

<https://www.tehrantimes.com/news/483222/China-hails-joint-military-exercises-with-Iran-and-Russia>

## H. Israel

### **ULTRASAT program: Israel Aerospace Industries to develop, build country's first astronomical observation satellite**

*Israel Defense, March 19, 2023*

Israel Aerospace Industries (IAI) has signed an agreement with the Weizmann Institute of Science and Israel's Ministry of Science, under which it will design, develop, and build the ULTRASAT (Ultraviolet Transient Astronomy Satellite), Israel's first astronomical observation satellite. The satellite, which incorporates ground-breaking and unique technological capabilities, will be developed by IAI, which has extensive experience in observation missions from space, both for military and civilian applications. Together with partners in Israel and elsewhere, such as Elop, DESY (the German Electron Synchrotron), and NASA, which will launch the satellite into space. DESY and NASA are also participating in the scientific research program.

<https://www.israeldefense.co.il/en/node/57615>

### **Dubai Police to purchase Airobotics's Iron-Drone systems**

*Israel Defense, March 21, 2023*

Israeli company Airobotics, a developer and provider of autonomous drone infrastructures for smart cities, announced that it signed a Memorandum of Understanding (MOU) with the Dubai Police in early March, as part of which the police will acquire Iron-Drone systems, an autonomous counter drone system developed by Airobotics that was launched earlier this month, designed to neutralize suspicious drones that cannot be neutralized by electronic jamming. In addition, as part of the collaboration with the Dubai Police, the company will operate to upgrade the systems and adapt them to the operational needs of the Dubai Police and integrate them into the Dubai airspace. According to the company, the agreement signed with the Dubai police also includes adapting the company's system to the needs of the police specifically and its integration into the airspace, for the first time in Dubai in particular and in the world in general.

<https://www.israeldefense.co.il/en/node/57639>

### **New discoveries and advances ranging from the BRICS countries to Israel, Japan and South Korea**

*Israel Defense, March 26, 2023*

In the previous article we discussed new discoveries and scientific advances ranging from the United States of America to Russia, Great Britain, Germany and Finland. In this article we will look at breakthroughs in further countries. For the first time the Hayabusa 2 probe of the Japan Aerospace Exploration Agency's (JAXA) has brought back gas from asteroid 162173 Ryugu (the orbit of which is close to that of the Earth) discovered in 1999. The mission was launched on 3 December. On 27 June 2018, the probe reached the asteroid orbiting it at a distance of about 20 kilometres. After about one year and a



half of measurements and surveys, the probe began its manoeuvres to approach the Earth on 13 November 2019, carrying the samples collected on Ryugu's surface in a capsule.

<https://www.israeldefense.co.il/en/node/57682>

### **BIRD Aerosystems delivers Falcon 7X with AMPS, AeroShield-M POD to undisclosed customer**

*Israel Defense, March 27, 2023*

BIRD Aerosystems, an Israeli company which provides global innovative defense technology and solutions that protect fleets, armored vehicles, and ground assets of governments and related agencies, announced last week that it has delivered a Falcon 7X aircraft installed with its AMPS Airborne Missile Protection System and AeroShield-M (Mini) POD to an undisclosed customer. The aircraft has completed a series of flight tests and certifications and will enter operational use by the customer. The installation of the AMPS system was conducted by the OEM at the Dassault Aviation factory in France, with the support of BIRD which was responsible for the installation, upervision, integration, and testing of the system.

<https://www.israeldefense.co.il/en/node/57697>

### **Controp to start local manufacturing of its products in India**

*Israel Defense, March 27, 2023*

Controp Precision Technologies, an Israeli company specializing in the field of electro-optics IR defense and homeland security solutions, announced today (Sunday) that it signed a memorandum of understanding (MoU) with Indian-based Paras Defense and Space Technologies and as part of the MoU, the companies will be setting up a joint venture (JV) in India for manufacturing electro-optic systems for various applications. Hagai Azani, Controp's CEO, said that the MoU is a first step aiming to expand both companies' presence in the defense sector in India.

<https://www.israeldefense.co.il/en/node/57699>

### **Israel successfully launches "Ofek 13" satellite**

*Israel Defense, March 29, 2023*

The Israeli Ministry of Defense's Satellite Administration in the Directorate of Defense Research & Development, the Israel Defense Forces (IDF), and Israel Aerospace Industries (IAI) successfully launched the "Ofek 13" satellite into space in the early hours of the morning (Wednesday). The launch took place at a test site in central Israel using a "Shavit" launcher. The satellite successfully entered orbit, has begun transmitting data, and completed an initial series of inspections in accordance with original launch plans. IMoD and IAI engineers will continue pre-planned inspections before it begins full operational activity in the near future.

<https://www.israeldefense.co.il/en/node/57722>

#### **I. Saudi Arabia**

### **Saudi Arabia Aiming for Complete Nuclear Fuel Cycle**

*Arms Control Association, March 2023*

Saudi Arabia plans to enrich its domestic uranium stocks to ensure its ability to complete "the entire nuclear fuel cycle," the kingdom's energy minister, Prince Abdulaziz bin Salman, told a mining and industry conference in Riyadh on Jan. 11. He said the process would include "the production of yellowcake, low enriched uranium and the manufacturing of nuclear fuel both for our national use and of course, for export," Reuters reported. The minister's comments expanded on his 2019 commitment to enrich domestic uranium to fuel the country's planned nuclear power program, which is expected to include building 16 nuclear reactors over the next 20 to 25 years at a cost of more than \$80 billion.

<https://www.armscontrol.org/act/2023-03/news/saudi-arabia-aiming-complete-nuclear-fuel-cycle>

## India, Saudi Arabia to explore new cooperation in space

*Arab News, March 17, 2023*

India is working on new space collaborations with Saudi Arabia, focusing on downstream applications and satellite manufacturing, the Indian Space Research Organization said on Friday. ISRO, India's national space agency, has been cooperating with the Kingdom under a 2010 agreement with King Abdulaziz City for Science and Technology. There has been growing interest in expanding the collaboration since 2018, following the formation of the Saudi Space Commission, whose CEO, Dr. Mohammed Al-Tamimi, visited India last week. The trip aimed at enhancing "joint cooperation between the two countries in the future of the space sector," Al-Tamimi said on Twitter after meeting with ISRO officials and representatives of the industry, as well as visiting research centers.

<https://www.arabnews.com/node/2270621/world>

## J. United Arab Emirates

### Nuclearelectrica and ENEC sign MoU on cooperation

*World Nuclear News, March 22, 2023*

Romania's Nuclearelectrica and Emirates Nuclear Energy Corporation (ENEC) have signed a memorandum of understanding (MoU) to cooperate on the "potential development and expansion of nuclear energy programmes in the United Arab Emirates and Romania as well as within central and eastern Europe". The two companies said the MoU would see them "work together to assess potential partnerships in operations and maintenance support of nuclear energy plants, capacity building and human capital development, as well as synergies in research and development. The two parties will share experience in developing financing and commercial frameworks of nuclear programmes, as well as exchanging knowledge on project management capabilities".

<https://www.world-nuclear-news.org/Articles/Nuclearelectrica-and-ENEC-sign-MoU-on-cooperation>

## K. Türkiye

### Historic: Türkiye-made 5th gen fighter jet leaves hangar

*Daily Sabah, March 17, 2023*

In what is a historic day for Türkiye and possibly for global fighter jet history, the Turkish developed and made TF-X National Combat Aircraft (MMU) fifth generation stealth fighter jet left its hangar late Friday, according to an announcement made by the Presidency of Defense Industries (SSB) Chairperson Ismail Demir. Ambitious goals seen as dreams are being realized one by one, as Türkiye's fifth generation stealth fighter awoke Friday coming out of its hangar for the first time, and no doubt will soon start to flex its muscles. "In memory of our martyrs! We said that we will take our National Combat Aircraft out of the hangar on March 18.

<https://www.dailysabah.com/business/defense/historic-turkiye-made-5th-gen-fighter-jet-leaves-hangar>

### Embargos fuel rapid Turkish defense industry localization

*Daily Sabah, March 21, 2023*

"What does not kill you makes you stronger" is a saying that represents a summary of the breakthrough Türkiye has achieved in the defense sector despite a score of Western embargoes, which industry officials say only helped fuel the country's rapid localization drive. The last two decades have seen Türkiye's defense industry go through a profound transformation to eventually domestically manufacture a series of air, land and sea platforms. The country's external dependence in the sector dropped to 20%, from 80% in the early 2000s. President Recep Tayyip Erdoğan has hailed the success as a "revolution" and dubbed it Türkiye's unprecedented march toward full independence in the critical industry.

<https://www.dailysabah.com/business/defense/embargos-fuel-rapid-turkish-defense-industry-localization>

## Türkiye develops new 'Azab' kamikaze drone

*Daily Sabah, March 21, 2023*

Turkish tech firm Robit Technology has developed a new multipurpose kamikaze drone called "Azab" with a long-range flight distance. The delta-winged platform, which has a high payload capacity, passed all flight tests successfully. Firing tests of the unmanned aerial vehicle (UAV) are planned to be carried out in the near future. "We have done all the flight tests. We move on to ammunition tests. We will carry out ammunition tests in the coming months," Selçuk Fýrat, product director at Robit Technology, told Anadolu Anadolu Agency (AA). The ammunition tests are expected to be completed by the end of the third quarter of this year, Fýrat said.

<https://www.dailysabah.com/business/defense/turkiye-develops-new-azab-kamikaze-drone>

## Hold the line: Türkiye touts new defense tech to build up border security

*Daily Sabah, March 22, 2023*

The first product of the Turkish defense industry's Low Altitude Radar System Project - which is to strengthen border security - would soon be added to the inventory, the head of the Presidency of Defense Industries (SSB), Ismail Demir said Tuesday. Demir's statements came as part of the 4th International Military Radar and Border Security Summit (MRBS), which has opened its doors to sector stakeholders and enthusiasts in the capital Ankara.

<https://www.dailysabah.com/business/defense/hold-the-line-turkiye-touts-new-defense-tech-to-build-up-border-security>

## Türkiye reveals its 1st flying-wing unmanned fighter Anka-3

*Daily Sabah, March 22, 2023*

For the first time, Turkish Aerospace Industries (TAI) has revealed the technical futures of Türkiye's first flying-wing, deep-strike stealth unmanned fighter jet, Anka-3. The state-of-the-art platform is expected

to make its maiden flight this year. The features of the unmanned fighter jet and a photo of the aircraft were revealed as part of the two-day Military Radar and Border Security (MRBS) Summit held in Ankara.

At the event, TAI General Manager Temel Kotil stated that the Anka-3 Unmanned Combat Aircraft System is now preparing for its maiden flight. "We are counting the days to the flight of Anka 3," he said.

<https://www.dailysabah.com/business/defense/turkiye-reveals-its-1st-flying-wing-unmanned-fighter-anka-3>

## Türkiye's renewed main battle tank Altay ready for army tests

*Daily Sabah, March 23, 2023*

BMC Defense, responsible for developing Türkiye's long-awaited main battle tank (MBT) Altay, is preparing to deliver the revamped tank, which has reached the mass production stage, to the Turkish Armed Forces (TSK) for tests on April 23. The tests of the Altay tank by the TSK are expected to be completed in 2024. In 2025, mass production of the tank will begin with the Korean power group, and it is planned to continue mass production of the Altay tank with a domestic engine in the second half of 2026. BMC Executive Board Member and Manager Murat Yalçýntaþ, BMC Defense General Manager Mehmet Karaaslan and BMC Power General Manager Mustafa Kaval recently commented on the company's projects, including the Altay tank.

<https://www.dailysabah.com/business/defense/turkiyes-renewed-main-battle-tank-altay-ready-for-army-tests>

## US believes Türkiye should get F-16 jets: Blinken

*Daily Sabah, March 24, 2023*

Türkiye "should get" the upgraded F-16 fighter jets and modernization kits, said top United States diplomat on Thursday, in a move he said was important for NATO. U.S. Secretary of State Antony Blinken's remarks came as he testified



before the House Foreign Affairs Committee. Blinken was asked about the sale of F-16 jets to Türkiye and the steps the Joe Biden administration is taking to “ensure that American weapons are not used to threaten allies and partners.” “We believe that Türkiye should get the upgraded F-16 and the modernization package for the existing F-16,” he responded. “We think it’s important for NATO, important for the alliance.”

<https://www.dailysabah.com/business/defense/us-believes-turkiye-should-get-f-16-jets-blinken>

### **Turkish drone magnate to unveil sea-based aircraft before test flight**

*Daily Sabah, March 27, 2023*

The Turkish defense company behind the pioneering unmanned aircraft that earned fame for its critical role in several conflicts is preparing to show off its latest platform that promises to extend the country’s drone capabilities from land-based to naval operations. Deployment of Bayraktar TB2 unmanned combat aerial vehicles (UCAVs) has been credited with helping tip the balance of conflicts in Libya, Syria, Karabakh and lastly, Ukraine. This pushed the aircraft’s developer Baykar into the global spotlight and transformed it into a major manufacturer and exporter.

<https://www.dailysabah.com/business/defense/turkish-drone-magnate-to-unveil-sea-based-aircraft-before-test-flight>

### **Turkish unmanned vessel test-fires with guided cruise missile**

*Daily Sabah, March 28, 2023*

Turkish armed unmanned surface vessel (AUSV) named Marlin successfully fired a guided missile for the first time, using a solid-propellant cruise missile with guided ammunition. The missile was launched from the AUSV, demonstrating new capabilities in unmanned naval vehicles.

Presidency of Defense Industries (SSB) head Ismail Demir announced the achievement on social media, stating that the country is committed to advancing its capabilities in

this field. “We are determined to reach new heights in unmanned naval technology,” Demir said.

<https://www.dailysabah.com/business/defense/turkish-unmanned-vessel-test-fires-with-guided-cruise-missile>

### **Turkish defense firm Havelsan counts days for ‘digital troops’**

*Daily Sabah, March 30, 2023*

The “digital troops” concept, which will serve with unmanned aerial, land, and sea vehicles developed within the Turkish defense industry, will take to the field this year, according to the developer company.

Unmanned aerial, land, and underwater swarms, new-generation wearable military technologies combined with command-and-control centers make up the digital troops. Havelsan, which has been working on the “herd operation capability” that enables unmanned vehicles to work together, aims to cross a critical threshold with this development.

<https://www.dailysabah.com/business/defense/turkish-defense-firm-havelsan-counts-days-for-digital-troops>

### **Türkiye’s unmanned fighter jet Kızılelma completes another test**

*Daily Sabah, March 31, 2023*

Türkiye’s unmanned fighter jet, Bayraktar Kızılelma, completed its third test, the medium altitude system identification test, a high-ranking official from the developing company said Thursday. Selçuk Bayraktar, chief technology officer (CTO) at the Turkish drone magnate Baykar, shared the update on his Twitter account with video footage. “Bayraktar #KIZILELMA has successfully completed the medium altitude system identification test,” his statement read. The indigenous aircraft reached an altitude of 20,000 feet during the trial, Bayraktar said in the video.

<https://www.dailysabah.com/business/defense/turkiyes-unmanned-fighter-jet-kizilelma-completes-another-test>



## L. East Asia

### U.S., South Korea conduct military exercises as North Korea ramps up missile testing

*PBS, March 21, 2023*

Tensions on the Korean Peninsula are running high. This month, the U.S. and South Korea launched their largest military exercises in nearly six years. In response, North Korea tested five missiles, part of a record number of tests over the last 15 months. Nick Schiffrin looks at the debate over U.S. policy in the region as the exercises and tests continue.

<https://www.pbs.org/newshour/show/u-s-south-korea-conduct-military-exercises-as-north-korea-ramps-up-missile-testing>

### Philippines: The 70s nuclear relic that may open at last

*BBC, March 29, 2023*

A cool breeze blows off the West Manila Bay into a grove of mango trees some 100km west of the Philippine capital. In the sky above, a family of Pacific swallows are busy doing acrobatics. Sitting rather incongruously in this bucolic scene is the vast concrete hulk of the Bataan nuclear power plant. This is South East Asia's first nuclear power plant, which was completed in 1986. Except it has never produced a kilowatt of electricity. It was never even put into operation. Now, more than three decades after it was finished, there is growing support for opening it.

<https://www.bbc.com/news/world-asia-64634816>

### IAEA Mission Says Viet Nam is Committed to Nuclear Security, Encourages Further Strengthening of the National Nuclear Security Regime

*March 31, 2023*

An International Atomic Energy Agency (IAEA) team concluded an International Security Advisory Mission (INSServ) to Viet Nam today. The team said the country has made progress towards establishing an

effective national nuclear security regime for nuclear or other radioactive material out of regulatory control. It encouraged Vietnamese authorities to further integrate existing systems and measures into a national nuclear security policy. The mission – the first of this kind to Viet Nam – was conducted at the request of the Government and hosted by the Viet Nam Agency for Radiation and Nuclear Safety (VARANS) from 19 to 31 March.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-says-viet-nam-is-committed-to-nuclear-security-encourages-further-strengthening-of-the-national-nuclear-security-regime>

## M. Japan

### AUKUS sub deal is one pillar of regional security

*The Japan Times, March 17, 2023*

The outlines of the Australia-U.K.-U.S. security partnership became clearer this week as the three countries unveiled plans to develop a new fleet of nuclear-powered attack submarines. The ambitious project is designed to help check China's growing power in the Indo-Pacific and has, as a result, triggered Beijing's fury. The submarines are only part of a more wide-ranging security partnership, however, the other elements of which are potentially even more significant. AUKUS was announced in 2021 as an "enhanced trilateral security partnership." Its birth was controversial, starting with the renunciation of a deal with France to provide the next generation of Australian submarines.

<https://www.japantimes.co.jp/opinion/2023/03/17/editorials/aucus-summit/>

### Nuclear power plant leaks 400,000 gallons of radioactive water

*NBC News, March 17, 2023*

Minnesota regulators said Thursday they're monitoring the cleanup of a leak of 400,000 gallons of radioactive water from Xcel Energy's Monticello nuclear power plant, and the company said there's no danger to the public. "Xcel Energy took

swift action to contain the leak to the plant site, which poses no health and safety risk to the local community or the environment," the Minneapolis-based utility said in a statement. While Xcel reported the leak of water containing tritium to state and federal authorities in late November, the spill had not been made public before Thursday. State officials said they waited to get more information before going public with it. "We knew there was a presence of tritium in one monitoring well, however Xcel had not yet identified the source of the leak and its location," Minnesota Pollution Control Agency spokesman Michael Rafferty said.

<https://www.nbcnews.com/news/us-news/nuclear-power-plant-leaks-400000-gallons-radioactive-water-rcna75406>

### Japan begins preparation works for nuclear-contaminated wastewater dump with 'greater price to pay'

*Global Times, March 18, 2023*

Japan's crippled Fukushima Daiichi nuclear power plant commenced the operation of equipment needed for its nuclear-contaminated wastewater dumping plan for the first time on Friday as a prelude to the wastewater's final release into the open ocean. Experts warned that despite growing criticism from home and abroad, Japan will likely stick to its dumping plan either judging from its political considerations or from weighing the domestic technological and capital costs.

<https://www.globaltimes.cn/page/202303/1287514.shtml>

### Japan Prime Minister Fumio Kishida announces new Indo-Pacific plan during India visit

*CNBC, March 20, 2023*

Japan's Prime Minister Fumio Kishida on Monday invited his Indian counterpart Narendra Modi for the Group of Seven summit in May and announced action plans for a new Indo-Pacific initiative aimed at countering China's influence in the region.

Kishida, who is on a two-day trip to India, said he hopes to promote a vision of free and

open Indo-Pacific, a Tokyo-led initiative for greater security and economic cooperation that is geared toward curbing Beijing's growing assertiveness. It includes Japan's assistance to emerging economies, support for maritime security, a provision of coast guard patrol boats and equipment and other infrastructure cooperation.

<https://www.cnn.com/2023/03/21/japan-pm-kishida-announces-new-indo-pacific-plan-during-india-visit.html>

### North Korea's Kim oversees missile drill with mock nuclear warhead

*The Japan Times, March 20, 2023*

North Korean leader Kim Jong Un oversaw a nuclear counterstrike drill involving a missile with a mock atomic warhead capable of reaching Japan's west coast, its official media said. Kim brought his daughter to exercises over the weekend, where he issued a threat to the U.S. over joint military drills it's conducting with South Korea, saying his country is preparing to make "an immediate and overwhelming nuclear counterattack anytime," the Korean Central News Agency reported Monday. "The missile was tipped with a test warhead simulating a nuclear warhead," KCNA said. The missile, fitted with detonators and devices to simulate a nuclear attack, exploded at a height of about 800 meters (875 yards) above its target, it said.

<https://www.japantimes.co.jp/news/2023/03/20/asia-pacific/kim-calls-for-nuclear-attack-readiness/>

### Russia Flies Nuclear-Capable Bombers over Sea of Japan

*The Japan News, March 22, 2023*

Russia's Defense Ministry has said two Tu-95 nuclear-capable bombers of the country's air force flew over the high seas in the Sea of Japan, according to the Tass news agency. During the flights, which lasted over seven hours, the bombers were escorted by Su-30 and Su-35 fighter jets, the ministry said Tuesday, adding that

none of the aircraft intruded into the airspace of any other country. Russia strictly observed international law in conducting the flights, the ministry said.

<https://japannews.yomiuri.co.jp/politics/defense-security/20230322-98859/>

### **UK-Japanese partnership to develop fusion materials**

*World Nuclear News, March 23, 2023*

A collaboration agreement has been signed between Japan's Kyoto Fusioning (KF) and the UK Atomic Energy Authority (UKAEA) to develop fusion related technologies. The first project under the collaboration will be the development of a 'fusion-grade' silicon carbide composite system. "The collaboration reaffirms the strategic partnership between the United Kingdom and Japan and is based on a mutual commitment to deliver sustainable, commercial fusion energy for generations to come," the partners said. KF and UKAEA said that as a first step they will develop a silicon carbide composite system (SiC/SiC) suitable for use as a structural material inside a fusion machine and to understand its stability under simulated fusion conditions.

<https://www.world-nuclear-news.org/Articles/UK-Japanese-partnership-to-develop-fusion-material>

#### ***N. North Korea***

### **North Korea launches missile into sea amid US-SKorea drills**

*AP News, March 20, 2023*

North Korea launched a short-range ballistic missile toward the sea on Sunday, its neighbors said, ramping up testing activities in response to ongoing U.S.-South Korean military drills that it views as an invasion rehearsal. The North's continuing missile tests showed its determination not to back down despite the U.S.-South Korea exercises, the biggest of their kind in years. But many experts say the missile tests are also part of North Korea's bigger objective to expand its weapons arsenal, win global

recognition as a nuclear state and get international sanctions lifted.

<https://apnews.com/article/north-korea-missile-us-military-drills-9693a6124abe62de64229b101cd312f1>

### **North Korea simulates nuclear counterattack against US and South Korea**

*Sky News, March 20, 2023*

North Korea says it has simulated a nuclear counterattack against the US and South Korea as it fired another ballistic missile over the weekend - its fifth this month. Kim Jong Un instructed his military to hold more drills to sharpen the war readiness of his nuclear forces in the face of "aggression" by his enemies, state media reported. He said the exercises improved his military's war capability and urged the military to stand ready for any "immediate and overwhelming nuclear counterattack anytime".

<https://news.sky.com/story/north-korea-simulates-nuclear-counterattack-against-us-and-south-korea-12838763>

### **North Korea tested robotic sub capable of causing 'radioactive tsunami' – state radio**

*TASS, March 24, 2023*

North Korea tested a nuclear-capable robotic sub, which can cause a 'super-powerful radioactive tsunami' when exploding, North Korea's state-run Voice of Korea radio said on Friday. "This secret weapon is a nuclear-capable unmanned underwater assault craft. Its mission is to travel under water in secret and to perform an underwater explosion, creating a super-powerful radioactive tsunami and destroying the adversary's ships and ports," the radio reported.

<https://tass.com/situation-on-the-korean/1593777>

## North Korea asserts first evidence of tactical nuclear weapons

*BBC, March 28, 2023*

North Korea has revealed small nuclear warheads, which it says can be fitted on to short-range missiles. The North has long claimed it has tactical nuclear weapons, capable of hitting targets in South Korea. But the photos published in its state newspaper on Tuesday are the first time it has provided evidence. However, it is impossible to verify whether they are the real deal. Until North Korea tests one of these devices, we are left guessing. Pyongyang has spent the past fortnight firing a barrage of what it says are nuclear-capable weapons, while simulating nuclear attacks on Seoul.

<https://www.bbc.com/news/world-asia-65085542>

## North Korea Reveals And Tests Nuclear Capable UUV 'Haeil-1'

*Naval News, March 28, 2023*

'Haeil-1' is a possible derivative of the Haeil UUV that was revealed less than a week ago. Additionally, the state media also released photos of 'Hwasan-31' (meaning Volcano in English) tactical nuclear warhead, citing that those can be loaded on the "suicide drones". According to KCNA, North Korea's Academy of National Defense Science conducted a drill to test the new 'Haeil-1' between March 25<sup>th</sup> through 27<sup>th</sup>. The state media released in a statement that: "our newest and most advanced unmanned underwater nuclear vehicle Haeil-1 was launched from a bay near Wonsan on the afternoon of March 25<sup>th</sup>." It also added that "Haeil-1 successfully cruised in oval-shaped and other geometrically set courses for 41 hours and 27 minutes before reaching the target set near Hwadae-gun, North Hamgyeong Province on the morning of March 27<sup>th</sup>, where its test nuclear warhead detonated just as planned."

<https://www.navalnews.com/naval-news/2023/03/north-korea-reveals-and-tests-nuclear-capable-uuv-haeil-1/>

## As missile tests escalate, North Korea plays cyberespionage long game

*The Japan Times, March 29, 2023*

Masquerading as media, elite universities and diplomatic and defense figures, North Korean actors have targeted governments, think tanks and businesses in the U.S., Japan, South Korea and Europe as part of an evolving, long-term cyberespionage strategy. While missiles are fired off from the peninsula with increasing regularity, a raft of digital weapons ultimately aimed at supporting Pyongyang's nuclear ambitions are being waged by APT43, the Google-owned threat intelligence firm Mandiant said in a report released Tuesday. APT43 is an umbrella term for activities sometimes attributed to groups "Kimsuky" or "Thallium." The report provides a window into Pyongyang's tactical shifts and evolving strategy since 2018, detailing a focus prior to October 2020 on South Korean and U.S. government offices, diplomatic organizations and think tanks with the aim of gathering information on foreign policy and security issues affecting the Korean Peninsula.

<https://www.japantimes.co.jp/news/2023/03/29/asia-pacific/north-korea-cyberespionage-report/>

### O. South Korea

## South Korea says North Korea test-fired multiple cruise missiles days after North conducted what it called simulated nuclear strike on South

*CBS News, March 22, 2023*

North Korea launched multiple cruise missiles toward the sea on Wednesday, South Korea's military said, three days after the North carried out what it called a simulated nuclear attack on South Korea. The launches are the North's fourth round of weapons tests since the U.S. and South Korean militaries last week began large-scale military drills that



the North views as an invasion rehearsal. The 11-day U.S.-South Korean military drills are to end on Thursday. But North Korea is expected to continue its testing activities as the United States reportedly plans to send an aircraft carrier in coming days for another round of joint drills with South Korea.

<https://www.cbsnews.com/news/north-korea-cruise-missiles-test/>

### **South Korea, US To Hold Largest-Ever Military Drills Amid N Korea Tension**

*NDTV, March 22, 2023*

South Korean and US forces will hold their largest-ever live-fire exercises in June in a show of force to North Korea, which has ratcheted up tension with numerous missile launches, South Korea's defence ministry said on Wednesday. The exercises are part of a series of events marking the 70th anniversary of the alliance between the two countries this year. "We've planned various anniversary programmes focusing on realising 'peace through strength' through action based on our strategic deterrence capabilities and the solid combined defence posture amid North Korea's evolving nuclear and missile threats," the ministry said in a statement.

<https://www.ndtv.com/world-news/south-korea-us-to-hold-largest-ever-military-drills-amid-n-korea-tensions-3883293>

### ***P. Australia***

### **Australia to buy up to 220 Tomahawk missiles from the US**

*ABC News, March 17, 2023*

Australia said it's planning to buy up to 220 Tomahawk cruise missiles from the United States after the U.S. State Department approved the sale Friday. The deal comes days after Australia announced it would buy nuclear-powered attack submarines from the U.S. to modernize its fleet amid growing concern about China's influence in the Indo-Pacific. Australian officials said the

new nuclear-powered submarines would be able to fire the Tomahawk missiles. Japan last month also announced plans to upgrade its military in an effort to deter China, including buying 400 Tomahawk cruise missiles for deployment as soon as 2026.

<https://abcnews.go.com/Business/wireStory/australia-buy-220-tomahawk-missiles-us-97929645>

### **China says Australia-Britain-US nuclear submarine cooperation may spark arms race**

*Reuters, March 30, 2023*

Nuclear submarine cooperation between Australia, the United States and Britain may spark an arms race, the Chinese foreign ministry said on Thursday.

<https://www.reuters.com/world/china-says-australia-britain-us-nuclear-submarine-cooperation-may-spark-arms-2023-03-30/>

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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

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