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A Fortnightly Newsletter from the Indian Pugwash Society

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A. India

- Union Cabinet approves procurement of 70 HTT-40 Basic Trainer Aircraft from HAL for Indian Air Force at a cost of over Rs 6,800 crore
- Antony Blinken and Sergei Lavrov meet for first time since Ukraine war
- Quad Foreign Ministers meet: Quad foreign ministers denounce Russian threats of nuclear war
- First Ever Privately Manufactured Indigenised Fuze of ASW Rocket Handed Over To Indian Navy
- We Hope To Work Closely With India To End Russian Aggression: US
- Another India-Pakistan war? High possibility of military retaliation in Kashmir under Modi's leadership, says US intel
- MoD signs Rs 667 crore contract for six Dornier-228 aircraft from HAL to further bolster operational capability of Indian Air Force
- US reaffirms India as global strategic partner; supports constructive talks between Indo-Pak. Details
- Aatmanirbhar Bharat: MoD inks over Rs 900 crore contract for Normal Refit of Sindhukirti Submarine at Hindustan Shipyard Limited, Visakhapatnam
- Maiden successful flight-test of DRDO's indigenous Power Take off Shaft conducted on LCA Tejas in Bengaluru
- Navy to approach govt for three AIP-equipped attack submarines
- DRDO conducts two consecutive successful flight tests of Very Short Range Air Defence System missile off Odisha coast
- Union Minister Dr Jitendra Singh informs that the budget of Rs. 9,023 Crore is allocated towards achieving the objectives of Gaganyaan mission
- Union Minister Dr. Jitendra Singh says, presently (2020-21) nuclear power is saving 41 million tonnes of CO2 emissions annually, compared to the emissions that would be generated by equivalent electricity generation from coal based thermal power plants.
- Nuclear Power Saves 41 Million Tonnes Carbon Emissions Every Year: Centre



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B. Russia

- Sri Lanka taps Russia, completes paperwork to set up its first nuclear power plant
- Russia working out new military response against potential US aggression – defense journal
- IAEA manages to rotate inspectors at Zaporozhye NPP at fourth attempt – Rosenergoatom
- Three IAEA inspectors arrive at ZNPP on rotation basis – Russian official
- IAEA expert teams to rotate at three nuclear facilities in Ukraine this week – Grossi
- Nuclear safety situation at ZNPP is precarious – IAEA
- Ukrainian forces open fire during rotation of IAEA experts at ZNPP – official
- Russian security team meeting IAEA experts comes under fire, Moscow to protest – advisor
- IAEA chief to discuss increase in number of inspectors at nuclear facilities in Iran – TV
- Zaporozhye NPP well-protected, but Ukraine shells accompanying infrastructure – acting head
- Governor rules out discussions on status of Zaporozhye nuke plant
- Blackout: Ukraine cuts off power to Zaporozhye nuclear plant, says politician
- Blackout poses no risks of nuclear incidents at ZNPP – Rosenergoatom official
- Safety of Zaporozhye NPP nuclear facilities priority number one for Russia, envoy states
- US eager to bring Russia back to New START – Russian MFA
- AUKUS alliance's nuclear submarine plan for Australia raises many questions – Kremlin

C. Pakistan

- In veiled criticism of India, Khar says supply of advanced weapons straining region's security environment
- Pakistani firms among 37 put on US trade blacklist
- Pakistan plays on both sides of Ukraine war
- Kashmir still seen as 'potential flashpoint' for India-Pakistan conflict

D. Europe

- France mounts battle for nuclear energy in Europe
- South Korea's APR1000 certified for European use by EUR
- U.S., Europe Split on Response to Iran's Near-Weapons-Grade Nuclear Enrichment
- Poland, Ukraine Call for Nuclear Energy Sanctions Against Russia
- The EU's view on the Iran nuclear deal and standoff
- EU rewrites climate diplomacy deal to resolve nuclear sticking point
- EDF teams up with Italian partners on SMR development
- Serbia-Croatia border arrests over radioactive material found in car
- Westinghouse signs MOU for possible AP1000 unit at Kozloduy NPP
- US, European powers express alarm at Iran enriching uranium to 84 pct
- French Energy Prices Jump as Nuclear-Reactor Concerns Return
- IAEA Mission Observes Strengthened Safety Measures at Belgium's Largest Research Reactor, Sees Opportunities for Further Improvement
- Europe dissolves Iran trade system that never took off
- France and Britain seal deals on nuclear cooperation

- Why Russia Has Such a Strong Grip on Europe's Nuclear Power
- UK \$6 billion defense boost targets atomic submarines, weapons top-up
- AUKUS nuclear pact 'great news' for global security: British premier
- Director General Statement in Relation to AUKUS Announcement
- Europe is divided on nuclear power: Which countries are for and against it? | Euronews

E. Ukraine

- New IAEA monitors reach Ukrainian nuclear plant at fourth attempt
- Update 149 - IAEA Director General Statement on Situation in Ukraine
- Update 150 - IAEA Director General Statement on Situation in Ukraine
- Ukraine war: Russian air strikes cut power at Zaporizhzhia nuclear plant

F. United States of America

- US issues more Iran sanctions amid stalled diplomacy
- US waiting for UN nuclear watchdog meetings in Iran before deciding next steps
- U.S. Sends Ukraine \$400 Million in Military Equipment
- Spain asks U.S. to begin cleanup of nuclear accident site
- U.S. intel chiefs warn Putin is expanding his nuclear weapons arsenal as the war in Ukraine drags on
- Russia Reportedly Supplying Enriched Uranium to China
- 'Complex threats from China, Russia, North Korea and Iran': US intel agency
- Saudi Arabia likely to agree to nuclear curbs if US gives backing, Congress told
- New US nuclear chief takes fresh stance on sea-launched cruise missile

G. East Asia

- Quad slams nuclear threats as 'inadmissible' in India huddle
- North Korea Fires Ballistic Missile Toward Sea, Seoul Says
- Russia boosting China in nuclear arms race, says Pentagon
- Kim supervises N. Korean troops simulating attack on South
- Japan Marks 12 Years Since Tsunami and Nuclear Disaster
- South Korea should build nuclear weapons to defend against North, says Seoul's mayor
- Seoul mayor calls for South Korean nuclear weapons to counter threat from North
- North Korea touts "nuclear war deterrence" with submarine cruise missile test amid U.S.-South Korea drills
- North Korea test-fires nuclear cruise missiles from submarine
- North Korea preparing for its seventh nuclear test, would be dangerous provocation, US warns

H. Australia

- Australia to buy nuclear-powered submarines made in the US
- Penny Wong hits back at China's claim Aukus nuclear submarines will fuel an arms race
- China says AUKUS on 'dangerous path' with nuclear subs deal
- Why Australia wants nuclear-powered submarines

A. India

Union Cabinet approves procurement of 70 HTT-40 Basic Trainer Aircraft from HAL for Indian Air Force at a cost of over Rs 6,800 crore

PIB, March 1, 2023

The Union Cabinet has approved procurement of 70 HTT-40 Basic Trainer Aircraft from Hindustan Aeronautics Limited (HAL) for the Indian Air Force at a cost of Rs 6,828.36 crore. The aircraft will be supplied over a period of six years. The HTT-40 is a turbo prop aircraft and is designed to have good low speed handling qualities and provide better training effectiveness. This fully aerobatic tandem seat turbo trainer has air-conditioned cockpit, modern avionics, hot re-fueling, running change over and zero-zero ejection seats. The aircraft will meet the shortage of basic trainer aircraft of IAF for training of newly inducted pilots. The procurement will include associated equipment and training aids including simulators. Being an indigenous solution, the Aircraft is configurable for upgrades to incorporate the futuristic requirements of the Indian Armed Forces.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1903445>

Antony Blinken and Sergei Lavrov meet for first time since Ukraine war

BBC, March 2, 2023

US Secretary of State Antony Blinken has told his Russian counterpart Sergei Lavrov to “end this war of aggression” against Ukraine. The remarks are the first Mr Blinken has made face to face to Mr Lavrov since the start of Russia’s full-scale invasion more than a year ago. The two met briefly on the sidelines of the G20 summit in India’s capital Delhi on Thursday. Mr Blinken also raised the case of Paul Whelan, an American detained in Russia. A senior State Department official said the discussion in Delhi lasted less than 10 minutes - they spoke “on the move” said the Russian foreign

ministry, downplaying the exchange. “I told the foreign minister [Sergei Lavrov] what I and so many many others said last week at the United Nations, and what so many G20 foreign ministers said today - end this war of aggression, engage in meaningful diplomacy that can produce a just and lasting peace,” Mr Blinken said at a briefing after the talks.

<https://www.bbc.com/news/world-asia-india-64825198>

Quad Foreign Ministers meet: Quad foreign ministers denounce Russian threats of nuclear war

Mint, March 3, 2023

The meeting of the Quad Foreign Ministers is being hosted by India today in New Delhi. The meeting will be chaired by External Affairs Minister, Dr. S. Jaishankar, and will see the participation of Foreign Ministers of Australia and Japan and the Secretary of State of the United States of America. The top diplomats of Australia, India, Japan and the United States offered sharp but veiled criticism of China on Friday, even as they maintained their Indo-Pacific-focused bloc is not aimed at countering Beijing. Meeting in New Delhi, the four barely mentioned China by name and insisted that the so-called Quad group is designed to boost their own national interests and improve those of others through enhanced cooperation in non-military areas.

<https://www.livemint.com/news/india/quad-summit-2023-live-updates-s-jaishankar-penny-wong-antony-blinken-yoshimasa-hayashi-india-usa-japan-australia-11677815211324.html>

First Ever Privately Manufactured Indigenised Fuze of ASW Rocket Handed Over To Indian Navy

PIB, March 3, 2023

Indian Navy today received a fully indigenised fuze YDB-60 for underwater Rocket RGB 60 manufactured for the first time by a private Indian industry. In order to provide major boost to *AatmaNirbharta* in Armament and

Ammunition, Indian Navy received for the first time a fully indigenised fuze YDB-60 for underwater Anti Submarine Warfare (ASW) Rocket RGB-60 used from major warships, through a private manufacturer M/s Economic Explosives Limited (EEL), Nagpur. This would be the first time the Indian Navy has placed supply order for underwater ammunition fuze on an Indian Private industry.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1904010>

We Hope To Work Closely With India To End Russian Aggression: US

NDTV, March 3, 2023

The United States has expressed hope that it can work with India to bring an end to the conflict between Russia and Ukraine, US State Department spokesperson Ned Price said in a press briefing on March 2. He said that India has the ability to speak with moral clarity. Responding to a question about the role India can play to bring an end to the ongoing conflict, Price said, "India has the ability we have seen from Prime Minister Modi to speak with tremendous moral clarity. When Prime Minister Modi said last year "this is not an era of war", the world listened as they should because when Prime Minister Modi and his country said something to that effect, it's meaningful to the United States, it's meaningful to Russia, it is meaningful to countries near and far."

<https://www.ndtv.com/world-news/we-hope-to-work-closely-with-india-to-end-russian-aggression-us-3830217>

Another India-Pakistan war? High possibility of military retaliation in Kashmir under Modi's leadership, says US intel

Mint, March 9, 2023

A US intelligence report has raised concerns about the possibility of India retaliating against Pakistan in the event of a terror attack on India or an orchestrated "violent

unrest in Kashmir" by extremist groups based in Pakistan. The annual threat assessment report by the US Director of National Intelligence predicts the possibility of a conflict between India and Pakistan with particular concern due to the risk of an "escalatory cycle between two nuclear-armed states". Given Pakistan's history of supporting extremist groups, the report acknowledges a higher probability of India responding with military force under the leadership of Prime Minister Narendra Modi to "perceived or real Pakistani provocations". The report adds that each side's perception of heightened tensions raises the risk of conflict, with violent unrest in Kashmir or a militant attack in India being potential flashpoints.

<https://www.livemint.com/news/india/another-india-pakistan-war-high-possibility-of-military-retaliation-in-kashmir-under-modi-s-leadership-says-us-intel-11678346596143.html>

MoD signs Rs 667 crore contract for six Dornier-228 aircraft from HAL to further bolster operational capability of Indian Air Force

PIB, March 10, 2023

Ministry of Defence, on March 10, 2023, signed a contract for procurement of six Dornier-228 aircraft for the Indian Air Force (IAF) from Hindustan Aeronautics Limited (HAL) at a cost of Rs 667 crore. The aircraft was used by IAF for Route Transport Role and communication duties. Subsequently, it has also been used for training of transport pilots of the IAF. The present lot of six aircraft will be procured with an upgraded fuel-efficient engine coupled with a five bladed composite propeller. The aircraft is ideally suited for short haul operations from semi-prepared/short runways of the North East and island chains of India. The addition of the six aircraft will further bolster the operational capability of the IAF in the remote areas.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1905670>

US reaffirms India as global strategic partner; supports constructive talks between Indo-Pak. Details

Mint, March 10, 2023

The US on Thursday has reiterated that India is a global strategic partner of America. The statement came by US State Department Spokesperson Ned Price while replying on the US Secretary of State Antony Blinken's recent visit to India and his audience with Prime Minister Narendra Modi. During the press briefing, Price said, "our message to India and about India is consistent. India is a global strategic partner of US." "Secy did have an audience with PM when he was in Delhi for G20. I'm not in a position to detail what was exchanged between them," he said. Blinken was in India to take part in the G20 Foreign Ministers' Meeting and the Raisina Dialogue. The spokesperson further added, "The engagements we've had with our Indian partners at the ministerial level, at the leader level, at all levels, have been in furtherance of deepening the already extensive ties between our two countries."

<https://www.livemint.com/news/world/us-reaffirms-india-as-global-strategic-partner-supports-constructive-talks-between-indo-pak-details-11678405502458.html>

Aatmanirbhar Bharat: MoD inks over Rs 900 crore contract for Normal Refit of Sindhukirti Submarine at Hindustan Shipyard Limited, Visakhapatnam

PIB, March 13, 2023

In another boost to achieve 'Aatmanirbhar Bharat', Ministry of Defence, on March 13, 2023, signed a contract for Normal Refit of Sindhukirti Submarine at Hindustan Shipyard Limited (HSL), Visakhapatnam at an overall cost of Rs 934 crore. Sindhukirti is 3rd Kilo Class Diesel Electric Submarine. After completion of refit, Sindhukirti will be combat worthy and will join the active submarine fleet of the Indian Navy. This refit

has been offloaded to develop alternate repair facility for submarines and is a further step towards undertaking Medium refit with Life Certification at HSL. The project involves more than 20 Micro Small and Medium Enterprises (MSMEs) and would lead to employment generation of 1,000 mandays per day for the project duration.

<https://pib.gov.in/>

[PressReleasePage.aspx?PRID=1906425](https://pib.gov.in/PressReleasePage.aspx?PRID=1906425)

Maiden successful flight-test of DRDO's indigenous Power Take off Shaft conducted on LCA Tejas in Bengaluru

PIB, March 14, 2023

Maiden successful flight-test of Power Take off (PTO) Shaft was conducted on Light Combat Aircraft (LCA Tejas) Limited Series Production (LSP) - 3 aircraft in Bengaluru on March 14, 2023. The PTO shaft is indigenously designed and developed by Combat Vehicles Research & Development Establishment (CVRDE), Chennai of Defence Research and Development Organisation (DRDO). The PTO shaft, which is a critical component in the aircraft, will support the requirements of future fighter aircraft & their variants and offers competitive cost & reduced time of availability. With this successful test, the DRDO has achieved a greater technological feat by realisation of complex high-speed rotor technology which only few countries have achieved.

<https://pib.gov.in/>

[PressReleasePage.aspx?PRID=1906869](https://pib.gov.in/PressReleasePage.aspx?PRID=1906869)

Navy to approach govt for three AIP-equipped attack submarines

Hindustan Times, March 14, 2023

The Indian Navy is expected to approach Defence Acquisition Council (DAC) for acceptance of the necessity for three air independent propulsion (AIP) equipped diesel attack submarines to be built at Mazagon Dock Shipbuilders Limited

(MDL) in collaboration with the French Naval Group. It is learnt that the contract to build three AIP submarines will be given to MDL based on specific requirements of the Indian Navy. MDL has already built six Kalveri class, based on the French Scorpene class, submarines for the Indian Navy with the sixth INS Vagsheer expected to be commissioned into the Navy before March 2024.

<https://www.hindustantimes.com/india-news/navy-to-approach-govt-for-three-aip-equipped-attack-submarines-101678767222337.html>

DRDO conducts two consecutive successful flight tests of Very Short Range Air Defence System missile off Odisha coast

PIB, March 14, 2023

Defence Research and Development Organisation (DRDO) conducted two consecutive successful flight tests of Very Short Range Air Defence System (VSHORADS) missile at the Integrated Test Range, Chandipur off the coast of Odisha on March 14, 2023. The flight tests were carried out from a ground-based man portable launcher against high speed unmanned aerial targets, mimicking approaching and receding aircraft. The targets were successfully intercepted, meeting all mission objectives. VSHORADS is a Man Portable Air Defence System (MANPAD) meant for neutralising low altitude aerial threats at short ranges. It has been designed and developed indigenously by Research Centre Imarat, Hyderabad in collaboration with other DRDO laboratories and Indian Industry Partners. The missile incorporates many novel technologies including Dual-band IIR Seeker, miniaturised Reaction Control System and integrated avionics. The propulsion is provided by a dual thrust solid motor.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1906915>

Union Minister Dr Jitendra Singh informs that the budget of Rs. 9,023 Crore is allocated towards achieving

the objectives of Gaganyaan mission

PIB, March 15, 2023

Union Minister of State (Independent Charge) Atomic Energy and Space, Dr Jitendra Singh today informed that the budget of Rs. 9023 Crore is allocated towards achieving the objectives of Gaganyaan mission. In a written reply to a question to the Lok Sabha, Dr Jitendra Singh said, the scope of Gaganyaan programme is to demonstrate human spaceflight capability to Low Earth Orbit and safe return. He said, ISRO is developing indigenous technologies for Human rated launch vehicle, Habitable Crew Module, Life Support System, Crew Escape System, Ground Station Network, Crew Training and Recovery. These technologies are crucial to meet the objectives of Gaganyaan mission and to take up any further interplanetary missions, the Minister added. Government has created the Indian National Space Promotion and Authorization Centre (IN-SPACE), as the single window agency to promote, enable, authorize and supervise the non-Government entities in Space Sector in India. IN-SPACE has started to facilitate the private companies / start-ups, in installation of facilities within ISRO campuses, launch of satellites and Launch Vehicles, and Mentorship support. Till date, IN-SPACE has received applications from more than 160 NGEs in the Space Sector.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1907196>

Union Minister Dr. Jitendra Singh says, presently (2020-21) nuclear power is saving 41 million tonnes of CO2 emissions annually, compared to the emissions that would be generated by equivalent electricity generation from coal based thermal power plants.

PIB, March 15, 2023

Union Minister of State MoS, Atomic Energy and Space, Dr Jitendra Singh said

that presently (2020-21) nuclear power is saving 41 million tonnes of CO₂ emissions annually, compared to the emissions that would be generated by equivalent electricity generation from coal based thermal power plants. In a written reply to a question in Lok Sabha today, Dr. Jitendra Singh said that as part of Low Carbon Development of Electricity Systems consistent with Enhanced Development benefits, Government is exploring a significantly greater role for nuclear power. He added that nuclear power currently provides 3% of electricity generation. Sufficient production and share of nuclear power is essential for ensuring country's energy security. Current policy targets a three-fold rise in nuclear installed capacity by 2032. The Minister highlighted that nuclear energy can be considered for delivering base load power free of intermittency in place of energy from fossil fuels. DAE considers nuclear energy as a significant component of its non-fossil fuel power generation capacity and will continue to pursue research and innovation in this sector.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1907214>

Nuclear Power Saves 41 Million Tonnes Carbon Emissions Every Year: Centre

NDTV, March 15, 2023

India's nuclear power sector is saving 41 million tonnes of carbon dioxide emissions annually, compared to emissions that would have been generated by equivalent electricity generation from coal-based thermal power plants, Union Minister Jitendra Singh informed Lok Sabha today.

In a written reply, Mr Singh said as part of low carbon development of electricity systems consistent with enhanced development benefits, the government was exploring a significantly greater role for nuclear power. Nuclear power currently comprises three per cent of India's total electricity generation, Singh said, adding that sufficient production and share of

atomic energy was essential for ensuring the country's energy security.

<https://www.ndtv.com/india-news/nuclear-power-saves-41-million-tonnes-carbon-emissions-every-year-centre-3863599>

B. Russia

Sri Lanka taps Russia, completes paperwork to set up its first nuclear power plant

India Narrative, March 2, 2023

The Sri Lankan cabinet has signed international conventions related to generating nuclear power, looking forward to strengthening its renewable energy sources in the future. Sri Lanka Atomic Energy Board (SLARB) Chairman Professor SRD Rosa told Sri Lankan newspaper *Daily Mirror* that the country plans to have either off-shore or on-shore Small Modular Reactors (SMRs) that have a power capacity of up to 100 MW per unit. With the use of nuclear power generators, the country plans to minimise the use of fossil fuels. The newspaper quoted Rosa as saying: "The government has sought to implement the project in collaboration with the Russian government. The required technology will be provided by them, and they had also agreed to take back the nuclear waste. The Russian government has the technology to reprocess the nuclear waste".

<https://www.indianarrative.com/world-news/sri-lanka-taps-russia-completes-paperwork-to-set-up-its-first-nuclear-power-plant-114646.html>

Russia working out new military response against potential US aggression – defense journal

TASS, March 2, 2023

Russia is working out a new type of military operations involving its nuclear potential to fend off potential US attacks, the Russian Defense Ministry's Military Thought journal said in an article published on Thursday. The United States

is losing its leading positions in the world and thus its military-political course towards Russia is becoming increasingly aggressive, the article's authors say. As the article points out, this situation is related to the fact that Russia is perceived as "the main culprit of the loss of the American global dominance." As the authors of the article say, Russia's 'defeat' is planned through a "strategic (global) multi-sphere operation." The United States sees the final goal of this operation in the destruction of Russia's nuclear deterrence potential, which can be achieved by way of deploying missile shield systems around Russian borders or delivering a prompt global nuclear strike that can wipe out 65-70% of Russia's strategic nuclear forces.

<https://tass.com/defense/1583571>

IAEA manages to rotate inspectors at Zaporozhye NPP at fourth attempt – Rosenergoatom

TASS, March 2, 2023

The rotation of inspectors of the International Atomic Energy Agency (IAEA) at the Zaporozhye nuclear power plant, which was thwarted three times by the UN Security Department, has finally taken place, Rosenergoatom CEO adviser Renat Karchaa told TASS on Thursday. "Rotation of the IAEA inspectors took place in a normal mode, the column is moving. They are already on their way to Vasilyevka," he said. Earlier, Karchaa told TASS that the rotation was supposed to take place on February 7, 10 and 18. According to him, the UN Security Department disrupted the rotation of the IAEA inspectors at the Zaporozhye nuclear power plant three times in February, although the Russian side provided all the necessary security guarantees.

<https://tass.com/defense/1584033>

Three IAEA inspectors arrive at ZNPP on rotation basis – Russian official

TASS, March 2, 2023

Three inspectors from the International Atomic Energy Agency (IAEA) have arrived

at the Zaporozhye Nuclear Power Plant (ZNPP) on a rotation basis to relieve the outgoing team of inspectors, Renat Karchaa, an adviser to the director general of Rosenergoatom, told TASS on Thursday.

"IAEA inspectors have arrived at the plant. A total of seven people came: Three are IAEA specialists and four are UN security department staff," he said. Karchaa told TASS earlier that the rotations had been planned for February 7, 10 and 18, respectively, but that the UN security department disrupted the rotation process on all three dates in February, although Russia provided all security guarantees.

<https://tass.com/defense/1584165>

IAEA expert teams to rotate at three nuclear facilities in Ukraine this week – Grossi

TASS, March 2, 2023

The International Atomic Energy Agency (IAEA) plans to rotate its experts at the Rovno, South Ukraine and Khmelnytsky nuclear power plants in Ukraine this week, says a statement by Rafael Grossi, the agency's director general, posted on the IAEA website on Thursday. "IAEA expert teams are also rotating at three other nuclear facilities in Ukraine this week, where the Agency established a continued presence in January: the Rivne, South Ukraine and Khmelnytsky NPPs," Director General Grossi said. Earlier, Renat Karchaa, an adviser to the director general of Russia's Rosenergoatom nuclear power plant operator, told TASS that a rotation of IAEA experts had been eventually carried out at the Zaporozhye Nuclear Power Plant (ZNPP) at fourth attempt.

<https://tass.com/defense/1584195>

Nuclear safety situation at ZNPP is precarious – IAEA

TASS, March 2, 2023

The nuclear safety situation at the Zaporozhye nuclear power plant

continues to be precarious due to the disconnection of the only remaining backup power line at the plant, International Atomic Energy Agency Director General Rafael Mariano Grossi said in a statement published on the organization's website on Thursday. "The precarious nuclear safety and security situation was highlighted again yesterday, when the ZNPP's only remaining 330 kilovolt back-up power line was disconnected for a third time in less than a week, likely because of shelling on the other side of the Dnieper river," the statement said.

<https://tass.com/defense/1584211>

Ukrainian forces open fire during rotation of IAEA experts at ZNPP – official

TASS, March 3, 2023

Russian security officers came under directed fire at the contact line while meeting IAEA inspectors rotating personnel at the Zaporozhye Nuclear power Plant, Rosenergoatom CEO Advisor Renat Karchaa said Friday. "Our security officers, who provided the entire process of meeting IAEA inspectors, came under heavy rifle fire. Furthermore, a Ukrainian machinegun joined in. The fire was accurate, it is by sheer miracle that two of our security officers survived," Karchaa said on Russian TV. He specified that seven tripwire mines were discovered and defused along the Russian mission's route.

<https://tass.com/defense/1584607>

Russian security team meeting IAEA experts comes under fire, Moscow to protest – advisor

TASS, March 3, 2023

The incident where fire was deliberately opened from Ukraine on the Russian security team meeting IAEA experts who were on their way to the Zaporozhye nuclear power plant for rotation cannot be ignored, Renat Karchaa, advisor to the

director general of the Rosenergoatom company, said on Russian television on Friday. "I think that there will definitely be a note from Russia following this incident. In our opinion, such armed provocations cannot be ignored. We can say that members of the Russian security team risked their lives, but showed a great deal of composure and self-control," he said.

<https://tass.com/defense/1584631>

IAEA chief to discuss increase in number of inspectors at nuclear facilities in Iran – TV

TASS, March 3, 2023

The director-general of the International Atomic Energy Agency (IAEA) Rafael Grossi, who arrived in Tehran on a visit on Friday, intends to discuss with Iranian officials the possibility of increasing the number of monitors involved in inspections of Iran's nuclear facilities, the Al-Hadath TV channel reports. According to the broadcaster, Grossi will discuss inspections [of nuclear facilities] and an increase in the group of IAEA inspectors.

<https://tass.com/defense/1584669>

Zapozhye NPP well-protected, but Ukraine shells accompanying infrastructure – acting head

TASS, March 6, 2023

The Zapozhye nuclear power plant is well protected, that's why Ukrainian troops are shelling the accompanying infrastructure and power lines to prevent the plant from fully functioning, the acting governor of the Zaporozhye Region Yevgeny Balitsky said on Monday. "We defend the plant itself quite well - a lot of both drones and missiles were shot down over it. That's why they [Ukrainian troops] don't shell it. They hit the infrastructure around it, knocking out substations, knocking out power lines, knocking out infrastructure facilities. They make it so that the station cannot function

today and provide electricity to the Zaporozhye Region," he said during a Crimea24 TV broadcast.

<https://tass.com/defense/1585097>

Governor rules out discussions on status of Zaporozhye nuke plant

TASS, March 6, 2023

There will be no discussions about declaring the Zaporozhye nuclear power plant a so-called "zone", as it is owned by Russia, acting Zaporozhye Region Governor Yevgeny Balitsky said on Monday. "Repeated proposals have been made to discuss some 'settlement mechanisms', but all of them envisaged proclaiming [the station] a certain 'zone'. All issues around the power plant have been sorted out. [Russian] President [Vladimir Putin] decreed to transfer the nuclear power plant to Russia. <...> The nuke plant is Russian and it will work in the interests of the Zaporozhye Region and the territory of the Russian Federation," Balitsky told Crimea24 television.

<https://tass.com/defense/1585171>

Blackout: Ukraine cuts off power to Zaporozhye nuclear plant, says politician

TASS, March 9, 2023

Ukraine has cut off power to the Zaporozhye Nuclear Power Plant in the city of Enerгодar, Chairman of the We Stand With Russia movement Vladimir Rogov told TASS on Thursday. "[Ukraine] cut off the supply through the last remaining powerline to the Zaporozhye NPP at 4:53 a.m. The nuclear power plant is currently disconnected from external power sources," he said. "It has nothing to do with shelling attacks, nothing happened in the area that could have led to the power cutoff. It is just an act of pure spite on the part of Kiev," Rogov noted. He added that the nuclear power plant had been switched to diesel generators.

<https://tass.com/defense/1586317>

Blackout poses no risks of nuclear incidents at ZNPP – Rosenergoatom official

TASS, March 9, 2023

There is no threat of nuclear incidents in connection with the blackout at the Zaporozhye NPP, as backup systems are operating normally and there is enough fuel for diesel generators, Renat Karchaa, an adviser to the CEO of the Rosenergoatom concern, said this on the Rossiya-24 TV channel on Thursday. On Wednesday evening Ukraine completely cut off power supply for the nuclear power plant. Diesel generators had to be turned on. Karchaa previously explained that the power outage was due to a short circuit on the Ukraine-controlled territory. Kiev argued that the line was de-energized as a result of a "Russian shelling", there was not enough fuel for diesel generators at the ZNPP, and the situation was allegedly fraught with nuclear incidents.

<https://tass.com/defense/1586387>

Safety of Zaporozhye NPP nuclear facilities priority number one for Russia, envoy states

TASS, March 9, 2023

The safety of nuclear facilities at the Zaporozhye Nuclear Power Plant (ZNPP) is a top priority for Russia, and the physical integrity of ZNPP facilities is maintained and reinforced by Russian experts, Permanent Representative to International Organizations in Vienna Mikhail Ulyanov told a meeting of the IAEA Board of Governors on Thursday. "We consider it our duty to reiterate that the safety of nuclear facilities is an absolute priority for our country," Ulyanov said. He also focused on specific efforts by the Russian side to ensure nuclear safety and nuclear security at the ZNPP. "First of all, we confirm that the physical integrity of ZNPP facilities is maintained and strengthened by Russian specialists. The Russian side has established systematic protocols to restore the buildings,

equipment and infrastructure damaged as a result of attacks by the Ukrainian armed forces," the diplomat stated.

<https://tass.com/defense/1586611>

US eager to bring Russia back to New START – Russian MFA

TASS, March 10, 2023

Washington has stepped up efforts to bring Moscow back to negotiations under the strategic arms reduction treaty New START, Russia's Deputy Foreign Minister Sergey Ryabkov said in an interview with RT Arabic. "In the wake of President Vladimir Putin's decision to suspend New START, the Americans have stepped up their efforts to persuade Russia to change its mind and to return to New START negotiations so that inspections can resume. But this is impossible," he said. Ryabkov recalled that Russia had adopted a relevant law and Moscow notified the US about this. Russia's return to New START might be a possibility "only if Washington reconsiders its course towards Russia," he said.

<https://tass.com/politics/1586989>

AUKUS alliance's nuclear submarine plan for Australia raises many questions – Kremlin

TASS, March 14, 2023

Plans to provide nuclear-powered submarines to Australia raise many questions pertaining to non-proliferation, Kremlin Spokesman Dmitry Peskov said on Tuesday. The leaders of AUKUS (Australia, the United Kingdom and the United States) earlier announced a three-phase plan to provide Canberra with conventionally armed, nuclear-powered submarines and the technology for building them. "In any case, this gives rise to a lot of questions, which pertain to the issue of non-proliferation. Of course, there must be an extra degree of transparency here and answers should be provided for all questions that arise," Peskov stressed.

<https://tass.com/defense/1588395>

C. Pakistan

In veiled criticism of India, Khar says supply of advanced weapons straining region's security environment

Dawn, March 2, 2023

In a veiled criticism of India, Minister of State for Foreign Affairs Hina Rabbani Khar said on Thursday that the "generous" supply of conventional and non-conventional weapons to the neighbouring country was severely straining South Asia's strategic stability, and threatening "our national security". "The largest country in the region continues to be a beneficiary of nuclear exceptionalism, in violation of established non-proliferation norms and principles," she told a high-level United Nations (UN) panel – without naming India – during a conference via video link from Islamabad. "This country also remains a net recipient of generous supplies of advanced conventional and non-conventional weapons, technologies and platforms," she said.

<https://www.dawn.com/news/1739964>

Pakistani firms among 37 put on US trade blacklist

DAWN, March 4, 2023

An unspecified number of Pakistani companies have been added to a list of 14 entities put on a US trade blacklist for their alleged involvement in missile and nuclear activities. On Thursday, the US Commerce Department's Bureau of Industry and Security (BIS) added 37 entities to its Entity List (blacklist) for allegedly contributing to Russia's military and/or defence industrial base, supporting China's military modernisation, and facilitating or engaging in human rights abuses in Myanmar and in China. The list includes a separate category titled, "Ballistic Missile and Unsafeguarded Nuclear Activities". The statement said that "fourteen entities based in China and Pakistan are being added to the Entity List for contributing

to ballistic missile programs of concern, including Pakistan's missile program, and for involvement in unsafeguarded nuclear activities".

<https://www.dawn.com/news/1740308>

Pakistan plays on both sides of Ukraine war

Economic Times, March 8, 2023

Pakistan is playing on both sides of the Ukraine conflict. Since July 2022, Pakistan has been sending consignments of ammunition to Ukraine through an air bridge created by the UK followed by Poland's Gdansk port, and lately through Germany, quietly joining the Western effort to bolster the Ukrainian resistance against the Russians. But Islamabad has denied that it supplied arms to Ukraine. Pakistan Foreign spokesperson cited Pakistan's record of "non- interference" in conflicts. But this is a sham as Pakistan joined the United States against the Russians in Afghanistan in the 1980s and again, the US-led "global war on terror" from 2001 onwards.

<https://economictimes.indiatimes.com/news/international/world-news/pakistan-plays-on-both-sides-of-ukraine-war/articleshow/98496174.cms>

Kashmir still seen as 'potential flashpoint' for India-Pakistan conflict

DAWN, March 11, 2023

The US intelligence community, in its annual threat assessment, has warned that heightened tensions between India and Pakistan could lead to a direct conflict between two nuclear-armed nations, with the disputed valley of Kashmir listed as a potential 'flashpoint'. The 40-page intelligence report, presented to Congress this week, was also discussed at a US State Department news briefing, where an Indian journalist asked if the US had raised this issue at last week's counterterrorism conference in Islamabad. Instead of revealing the contents of the counterterrorism meeting, Spokesperson Ned Price defended Washington's decision to stay engaged with Islamabad on this and

other issues. "The goal of a stable and secure South and Central Asia, free from terrorism, depends on the strength of, in large part, our partnership with Pakistan," he said.

<https://www.dawn.com/news/1741527>

D. Europe

France mounts battle for nuclear energy in Europe

Financial Times, March 1, 2023

France is making an aggressive push to promote nuclear power in the EU, seeking to rally allies for battles to come in a stand-off with Germany over the bloc's energy policy. Paris on Tuesday persuaded 10 countries, including Hungary and Bulgaria, to join a "nuclear alliance" calling on Brussels to do more to back atomic energy, a move they argued would help meet climate goals while protecting the EU's energy independence. The establishment of the pro-nuclear group at a meeting in Stockholm, comes as France lobbies for concessions from the EU's ambitious renewable power goals to obtain what would effectively be carve-outs for its nuclear industry, the mainstay of its electricity production. That has opened a rift with Germany and left other member states wondering if they will be forced to pick sides.

<https://www.ft.com/content/f7a79b52-ff1a-4336-82c1-ed359df60173>

South Korea's APR1000 certified for European use by EUR

World Nuclear News, March 2, 2023

Korea Hydro & Nuclear Power's (KHNP's) APR1000 reactor design has been formally certified as compliant by the European Utility Requirements (EUR) organisation - a technical advisory group for European utilities on nuclear power plants. The Korean nuclear industry - including KHNP, KEPCO E&C, KEPCO NF, and Doosan Enerbility - officially applied for EUR certification in November 2019. The

assessment was launched in February 2021. The process of design assessment for EUR certification requires at least two sponsors from EUR members as one of the prerequisites to a new assessment. For the APR1000 standard design assessment, three sponsors and six supporters - more than half of the total EUR members - participated in the evaluation, KHNP said.

The EUR requirements cover a broad range of conditions for a nuclear power plant to operate efficiently and safely.

<https://www.world-nuclear-news.org/Articles/South-Korea-s-APR1000-certified-for-European-use>

U.S., Europe Split on Response to Iran's Near-Weapons-Grade Nuclear Enrichment

Wall Street Journal, March 2, 2023

The U.S. and its European allies have split over the response to Iran's production of near-weapons-grade uranium, with Britain, France and Germany favoring a public censure of Tehran while the Biden administration is reluctant to do that, according to diplomats involved in the discussions. The production of weapons-grade material could spark a crisis over Tehran's nuclear program. European diplomats say it could be the trigger to kill off the 2015 nuclear deal. Israeli officials have signaled that weapons-grade enrichment is a red line, although they haven't publicly set out what their response would be. Washington has long warned Iran against crossing that threshold.

<https://www.wsj.com/articles/u-s-europe-split-on-response-to-irans-near-weapons-grade-nuclear-enrichment-930a7a08>

Poland, Ukraine Call for Nuclear Energy Sanctions Against Russia

US News, March 2, 2023

Poland and Ukraine on Thursday called for international sanctions against Russia's nuclear energy sector, saying they feared their neighbour may hurt energy security

and economies in Europe if attacks on Ukrainian power facilities continue. Last week, the European Union adopted the tenth package of sanctions targeting Russia, but did not include its nuclear energy sector because of opposition from some EU member states. "If we want to develop nuclear, ... we need to suspend Russia in International Atomic Energy Agency (IAEA)," Anna Moskwa, the Polish climate and environment minister, said at an energy conference in the Croatian capital of Zagreb.

<https://www.usnews.com/news/world/articles/2023-03-02/poland-ukraine-call-for-nuclear-energy-sanctions-against-russia>

The EU's view on the Iran nuclear deal and standoff

The Jerusalem Post, March 3, 2023

The Jerusalem Post recently visited Brussels along with a group of journalists meeting with a wide range of top EU officials. During the various meetings, the European Union's view on the Iran nuclear standoff, with a number of significant revelations, became clear. Starting with the most recent news, it would seem that the EU was worried by the February 20 leaked initial IAEA report about Iran's enrichment of uranium to the 84% level, but still not as intensely worried as Israel. First, the 84% for Israel was immediately smoking-gun evidence of Iran's desire to break out to a nuclear weapon, since it is the equivalent of inches away from the 90% weaponized level.

<https://www.jpost.com/international/article-733239>

EU rewrites climate diplomacy deal to resolve nuclear sticking point

Reuters, March 6, 2023

European Union countries intend to push for a global phasing out of fossil fuels among their climate diplomacy priorities this year, which the bloc hopes to approve

this week after rewriting a contentious section on nuclear energy.

<https://www.reuters.com/business/environment/eu-rewrites-climate-diplomacy-deal-resolve-nuclear-sticking-point-2023-03-06/>

EDF teams up with Italian partners on SMR development

World Nuclear News, March 6, 2023

France's EDF has signed a Letter of Intent with Italy's Ansaldo Energia, Ansaldo Nucleare and Edison to assess potential industrial cooperation for the development of nuclear power in Europe, including in Italy, specifically in the field of small modular reactors (SMRs). "The aim of the agreement is to immediately leverage on the expertise of the Italian nuclear power sector, headed by Ansaldo Nucleare, in order to support the development of EDF Group's new nuclear projects, and at the same time to open a debate on the possible role of new nuclear power in Italy's energy transition," the partners said in a joint statement.

<https://www.world-nuclear-news.org/Articles/EDF-teams-up-with-Italian-partners-on-SMR-development>

Serbia-Croatia border arrests over radioactive material found in car

BBC, March 7, 2023

Three Croatian nationals have been arrested in Serbia after radioactive material was discovered in their car, Serbian officials say. They were about to enter Croatia on Saturday when scanners detected a "serious amount" of radiation. A subsequent search of an Audi car revealed the head of a radioactive lightning rod in the spare tyre slot of the boot, Serbian customs said. Such rods were widely used in the past, but are now largely being dismantled. The incident occurred at the Bezdan border crossing near the town of Sombor on Saturday at 20:30 (19:30 GMT). A statement by Serbian customs authorities said stationary monitors had sounded as the car was being checked before exiting the country. A subsequent search revealed the the head of the lightning

rod, as well as a device for measuring the composition of the metal.

<https://www.bbc.com/news/world-europe-64874255>

Westinghouse signs MOU for possible AP1000 unit at Kozloduy NPP

Nuclear Engineering, March 7, 2023

US-based Westinghouse Electric Company has signed a Memorandum of Understanding with Bulgaria's Kozloduy NPP - Newbuild on the potential deployment of one or more AP1000 reactors at the site. The agreement establishes a joint working group to initiate planning for the Generation III+ nuclear technology. The working group will also evaluate regulatory, licensing and design bases to ensure full compliance with applicable regulations. Currently, Kozloduy NPP operates two Soviet-built VVER-1000 reactors (units 5&6). Bulgaria was obliged to close four older VVER-440 units as a condition for accession to the European Union, even though the units had undergone significant safety upgrades. Bulgaria's parliament in January mandated the caretaker government to begin talks with the USA on a potential agreement for the construction of two additional reactors at the Kozloduy NPP (units 7&8) using Westinghouse AP1000 technology.

<https://www.neimagazine.com/news/newswestinghouse-signs-mou-for-possible-ap1000-unit-at-kozloduy-npp-10656328>

US, European powers express alarm at Iran enriching uranium to 84 pct

Al-Arabiya News, March 8, 2023

The US and Europe's top powers on Wednesday expressed alarm at Iran having produced a tiny amount of uranium enriched to 84 percent purity, very close to weapons grade, and said Iran must explain how it happened. The UN nuclear watchdog found uranium

particles enriched to up to 83.7 percent at Fordow, a site dug into a mountain and the second place where it is continuously enriching uranium to up to 60 percent. Weapons grade is around 90 percent. The so-called spike is large but it remains unclear whether it was accidental. It happened in two interconnected cascades, or clusters, of centrifuges that the watchdog recently found Iran had made substantial changes to without notifying it beforehand as it should have.

<https://english.alarabiya.net/News/world/2023/03/08/US-European-powers-express-alarm-at-Iran-enriching-uranium-to-84-pct>

French Energy Prices Jump as Nuclear-Reactor Concerns Return

Bloomberg, March 8, 2023

France's energy prices rose amid fresh concerns about corrosion in the country's nuclear fleet, against a backdrop of widespread strikes that have caused disruptions everywhere from ports to power stations. French power for next year jumped as much as 7.9%, the most since late January. Day-ahead natural gas prices in the nation advanced for a second day.

<https://www.bloomberg.com/news/articles/2023-03-08/european-gas-jumps-as-france-lng-imports-halt-amid-cold-snap#xj4y7vzkg>

IAEA Mission Observes Strengthened Safety Measures at Belgium's Largest Research Reactor, Sees Opportunities for Further Improvement

IAEA, March 8, 2023

An International Atomic Energy Agency (IAEA) team of experts this week said Belgium had strengthened safety at its BR2 research reactor — a large producer of medical isotopes — by improving training, maintenance, ageing management and the safety of experiments. The team also found the need for further safety enhancements to the reactor's organizational structure and operating rules and procedures. The seven day Integrated Safety Assessment for Research Reactors (INSARR) mission to the

Belgian Research Reactor 2 (BR2) was conducted at the request of the Federal Agency for Nuclear Control (FANC), Belgium's nuclear regulatory body. The mission team comprised five experts from Argentina, Canada, the Netherlands, South Africa, and the United States, as well as three IAEA officials.

<https://www.iaea.org/newscenter/pressreleases/iaea-mission-observes-strengthened-safety-measures-at-belgiums-largest-research-reactor-sees-opportunities-for-further-improvement>

Europe dissolves Iran trade system that never took off

AP News, March 10, 2023

European countries said Thursday they have decided to dissolve a system that was conceived in 2019 to enable trade with Iran and protect companies doing business with it from U.S. sanctions, but only ever processed one transaction. The German and French foreign ministries said the 10 shareholders of INSTEX — Belgium, Germany, Finland, Denmark, France, the Netherlands, Norway, Spain, Sweden and the U.K. — concluded that there was no basis to keep it going after Iran persistently refused to work with the institution. The decision comes at a time when tensions between the West and Iran have increased following Tehran's crackdown on internal dissent, its supply of armed drones to Russia that have been used in the war in Ukraine, and the de facto breakdown of its 2015 nuclear deal with world powers including Germany, France and the U.K.

<https://apnews.com/article/europe-iran-trade-system-nuclear-deal-e250566e291e5aa4a70515c5414ac510>

France and Britain seal deals on nuclear cooperation

Reuters, March 10, 2023

France and Britain signed two energy partnership agreements on Friday, emphasising nuclear power as a secure source of low-carbon energy.

<https://www.reuters.com/world/europe/france-britain-seal-deals-nuclear-cooperation-2023-03-10/>

Why Russia Has Such a Strong Grip on Europe's Nuclear Power

New York Times, March 11, 2023

Patricia Cohen, who covers the economic fallout of the war in Ukraine, reported from London. The pinched cylinders of Russian-built nuclear power plants that dot Europe's landscape are visible reminders of the crucial role that Russia still plays in the continent's energy supply. Europe moved with startling speed to wean itself off Russian oil and natural gas in the wake of war in Ukraine. But breaking the longstanding dependency on Russia's vast nuclear industry is a much more complicated undertaking. Russia, through its mammoth state-owned nuclear power company, Rosatom, dominates the global nuclear supply chain. It was Europe's third-largest supplier of uranium in 2021, accounting for 20 percent of the total. With few ready alternatives, there has been scant support for sanctions against Rosatom – despite urging from the Ukrainian government in Kyiv.

<https://www.nytimes.com/2023/03/10/business/economy/russia-nuclear-energy-ukraine.html>

UK \$6 billion defense boost targets atomic submarines, weapons top-up

Defense News, March 13, 2023

Defense spending is getting a £5 billion (\$6 billion) boost from the British government, but most of the cash has been earmarked for nuclear programs and rebuilding depleted weapons stocks rather than addressing wider capability gaps in the armed forces. The funding figures, released Sunday night, will be contained in a refresh of the 2021 integrated defense and security review due to be published later today. News of the increase came as Prime Minister Rishi Sunak headed off to San Diego, California, for a meeting Mar. 13 with U.S. President Joe Biden and Australian Prime Minister Anthony Albanese to announce details of the AUKUS nuclear submarine pact agreed by the three nations.

<https://www.defensenews.com/global/europe/2023/03/13/uk-6-billion-defense-boost-targets-atomic-submarines-weapons-top-up/>

AUKUS nuclear pact 'great news' for global security: British premier

Anadolu Agency, March 14, 2023

British Prime Minister Rishi Sunak said Monday that the AUKUS nuclear pact has been "great news" for both global security and British jobs. AUKUS is a three-way strategic defense alliance between Australia, the UK and the US initially to build a class of nuclear-propelled submarines. But its primary objective is "to uphold peace and stability in the Indo-Pacific and to deter and defend against rapidly evolving threats to the international order and system there," according to the US White House. It is also designed to enhance cooperation in the Indo-Pacific region, where the rise of China is seen as a growing threat, and to develop wider technologies. "The AUKUS partnership, and the submarines we are building in British shipyards, are a tangible demonstration of our commitment to global security. This partnership was founded on the bedrock of our shared values and resolute focus on upholding stability in the Indo-Pacific and beyond," Sunak said in a statement.

<https://www.aa.com.tr/en/europe/aukus-nuclear-pact-great-news-for-global-security-british-premier/2844809>

Director General Statement in Relation to AUKUS Announcement

IAEA, March 14, 2023

An announcement has been made by Australia, the United Kingdom and the United States (the AUKUS Parties) on Australia's acquisition of conventionally armed, nuclear-powered submarines. I also received separate communications on this matter from the Prime Minister of Australia, the Hon Anthony Albanese MP, and the Foreign Minister, the Hon Penny Wong, as well as from the United Kingdom and the United States. According to the announcement, the AUKUS Parties have agreed on three stages for the implementation of the AUKUS project

during the next 3 decades which include: training and capacity building; acquisition of complete, conventionally armed, nuclear-powered submarines; and the acquisition of complete, welded power units for submarines to be built in Australia.

<https://www.iaea.org/newscenter/pressreleases/director-general-statement-in-relation-to-aukus-announcement>

Europe is divided on nuclear power: Which countries are for and against it? | Euronews

Euronews, March 14, 2023

France, Europe's leading country for nuclear power, is considering a law to speed up the construction of new reactors. As the continent struggles with an energy crisis brought on by Russia's invasion of Ukraine, it is part of President Emmanuel Macron's bid for energy independence. On Monday, he said modernisation is essential to meet this goal. The bill is meant to streamline the process of approving and building new plants in the country. It also involves reversing Macron's predecessor's commitment to cap nuclear power to 50 per cent of the country's energy share. But the push for a nuclear revival has caused friction with other European nations like Germany. While some EU member states back it completely with reactors producing a vast proportion of their energy need, others have a complicated history of safety concerns and negative public opinion that puts nuclear out of the picture entirely.

<https://www.euronews.com/green/2023/03/13/europe-is-divided-on-nuclear-power-which-countries-are-for-and-against-it>

E. Ukraine

New IAEA monitors reach Ukrainian nuclear plant at fourth attempt

Reuters, March 2, 2023

A new team of monitors from the U.N. nuclear watchdog, the IAEA, has taken up its post at Ukraine's Russian-occupied Zaporizhzhia nuclear power station after a delay of almost a month, IAEA Director

General Rafael Grossi announced on Thursday.

<https://www.reuters.com/world/europe/new-iaea-monitors-reach-ukraine-nuclear-plant-fourth-attempt-russian-official-2023-03-02/>

Update 149 - IAEA Director General Statement on Situation in Ukraine

IAEA, March 2, 2023

A long-delayed rotation of International Atomic Energy Agency experts was carried out at Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) today, ending an impasse that had complicated the IAEA's efforts to support nuclear safety and security during the military conflict in the country, Director General Rafael Mariano Grossi said. The new team of IAEA staff arrived at Europe's largest nuclear power plant (NPP) after crossing the frontline, allowing the three experts who had been at the site in southern Ukraine since early January to finally begin their journey back to IAEA headquarters, a month later than initially planned. Director General Grossi said today's successful rotation was of major importance for the future of the IAEA Support and Assistance Mission to Zaporizhzhya (ISAMZ), which has been conducting vital nuclear safety and security activities since it was established six months ago.

<https://www.iaea.org/newscenter/pressreleases/update-149-iaea-director-general-statement-on-situation-in-ukraine>

Update 150 - IAEA Director General Statement on Situation in Ukraine

IAEA, March 9, 2023

Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) suffered a complete loss of external power for 11 hours today, forcing it to rely on emergency diesel generators for reactor cooling and other essential nuclear safety and security functions in the latest incident underlining the urgent need to protect Europe's largest such facility, Director General Rafael Mariano

Grossi of the International Atomic Energy Agency (IAEA) said. The ZNPP lost all off-site electricity around 5am local time at the site when its last remaining 750 kilovolt (kV) line was disconnected following reports of missile strikes across Ukraine, the sixth time the plant has been running on emergency diesel generators during the ongoing military conflict in the country, Director General Grossi told the IAEA Board of Governors earlier today.

<https://www.iaea.org/newscenter/pressreleases/update-150-iaea-director-general-statement-on-situation-in-ukraine>

Ukraine war: Russian air strikes cut power at Zaporizhzhia nuclear plant

BBC, March 9, 2023

At least nine people have been killed and power at Europe's largest nuclear plant has been lost after Russia launched missiles across Ukraine. The attacks hit cities from Kharkiv in the north to Odesa in the south and Zhytomyr in the west. Buildings and infrastructure were hit in Kharkiv and Odesa, with power blackouts in several areas. Attacks on the capital Kyiv are also reported. Ukraine said Russia fired 81 missiles, in what is the biggest strike in weeks. The military claimed it successfully shot down 34 cruise missiles and four of the eight Iranian-made Shahed drones which were fired. The attacks mark the biggest day of Russian missile strikes on Ukraine since the end of January, when 11 people died after dozens of buildings were struck in several regions.

<https://www.bbc.com/news/world-europe-64897888>

F. United States of America

US issues more Iran sanctions amid stalled diplomacy

Al-jazeera, March 2, 2023

The United States has imposed a new round of Iran sanctions, targeting the country's oil and petrochemical sales, as diplomacy between Washington and Tehran continues to stall. The measures announced on Thursday come weeks after US media

reports said Washington and Tehran were working on a prisoner exchange deal. "The United States is committed to significantly reducing Iranian energy exports and will sanction those facilitating Iran's petroleum and petrochemical trade," the State Department said. The sanctions hit a Vietnam-based company, two firms based in China, two others in Iran and one in the United Arab Emirates, accusing them of involvement "in the transport or sale" of Iranian oil and petrochemicals.

<https://www.aljazeera.com/news/2023/3/2/us-issues-more-iran-sanctions-amid-stalled-diplomacy>

US waiting for UN nuclear watchdog meetings in Iran before deciding next steps

Alarabiya News, March 3, 2023

The US is waiting for the head of the UN nuclear watchdog to meet with Iranian officials this weekend before deciding on its next steps in response to Tehran's nuclear escalations, a State Department official said Wednesday. "We understand IAEA Director General Grossi will be in Tehran for high-level meetings this weekend, and we await the results of those discussions as well as issuance of his report on NPT related issues," the spokesperson told Al Arabiya English. According to diplomats taking part in talks to revive the 2015 nuclear deal, the UK, France, and Germany have tabled a proposal to censure Iran at the next International Atomic Energy Agency (IAEA) meeting. But the unnamed diplomats, as reported by the Wall Street Journal, said that the Biden administration is against this choice.

<https://english.alarabiya.net/News/middle-east/2023/03/03/US-waiting-for-IAEA-meetings-in-Iran-before-taking-next-step>

U.S. Sends Ukraine \$400 Million in Military Equipment

U.S. Department of Defense, March 3, 2023

The United States will transfer military equipment worth up to \$400 million to

Ukraine to aid its defense against the Russian invasion, Defense Department officials said today. This security assistance package features ammunition and support equipment to meet Ukraine's critical security and defense needs. Since Russia invaded Ukraine on Feb. 24, 2022, the United States has sent more than \$30 billion worth of gear to Ukraine. This is the 33rd time the Biden administration has invoked the drawdown authority for Ukraine. In this package, the United States will provide additional ammunition for High Mobility Artillery Rocket Systems, additional 105 mm and 155 mm artillery rounds, and additional 25 mm ammunition.

<https://www.defense.gov/News/News-Stories/Article/Article/3318508/us-sends-ukraine-400-million-in-military-equipment/>

Spain asks U.S. to begin cleanup of nuclear accident site

ABC News, March 6, 2023

Spain said Monday it has asked the United States to begin procedures to remove soil contaminated with radioactivity after a mid-air collision dumped four U.S. hydrogen bombs near a southern Spanish village nearly 60 years ago. None of the bombs had exploded, but the plutonium-filled detonators on two went off, spreading several kilograms (pounds) of highly radioactive plutonium 239 across the landscape around Palomares. The Foreign Ministry said there would be no more details given on the petition until there is an official reply from the U.S. Spain and the U.S. signed a statement of intent in 2015 to negotiate a binding agreement to further restore and clear up the Palomares site and arrange for the disposal of the contaminated soil at an appropriate site in the U.S. But for several reasons no agreement was ever signed.

<https://abcnews.go.com/US/wireStory/spain-asks-us-begin-cleanup-nuclear-accident-site-97658097>

U.S. intel chiefs warn Putin is expanding his nuclear weapons

arsenal as the war in Ukraine drags on

CNBC, March 8, 2023

Russian President Vladimir Putin is likely to further upgrade the Kremlin's arsenal of long-range nuclear-capable missiles in order to deter Kyiv and its powerful Western allies, U.S. officials warned Wednesday. The warning from the nation's top spymasters comes as Russia intensifies its now year-long fight in Ukraine and as Putin threatens to withdraw from a key nuclear arms treaty. "Throughout its invasion of Ukraine, Moscow has continued to show that it views its nuclear capabilities as necessary for maintaining deterrence and achieving its goals in a potential conflict against the U.S. and NATO and it sees its nuclear weapons arsenal as the ultimate guarantor of the Russian Federation," the nation's top intelligence agency wrote in its annual threat report.

<https://www.cnn.com/2023/03/08/us-intel-chiefs-warn-putin-is-becoming-more-reliant-on-nuclear-weapons.html>

Russia Reportedly Supplying Enriched Uranium to China

U.S. Department of Defense, March 8, 2023

Various open-source outlets reported how Rosatom is providing highly enriched uranium for Chinese fast breeder reactors, said a U.S. official during a posture hearing today at the House Armed Services Subcommittee on Strategic Forces. Rosatom is a Russian state corporation that specializes in nuclear energy. "It's very troubling to see Russia and China cooperating on this," John F. Plumb, assistant secretary of defense for space policy, replied. "They may have talking points around it, but there's no getting around the fact that breeder reactors are plutonium, and plutonium is for weapons. So I think the [Defense] Department is concerned. And of course, it matches our

concerns about China's increased expansion of its nuclear forces as well, because you need more plutonium for more weapons," Plumb added.

<https://www.defense.gov/News/News-Stories/Article/Article/3323381/russia-reportedly-supplying-enriched-uranium-to-china/>

'Complex threats from China, Russia, North Korea and Iran': US intel agency

Livemint, March 9, 2023

The Office of the Director of National Intelligence, US warned of threats against the US posed by China, Russia, North Korea, and Iran. The US intel agency released its 2023 annual threat assessment report on Wednesday, according to the news agency ANI. The report also warned of global challenges like climate change, and evolving technologies that could have the potential to disrupt traditional business and society while creating unprecedented vulnerabilities. The United States is expected to face a "complex" security environment and will need to work to confront two "critical" strategic challenges: rising powers, like China, seeking dominance in the global order, the US intelligence community assessed in its report.

<https://www.livemint.com/news/world/complex-threats-from-china-russia-north-korea-and-iran-us-intel-agency-11678319081174.html>

Saudi Arabia likely to agree to nuclear curbs if US gives backing, Congress told

Middle East Eye, March 10, 2023

Saudi Arabia would likely commit to an agreement stopping it from taking steps towards building a nuclear weapon if the US backs the development of a civilian nuclear programme in the kingdom, US congressional members were told on Thursday. The comment, made by the head of the institute supporting the implementation of the Abraham Accords, come as US support for the programme emerges as one of a handful of asks Riyadh has reportedly made of Washington in order

to normalise relations with Israel. "They don't want to see a standard upheld by the United States that is one way for Tehran and another way for partners and allies in the region," Robert Greenway, Abraham Accords Peace Institute executive director, told the House Foreign Affairs Committee.

<https://www.middleeasteye.net/news/saudi-arabia-nuclear-abraham-accords>

New US nuclear chief takes fresh stance on sea-launched cruise missile

Defense News, March 15, 2023

The new head of U.S. Strategic Command, which oversees the country's nuclear arsenal, is taking a less forceful tone on developing the sea-launched cruise missile than his predecessor, who was an unabashed champion of the program. Gen. Anthony Cotton neither endorsed nor repudiated the sea-launched cruise missile nuclear program, commonly called SLCM-N, in a February letter to Congress. The letter – entered into the congressional record during Cotton's testimony before the Senate Armed Services Committee last week – and the Biden administration's proposed nuclear arsenal budget for fiscal 2024 lay the groundwork for another tussle with Congress over whether to proceed with SLCM-N.

<https://www.defensenews.com/congress/budget/2023/03/14/new-us-nuclear-chief-takes-fresh-stance-on-sea-launched-cruise-missile/>

G. East Asia

Quad slams nuclear threats as 'inadmissible' in India huddle

Nikkei Asia, March 3, 2023

Foreign ministers from the Quad grouping of the U.S., Japan, India and Australia on Friday declared that threats to use nuclear weapons are "inadmissible" while discussing Russia's invasion of Ukraine. India's External Affairs Minister S. Jaishankar hosted U.S. Secretary of State Antony Blinken and their Japanese and

Australian counterparts, Yoshimasa Hayashi and Penny Wong, for a Quadrilateral Security Dialogue meeting in New Delhi. The huddle came the morning after talks among Group of 20 foreign ministers ended without a joint communique due to differences concerning the Ukraine war. "We continued to discuss our responses to the conflict in Ukraine and the immense human suffering it is causing," the Quad members said in a joint statement released afterward, adding that the four sides "concurred that the use or threat of use of nuclear weapons is inadmissible."

<https://asia.nikkei.com/Politics/International-relations/Quad-slams-nuclear-threats-as-inadmissible-in-India-huddle>

North Korea Fires Ballistic Missile Toward Sea, Seoul Says

VOA News, March 9, 2023

North Korea on Thursday fired a short-range ballistic missile toward waters off its western coast, South Korea's military said.

The launch came as the United States and South Korea prepare to hold their biggest combined military training exercises in years next week to counter the threat of North Korea's nuclear arsenal, which leader Kim Jong Un has aggressively expanded in recent years despite his country's deepening economic isolation and pandemic-related difficulties. The South's Joint Chiefs of Staff said the missile was fired at around 6:20 p.m. from an area near the western coastal city of Nampo. There were no immediate assessments of how far it flew or where it landed.

<https://www.voanews.com/a/north-korea-fires-ballistic-missile-toward-sea-seoul-says-/6997186.html>

Russia boosting China in nuclear arms race, says Pentagon

The Telegraph, March 10, 2023

US defence official warns that Russia is helping China produce plutonium, as the latter bids for nuclear parity with the US. Russia is helping China produce plutonium

that could be used to expand its nuclear weapons arsenal, a US defence official has warned.

<https://www.telegraph.co.uk/world-news/2023/03/10/russia-boosting-china-nuclear-arms-race-says-pentagon/>

Kim supervises N. Korean troops simulating attack on South

ABC News, March 10, 2023

North Korean leader Kim Jong Un supervised a live-fire artillery drill simulating an attack on a South Korean airfield and called for his troops to be ready to respond to the enemies' "frantic war preparation moves" — apparently referring to the recent series of military drills between the United States and South Korea.

The North Korean state media report Friday came a day after South Korea's military detected the North firing at least one short-range ballistic missile toward the sea from a site near the western coastal city of Nampo. The South's Joint Chiefs of Staff was assessing whether more missiles may have been launched simultaneously. The United States has recently sent long-range B-1B and B-52 bombers for several rounds of joint aerial drills with South Korean warplanes.

<https://abcnews.go.com/International/wireStory/north-koreas-kim-supervises-frontline-artillery-drill-97753999>

Japan Marks 12 Years Since Tsunami and Nuclear Disaster

VOA News, March 11, 2023

Japan on Saturday marked the 12th anniversary of its massive earthquake, tsunami and nuclear disaster with a minute of silence, as concerns grew ahead of the planned release of the treated radioactive water from the wrecked Fukushima nuclear plant and the government's return to nuclear energy. The 9.0 magnitude earthquake and tsunami that ravaged large parts of Japan's northeastern coast on March 11,

2011, left more than 22,000 people dead, including about 3,700 whose subsequent deaths were linked to the disaster. A moment of silence was observed nationwide at 2:46 p.m., the moment the earthquake struck. Some residents in the tsunami-hit northern prefectures of Iwate and Miyagi walked down to the coast to pray for their loved ones and the 2,519 whose remains were never found.

<https://www.voanews.com/a/japan-marks-12-years-since-tsunami-and-nuclear-disaster-/7000986.html>

South Korea should build nuclear weapons to defend against North, says Seoul's mayor

South China Morning Post, March 13, 2023

South Korea should build nuclear weapons to bolster its defences against North Korea, even at the risk of international repercussions, the mayor of its capital city said, arguing that the country cannot be bound by the goal of denuclearisation. In an exclusive interview, Seoul Mayor Oh Se-hoon added new fuel to a growing debate over how South Korea should arm itself as the North races to perfect its capability to strike the South with tactical nuclear weapons. "North Korea has nearly succeeded in miniaturising and lightening tactical nuclear weapons and secured at least dozens of warheads," Oh said. "We've come to a point where it is difficult to convince people with the logic that we should refrain from developing nuclear weapons and stick to the cause of denuclearisation."

<https://www.scmp.com/news/asia/east-asia/article/3213305/south-korea-should-build-nuclear-weapons-protect-against-north-says-seouls-mayor>

Seoul mayor calls for South Korean nuclear weapons to counter threat from North

Reuters, March 13, 2023

South Korea should build nuclear weapons to bolster its defences against North Korea, even at the risk of international repercussions, the mayor of its capital city

said, arguing that the country cannot be bound by the goal of denuclearisation.

<https://www.reuters.com/world/asia-pacific/seoul-mayor-calls-south-korean-nuclear-weapons-counter-threat-north-2023-03-13/>

North Korea touts "nuclear war deterrence" with submarine cruise missile test amid U.S.-South Korea drills

CBS News, March 13, 2023

The South Korean and U.S. militaries launched their biggest joint military exercises in years Monday, as North Korea said it tested submarine-launched cruise missiles in an apparent protest of the drills it views as an invasion rehearsal. North Korea's launches Sunday signal the country likely will conduct provocative weapons testing activities during the U.S.-South Korean drills that are to run for 11 days. Last week, North Korean leader Kim Jong Un ordered his troops to be ready to repel its rivals' "frantic war preparation moves." The South Korean-U.S. drills include a computer simulation called the Freedom Shield 23 and several combined field training exercises, collectively known as the Warrior Shield FTX.

<https://www.cbsnews.com/news/north-korea-nuclear-war-deterrence-submarine-cruise-missiles-test-us-south-korea/>

North Korea test-fires nuclear cruise missiles from submarine

Channel News Asia, March 13, 2023

North Korea test-fired two strategic cruise missiles from a submarine on Sunday (Mar 12), state news agency KCNA said on Monday just as US-South Korea military drills were due to begin. "Strategic" is typically used to describe weapons that have a nuclear capability. KCNA said the launch confirmed the reliability of the system and tested the underwater offensive operations of submarine units that form part of North Korea's nuclear deterrent. South Korea's Joint Chiefs of Staff said the military was on high alert

and the country's intelligence agency was working with its US counterpart to analyse the specifics of the launch. On Monday, South Korean and American troops were scheduled to begin 11 days of joint drills, dubbed "Freedom Shield 23".

<https://www.channelnewsasia.com/asia/north-korea-test-fires-nuclear-cruise-missiles-submarine-3342096>

North Korea preparing for its seventh nuclear test, would be dangerous provocation, US warns

Wion News, March 14, 2023

The United States on Monday raised concerns about North Korea making preparations to conduct its seventh nuclear test. The outgoing spokesperson of the US State Department, Ned Price, urged the international community to take concerted action in response to such a destabilising event. "DPRK has finalised all of the steps it would need to take to conduct what would be its seventh nuclear test. A seventh nuclear test would be a dangerous provocation that would itself constitute a significant threat to peace and security in the region," said Price, who will soon be replaced by Indian American Vedant Patel as interim spokesperson.

<https://www.wionews.com/world/north-korea-is-ready-for-its-seventh-nuclear-test-us-warns-571833>

H. Australia

Australia to buy nuclear-powered submarines made in the US

AP News, March 10, 2023

Australia will purchase U.S.-manufactured, nuclear-powered attack submarines to modernize its fleet, a European official and two people familiar with the matter said Thursday, amid growing concerns about China's influence in the Indo-Pacific region. The purchase agreement for up to five Virginia-class submarines will be announced Monday when President Joe Biden, Australian Prime Minister Anthony Albanese and U.K. Prime Minister Rishi

Sunak meet in San Diego for talks on the 18-month-old nuclear partnership known by the acronym AUKUS. The people spoke on the condition of anonymity to discuss the matter ahead of the announcement.

<https://apnews.com/article/australia-united-states-nuclear-submarines-biden-aucus-64a1d6c416ad9206153ad601c177869b>

Penny Wong hits back at China's claim Aukus nuclear submarines will fuel an arms race

The Guardian, March 14, 2023

The Australian foreign affairs minister, Penny Wong, has hit back at China's response to Aukus, insisting that its criticisms of the nuclear-powered submarine deal are "not grounded in fact".

In an interview with Guardian Australia, Wong also signalled that she planned to make further visits to south-east Asia and the Pacific to reassure the region that Australia does not seek to escalate military tensions. After the announcement of a multi-decade plan that could cost as much as \$368bn between now and the mid-2050s, Wong said no rational observer could conclude Australia was the source of a regional arms race. She urged China to take up a US offer to agree on "guardrails" to avoid an outbreak of war, despite the concept being derided by Beijing last week. Australia has previously accused China of lacking transparency about its own rapid military buildup.

<https://www.theguardian.com/world/2023/mar/14/penny-wong-hits-back-at-chinas-claim-aucus-nuclear-submarines-will-fuel-an-arms-race>

China says AUKUS on 'dangerous path' with nuclear subs deal

The Times of India, March 14, 2023

The United States, Australia and the United Kingdom are traveling "further down the wrong and dangerous path for their own geopolitical self-interest,"

China's Foreign Ministry said Tuesday, responding to an agreement under which Australia will purchase nuclear-powered attack submarines from the U.S. to modernize its fleet. Spokesperson Wang Wenbin said the arrangement, given the acronym AUKUS – for Australia, the United Kingdom and the United States – arises from the “typical Cold War mentality which will only motivate an arms race, damage the international nuclear nonproliferation regime, and harm regional stability and peace.”

<https://timesofindia.indiatimes.com/world/china/china-says-aucus-on-dangerous-path-with-nuclear-subs-deal/articleshow/98631863.cms?from=mdr>

Why Australia wants nuclear-powered submarines

Aljazeera, March 14, 2023

United States President Joe Biden, Australian Prime Minister Anthony Albanese and United Kingdom Prime Minister Rishi Sunak have unveiled a plan that will see Australia acquire nuclear-powered submarines, allowing the country to become only the seventh in the world with such military technology. Under the deal, Australia will buy three US Virginia-class nuclear-powered submarines from the US by the early 2030s and has an option to buy two additional vessels if required.

<https://www.aljazeera.com/news/2023/3/14/why-australia-wants-nuclear-powered-submarines>

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

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