## Nuclear, Missile & Space Digest

Volume 15, Number 10

Amb. Sujan R. Chinoy

May 31, 2023

## Convenor

## A. India

- Indian companies sign agreement for nuclear plant construction
  - India opts for local manufacturing of loitering munition
  - India inks 1st defence pact with Caribbean nation
  - India, Russia cut deal on payment delays, defense production
- India's nuclear power industry may be opened to foreign investments
- Sullivan to convene US-India-Saudi-UAE NSAs meet in Riyadh over weekend
- Indian Defence Forces Ground ALH Dhruv Helicopter In View Of Recent Crashes
- Fighting unfit: Latest MiG-21 crash is symptomatic of deeper malaise and one that's undermining India's defence preparedness
- PM Modi recalls nuclear-tests, says India looks at tech for progress, not to assert itself
- India imposes phased import ban on 928 defence items in latest self-reliance push

## **B. Russia**

- FSB prevents terror attack on ZNPP executive plotted by Ukrainian intelligence
- US poaching experts on weapons of mass destruction from Ukraine Russian military
- Project 885M nuclear-powered sub to join Russian Navy by yearend source
- Rosenergoatom says Kiev not given up plans to seize Zaporozhye NPP by force
- US sanctions against Rosatom to wreak havoc on nuclear sector expert

## C. Pakistan

- Mint Explainer: What intelligence leaks reveal about Pakistan's ties with the US
- Chinese Defense Minister meets with Pakistani Chief of Naval Staff
- Imran Khan arrest: Indian defence forces keeping close watch on developments in Pakistan, tighten vigil along borders
- 13 Killed in Pakistan Security Base Hostage-Taking Attack
- UAE, Pakistan discuss cooperation relations in defense and military affairs



## Indian Pugwash Society

No.1, Development Enclave, Rao Tula Ram Marg, Near USI , Delhi-110010 Email: indianpugwashsociety@gmail.com

Tel. No (91-11) 2671-7983

Fax No. (91-11)2615-4192

**Executive Council** 

## Cdr. (Dr.) Probal K. Ghosh

Air Marshal S. G. Inamdar (Retd.)

Dr. Roshan Khanijo

Amb. R. Rajagopalan

Dr. Rajesh Rajagopalan

Shri Dinesh Kumar Yadvendra

## D. Europe

- IAEA Mission Commends Sweden's Management of Nuclear Power Plant Radioactive Waste and Spent Fuel, Encourages Improvements for Governance of Some Other Radioactive Waste
- Finland's nuclear and renewable power strengths provide a solid foundation for reaching its ambitious climate targets, IEA review says
- IAEA Mission to Georgia Finds Progress in Nuclear Security Arrangements, Encourages Continued Improvement
- Europe Presses White House to Address Iran's Growing Nuclear Program
- The Russian Nuclear Company The West Can't Live Without
- NuScale SMR simulator opens in Romania

## E. Ukraine

- Update 156 IAEA Director General Statement on Situation in Ukraine
- Impact of evacuations on Zaporizhzhia 'closely monitored' by IAEA
- Ukraine's occupied Zaporizhzhia nuclear plant faces possible staffing crunch
- Update 157 IAEA Director General Statement on Situation in Ukraine

## F. United States of America

- Amid China pressure, US and Philippines recommit to security alliance
- Russia 'very unlikely' to use nuclear weapons, US intel chief
- U.S., South Korea Agree to Strengthen Nuclear Coordination
- US watchful for surprise Israeli attack on Iran as nuclear crisis intensifies
- US regulators OK spent nuclear fuel facility in New Mexico
- Biden unlikely to deliver special nuclear disarmament message at Hiroshima G7
- Microsoft to buy power from nuclear fusion company Helion
- Milley Says Investments in Military Capabilities Are Paying Off

## West Asia

## G. Iran

- AEOI Head Hails Indigenous Nuclear Industry
- We have decided to end commotion over our nuclear program: Iran's nuclear chief
- IRGC to build aircraft carrier
- Iran Navy destroyers equipped with new missile
- Iran to get first shipment of SU-35 warplanes next week
- FM: Exchanges of Delegations Between Iran, IAEA Underway

## H. Israel

- BIRD completes deliveries of additional AMPS systems for Czech Mi-17 helicopters
- Israel Aerospace Industries awarded \$100 million contract to provide airborne SIGINT solutions to international customer
- Estonia signs contract with Israel Aerospace Industries to acquire long-range loitering munitions

- Ukraine receives Israeli missile warning systems
- IDF launches Operation Shield and Arrow against the Islamic Jihad in Gaza
- Elbit Systems awarded \$71 million contract with British Army
- Day 3: Israel continues operation "Shield and Arrow" against the Islamic Jihad in Gaza
- Israel Aerospace Industries, ATLAS ELEKTRONIK unveil joint development integrated BlueWhale unmanned submarine
- Shield and Arrow in numbers
- Iran claims it has added 2000-km range missiles to navy vessels

## I. Syria

• Iran Ready to Arm Syria with Advanced Weapons: Defense Minister

## J. Turkiye

- Türkiye's homegrown 5th-generation fighter jet named KAAN
- 'Türkiye hopes to serve friendly countries for aircraft retrofit'
- Turkish fighter jet KAAN to fly after high-speed taxi tests
- Türkiye rejected US proposal to send S-400s to Ukraine: Top diplomat
- Turkish UCAV Akýncý fires Roketsan cruise missile in global 1st
- Türkiye's long-range air defense system Siper completes final test

## K. United Arab Emirates

• UAE signs nuclear energy cooperation agreements with China bodies

## L. East Asia

- Singapore backs Aukus and says Australia could play 'bigger role' in regional security
- Japanese, South Korean commanders tour US Navy nuclear sub in military 'first'
- Japan, US, S. Korea discuss sharing of N. Korea missile data

## M. North Korea

• North Korea Issues Warning After US-South Korea Summit

## N. Japan

- France, Japan Sign Nuclear Partnership Deal
- IAEA Task Force Issues New Report on Regulatory Aspects of Water Discharge at Fukushima Daiichi

## O. South Korea

- South Korea urges resolution of dispute with US over nuclear exports
- Japan to reassure South Korean experts on safety of Fukushima water release

### P. Australia

- Secret China 'war-gaming' exercises expose Australia's defence weaknesses
- UK and Australian visit to British home of next-generation nuclear submarines
- US Clears \$207M Maritime Surveillance Systems Sale to Australia
- New Agency And New Regulator To Deliver Australia's SSN Program
- Australia to boost Pacific, defence spending in budget
- Australia Invests in Local Production of New Bomb Disposal Robots
- Missile launcher a game-changer
- Nuclear power at least 15 years away, says regulator

### A. India

## Indian companies sign agreement for nuclear plant construction

#### World Nuclear News, May 2, 2023

The supplementary joint venture agreement between NTPC - the country's largest integrated energy company - and government enterprise Nuclear Power Corporation of India Ltd (NPCIL) is for the development of six 700 MWe pressurised heavy water reactors (PHWRs) across two sites. The joint venture company will "initially" develop two 700 MWe PHWRs at Chutka in Madhya Pradesh and four at Mahi Banswara in Rajasthan. These are amongst a list of ten PHWR reactors that have already been accorded administrative approval and financial sanction to be built in "fleet mode".

https://www.world-nuclear-news.org/Articles/ Indian-companies-sign-agreement-for-nuclearplant

## India opts for local manufacturing of loitering munition

#### Israel Defense, May 2, 2023

The Indian Ministry of Defense decided to procure 450 Nagastra-1 Loitering ammunition for its armed forces, manufactured by the Indian manufacturer Economic Explosives. According to the official press release, the Nagastra-1 prevailed over competitors from Poland and Israel. Economic Explosives describes he Nagastra-1 as an in-house development and consists of components that are 75% Indianmade. It is equipped with a 1.5 kg prefragmented warhead and, with a launch mass of eight kilograms and capable of independently detecting and engaging targets at a distance of up to 15 km. The system also has a day-and-night vision camera in the front. The Nagastra-1 is powered by two propellers with electric motors, which are integrated into the wings.

https://www.israeldefense.co.il/en/node/58030

## India inks 1st defence pact with Caribbean nation

#### Tribune India, May 2, 2023

India, for the first time, has included a Caribbean nation – the Dominican Republic – into the ITEC-Defence Scheme, under which the armed forces personnel of that country will get trained at various military training institutes in the country. The pact was among the several signed during External Affairs Minister Jaishankar's visit last week. The two sides also agreed to deepen cooperation in cutting-edge sectors such as space exploration, satellite data management, artificial intelligence, biotechnologies, information and communication technologies and more. A meeting between Jaishankar and his counterpart Roberto Alvarez also focused on bilateral, regional as well as international issues. The two ministers also jointly inaugurated the Indian embassy, which was opened in 2022.

https://www.tribuneindia.com/news/nation/ india-inks-1st-defence-pact-with-caribbeannation-503857

## India, Russia cut deal on payment delays, defense production

#### Defense News, May 4, 2023

India and Russia have agreed to resolve delayed payments related to defense contracts, while also formalizing a plan for the local production of Russian equipment and spare parts. The planned resolution comes as India and China are caught up in a territorial dispute near their borders, and as the West implements sanctions on Moscowamid Russia's invasion of Ukraine.

As a result of the economic restrictions, India has been unable to make payments to Russia since April 2019. India has attempted to install an alternative rupeeruble payment to cover the costs, but Russia declined the proposal. The amount due totals about \$3 billion as of April 2023, a government source told Defense News on the condition of anonymity because the individual was not authorized to speak to the press.

https://www.defensenews.com/global/asia-pacific/ 2023/05/04/india-russia-cut-deal-on-paymentdelays-defense-production/

## India's nuclear power industry may be opened to foreign investments

#### The Economic Times, May 5, 2023

The measures have been recommended by a government panel, set up by think-tank Niti Aayog which is headed by Prime Minister Narendra Modi. Under India's Atomic Energy Act 1962, the government plays a central role in developing and running nuclear power stations. A digital marketing course is an essential investment for individuals seeking to thrive in the rapidly evolving digital landscape. This specialised programme equips participants with the knowledge and skills needed to leverage digital channels and strategies effectively. Through comprehensive modules covering various aspects of digital marketing, including search engine optimization (SEO), social media marketing, content creation, and data analytics, participants gain a deep understanding of how to create impactful online campaigns.

https://economictimes.indiatimes.com/industry/ energy/power/india-considering-allowing-foreigninvestment-in-nuclear-power/articleshow/ 100015038.cms?from=mdr

## Sullivan to convene US-India-Saudi-UAE NSAs meet in Riyadh over weekend

#### Economic Times, May 6, 2023

Sullivan said on Thursday he will travel to Saudi Arabia this weekend for talks with Saudi leaders, as the United States seeks to bolster ties with Riyadh. Sullivan, speaking at the Washington Institute for Near East Policy, said he would be traveling to Saudi Arabia on Saturday for talks with Saudi leaders. He is expected to meet with Saudi Crown Prince Mohammed bin Salman. The US National Security Advisor Jake Sullivan is planning a meeting of Saudi-UAE-India NSAs in Saudi Arabia this weekend in what would be the first such initiative involving national security advisers in the volatile region where India has huge stakes.

https://economictimes.indiatimes.com/news/ defence/us-nsa-to-meet-up-with-india-saudiuae-counterparts/articleshow/ 100022274.cms?from=mdr

## Indian Defence Forces Ground ALH Dhruv Helicopter In View Of Recent Crashes

#### Zee News, May 6, 2023

Indian defence forces have temporarily grounded the Advanced Light Helicopter (ALH) Dhruv in view of the recent crashes. The move has been made as a precautionary measure to prevent any further accidents. The choppers will stay grounded for more than a month or two. The decision was supplemented by the chopper crash on May 4, claiming the lives of Indian Army personnel. ANI quotes defence officials saying, "In view of the crash in which one Army jawan lost his life on May 4, operations of the ALH Dhruv choppers have been halted as a precautionary measure by the force."

https://zeenews.india.com/aviation/indiandefence-forces-ground-alh-dhruv-helicopter-inview-of-recent-crashes-2603655.html

## Fighting unfit: Latest MiG-21 crash is symptomatic of deeper malaise and one that's undermining India's defence preparedness

#### The Times of India, May 10, 2023

The latest MiG-21 crash has killed three civilians and injured three more – wreckage from the burning aircraft fell on a village home in Rajasthan. The inglorious history of MiG-21 crashes in this country is beginning to look both like a tragedy and a farce. The Russian aircraft, of 1960s

vintage, should have been phased out decades ago. That three squadrons of the MiG-21 continue to be in service is a huge indictment of defence planning and modernisation. It is shocking that 55 military personnel have lost their lives in more than 50 aircraft and helicopter accidents in just over five years. The MiG-21 as well as the Cheetah/Chetak helicopters have been major culprits. Far from ensuring India's military capabilities, these flying coffins have de facto become weapons against the armed forces themselves. The MiG-21s are supposed to be replaced by the indigenous Tejas fighter.

https://timesofindia.indiatimes.com/blogs/toieditorials/fighting-unfit-latest-mig-21-crash-issymptomatic-of-deeper-malaise-and-one-thatsundermining-indias-defence-preparedness/

## PM Modi recalls nuclear-tests, says India looks at tech for progress, not to assert itself

#### Indian Express, May 12, 2023

Modi said measures taken since 2014 have resulted in big changes in the field of science and technology. "The Start-up India Campaign, Digital India, and National Education Policy have helped India gain new heights in the field.... The number of patents has increased from 4,000 per year 10 years ago to more than 30,000 today. Registration of designs has grown from 10,000 to 15,000 in this period. The number of trademarks has grown from less than 70,000 to more than 2,50,000," he said. On the occasion, Modi laid the foundation stone for multiple projects related to scientific and technological advancement worth more than Rs 5,800 crore. These include Laser Interferometer Gravitational Wave Observatory in Hingoli, Maharashtra; Homi Bhabha Cancer Hospital and Research Centre in Jatni, Odisha; and the Platinum Jubilee Block of Tata Memorial Hospital in Mumbai.

https://indianexpress.com/article/india/pm-modirecalls-nuclear-tests-says-india-looks-at-tech-forprogress-not-to-assert-itself-8604857/

## India imposes phased import ban on 928 defence items in latest selfreliance push

#### Hindustan Times, May 14, 2023

India has announced a fresh list of 928 military items, including line replacement units, sub-systems and spares, that will come under a phased import ban between December 2023 and December 2029, in its latest push for self-reliance in the defence manufacturing sector, officials aware of the matter said on Sunday. It covers items used in fighter planes, trainer aircraft, warships and different types of ammunition. This is the fourth 'positive indigenisation list' of "strategically important" components, used by defence public sector undertakings (DPSUs), placed under an import ban over the last two years. The previous lists were published by the defence ministry in December 2021, March 2022 and August 2022.

https://www.hindustantimes.com/india-news/ india-announces-fourth-positive-indigenisationlist-for-defence-manufacturing-bans-importsworth-rs-715-crore-101684064698384.html

#### B. Russia

## FSB prevents terror attack on ZNPP executive plotted by Ukrainian intelligence

#### TASS, May 5, 2023

A terror attack on a Zaporozhye Nuclear Power Plant executive plotted by Ukrainian military intelligence agents has been thwarted by Russian Federal Security Service (FSB) officers, the FSB press center told TASS on Friday.

"The Russian Federal Security Service has stopped the activities of a sabotage and terrorist group of Ukrainian special services agents on the territory of the Zaporozhye Region. As a result of measures taken at the preparation stage, a terrorist act against a Zaporozhye NPP executive was foiled," it said. According to the FSB, the criminal activities were coordinated by officers of the Ukrainian defense ministry's main intelligence directorate both directly and via a go-between in Finland.

#### https://tass.com/defense/1614073

## US poaching experts on weapons of mass destruction from Ukraine – Russian military

#### TASS, May 5, 2023

The US Department of Energy has been recruiting experts who worked on weapons of mass destruction in Ukraine, Chief of Russia's Nuclear, Biological and Chemical Protection Troops Lieutenant General Igor Kirillov said on Friday.

"Please pay attention to the official statement that Principal Deputy Director in the Office of Science at the US Department of Energy John Stephen Binkley made on April 4, 2022. <...> The document presented here confirms that the recruitment of specialists with experience and knowledge in the field of weapons of mass destruction was one of the Energy Department's focuses," he pointed out at a briefing on the analysis of documents pertaining to Washington's military biological activities.

#### https://tass.com/defense/1614269

## Project 885M nuclear-powered sub to join Russian Navy by yearend source

#### TASS, May 11, 2023

The Project 885M second serial-produced multipurpose nuclear-powered submarine Krasnoyarsk will be handed over to the Russian Navy by the end of this year, a source in the defense industry told TASS on Thursday.

"The delivery of the submarine Krasnoyarsk to the Navy is scheduled for December 2023 or a bit later, for the first quarter of 2024," the source said.

ASS has no official confirmation of this information yet.

The Project 885M nuclear-powered sub Krasnoyarsk built by the Sevmash Shipyard (part of the United Shipbuilding Corporation) was earlier expected to be handed over to the Russian Navy in late 2022.

#### https://tass.com/defense/1615827

## Rosenergoatom says Kiev not given up plans to seize Zaporozhye NPP by force

#### TASS, May 12, 2023

Kiev lies to the global community by pretending it doesn't want to seize the Zaporozhye nuclear power plant by force, Renat Karchaa, an adviser to the head of the Rosenergoatom concern, told TASS on Friday. Earlier, Pyotr Kotin, the head of Ukraine's Energoatom, said that the Ukrainian military would bypass the Zaporozhye NPP during its planned counterattack to avoid damaging it. According to him, Kiev plans to encircle the town of Energodar, where the plant is located, and cut the road south to Crimea. "I would say that Kotin is putting up a front with these statements. The purpose of such statements is obvious to me: to misinform, to disorient us and at the same time to present themselves in the eyes of the world community as good guys who allegedly care about nuclear safety," Karchaa said.

https://tass.com/defense/1616361

## US sanctions against Rosatom to wreak havoc on nuclear sector – expert

#### TASS, May 12, 2023

The nuclear sector will face a serious crisis if the United States imposes sanctions against Russia's state nuclear corporation Rosatom, Renat Karchaa, an adviser to the director general of Russia's Rosenergoatom nuclear power engineering company, told TASS on Friday.

Earlier, Democrat Gregory Meeks, a member of the US House of Representatives from New York, came out with an initiative to impose sanctions on Rosatom, as well as on any individual or legal entity that endangered the Zaporozhye Nuclear Power plant. "If the United States ultimately imposes sanctions on Rosatom, it will cause turbulence in the nuclear sector. It's not just replacing one fuel with another. It is a complicated technological process. They will tilt the balance which will lead to a serious crisis," Karchaa said.

https://tass.com/defense/1616623

#### C. Pakistan

## Mint Explainer: What intelligence leaks reveal about Pakistan's ties with the US

#### Mint, May 1, 2023

Continued coverage of leaked US intelligence documents, which surfaced in April, have put the spotlight on Pakistan. According to a report in the Washington Post, leaked intelligence documents show that Pakistan's Minister of State Hina Rabbani Khar argued in a private that Islamabad's ties with the US could prevent it from fully leveraging its relationship with China. Khar's memo, titled 'Pakistan's Difficult Choices' was the subject of a Washington Post report, part of its ongoing investigation into the leaked intelligence documents, which first appeared on popular messaging platforms such as Discord in April. As the Post points out, it is unclear how US intelligence agencies acquired the memo. Since the leaks American intelligence has faced criticism, particularly from allies such as South Korea, for intercepting communications of senior lawmakers to ascertain their position on the war in Ukraine.

https://www.livemint.com/opinion/online-views/ mint-explainer-what-intelligence-leaks-revealabout-pakistan-s-ties-with-the-us-11682931679717.html

## Chinese Defense Minister meets with Pakistani Chief of Naval Staff

#### China Millitary, May 8, 2023

Chinese State Councilor and Defense Minister General Li Shangfu met with Admiral Amjad Khan Niazi, Chief of the Naval Staff of Pakistani Navy, in Beijing on the morning of May 8. Li said that President Xi Jinping attaches great importance to bilateral relations and had met with Pakistani prime minister three times last year. The Chinese side is willing to work with the Pakistani side to implement the important consensus reached by the leaders of the two countries, further strengthen high-level exchanges and strategic communication, and make the China-Pakistan relations a model for building a community of shared future for mankind. The mil-to-mil relationship is an important part of the bilateral relations. Both sides have achieved sound cooperative results in fields of delegate exchanges, joint exercises, equipment and technology, counter-terrorism, etc., while the cooperation between the two navies is getting deeper.

http://eng.chinamil.com.cn/CMC/ News\_209224/16222792.html

## Imran Khan arrest: Indian defence forces keeping close watch on developments in Pakistan, tighten vigil along borders

#### Times of India, May 9, 2023

Amid the deteriorating situation in Pakistan after former Pakistan PM Imran Khan's arrest on Tuesday, the Indian defence forces are keeping a close watch on the developments there." Indian defence forces are on a vigil and are keeping a close watch on the situation in Pakistan, in view of the developments there. Strong vigil being maintained by the forces along the Line of Control and the international border," defence sources told here.PTI chief Imran Khan was arrested on Tuesday from Islamabad High Court in connection with the Al-Qadir Trust case. The main concerns for the Indian side are that the Pakistan Army may try to open up a new front along the LoC by blaming Indian forces or other means to relieve the pressure from internal factors, the sources said.

https://timesofindia.indiatimes.com/india/ imran-khan-arrest-indian-defence-forceskeeping-close-watch-on-developments-inpakistan-tighten-vigil-along-borders/ articleshow/100109384.cms

## 13 Killed in Pakistan Security Base Hostage-Taking Attack

#### The Defense Post, May 14, 2023

More than a dozen people were killed in an overnight battle between Pakistan paramilitary troops and militants who stormed their base and took families hostage, the army said. "Well equipped" fighters assaulted a Frontier Corps compound in Muslim Bagh, Balochistan province, and captured three families in a residential block, the military said. Fighting raged from Friday evening until Saturday morning and "the complex clearance operation involved hostage rescue operation," the Inter-Services Public Relations (ISPR) said in a statement. No group immediately claimed responsibility for the attack but ethnic Baloch separatist groups have for decades waged a rebellion against the state in the southwestern province, frequently targeting security forces.

https://www.thedefensepost.com/2023/05/14/ pakistan-security-base-attack/

## UAE, Pakistan discuss cooperation relations in defense and military affairs

#### Gulf News, May 15, 2023

President His Highness Sheikh Mohammed bin Zayed Al Nahyan has discussed with General Asim Munir, Chief of Army Staff of Pakistan, cooperation relations and ways to boost them, especially in defense and military affairs. During a phone call, Sheikh Mohamed and General Munir explored avenues to support and strengthen the UAE-Pakistan ties to serve the common interests of both nations. Sheikh Mohamed underscored the UAE's commitment to supporting efforts that promote harmony and stability in Pakistan, as well as fulfilling the aspirations of its people for progress and prosperity.

https://gulfnews.com/uae/government/uaepakistan-discuss-cooperation-relations-in-defenseand-military-affairs-1.1684097480806

#### D. Europe

IAEA Mission Commends Sweden's Management of Nuclear Power Plant Radioactive Waste and Spent Fuel, Encourages Improvements for Governance of Some Other Radioactive Waste

#### IAEA, May 2, 2023

An International Atomic Energy Agency (IAEA) mission said that Sweden has a comprehensive, robust and wellfunctioning system for safely managing radioactive waste and spent nuclear fuel from nuclear power plants and commended the country's development of a concept for spent fuel disposal. The mission advised Sweden to improve its national policies and strategies for nonnuclear radioactive waste that originates, for example, from industrial uses, research, or medical applications.

The Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (ARTEMIS) team concluded the eleven-day mission to Sweden on 27 April. The team comprised eight experts from Belgium, Finland, France, Germany, the Netherlands, Norway, Switzerland, the United States of America and three IAEA staff members.

https://www.iaea.org/newscenter/pressreleases/ iaea-mission-commends-swedens-managementof-nuclear-power-plant-radioactive-waste-andspent-fuel-encourages-improvements-forgovernance-of-some-other-radioactive-waste

## Finland's nuclear and renewable power strengths provide a solid foundation for reaching its ambitious climate targets, IEA review says

#### International Energy Agency, May 5, 2023

Finland has one of the world's most ambitious carbon neutrality targets and is in a strong position to achieve them given its already low reliance on fossil fuels. But to fully reach its climate targets while ensuring energy security and promoting a sustainable economy, greater efforts are needed to speed up the deployment of solar and wind, and to wean transport and industry off their reliance on oil and gas, according the IEA's latest policy review.

Since the Agency's last policy review in 2018, Finland has updated its Climate Change Act to include a legal requirement to reach carbon neutrality by 2035, along with binding targets to reduce all greenhouse gas emissions by between 90% and 95% by 2050.

https://www.iea.org/news/finland-s-nuclear-andrenewable-power-strengths-provide-a-solidfoundation-for-reaching-its-ambitious-climatetargets-iea-review-says

## IAEA Mission to Georgia Finds Progress in Nuclear Security Arrangements, Encourages Continued Improvement

### IAEA, May 10, 2023

The International Atomic Energy Agency (IAEA) completed an advisory service mission to Georgia focused on assessing the country's nuclear security regime for nuclear and other radioactive material out of regulatory control (MORC). The team said the country has made progress in the development of arrangements to detect and respond to criminal or intentional unauthorised acts involving MORC. It encouraged Georgia to continue to develop these arrangements and their associated plans and procedures, and identified several examples of good practice in this area of nuclear security. The mission, carried out at the request of the Government of Georgia, took place from 24 April to 5 May and involved a team of eight international experts from France, Greece, Jordan, Spain, United Kingdom, United States of America, Vietnam, and one IAEA staff member.

https://www.iaea.org/newscenter/pressreleases/iaeamission-to-georgia-finds-progress-in-nuclearsecurity-arrangements-encourages-continuedimprovement

## Europe Presses White House to Address Iran's Growing Nuclear Program

#### The Wall Street Journal, May 12, 2023

Alarmed by Iran's progress in enriching uranium at close to weapons-grade levels, European countries are pressing the Biden administration to revive a diplomatic track with Tehran that they hope would help avoid a possible nuclear crisis.

https://www.wsj.com/articles/europe-presseswhite-house-to-address-irans-growing-nuclearprogram-30ecd415

## The Russian Nuclear Company The West Can't Live Without

#### Bloomberg, May 13, 2023

Cutting the heart out of a nuclear power plant is a surgical procedure that only a few specialists are equipped to handle.

The process begins by launching plasmatorch-wielding robots into an empty pool surrounded by thick concrete walls. From there, the remote-controlled machines make circular cuts, as if slicing pineapple rings, through a 600-ton steel vessel that contains radiation generated over decades of splitting atoms. These rings are then diced into meter-long pieces and transported via secure convoy to radioactive waste repositories, where they are left to cool down — indefinitely.

https://www.bloomberg.com/news/articles/2023-05-13/the-russian-nuclear-company-the-westcan-t-live-without#xj4y7vzkg

## NuScale SMR simulator opens in Romania

#### World Nuclear News, May 15, 2023

The first simulator for the control room of a NuScale VOYGR small modular reactor (SMR) power plant in Europe has opened at the University Politehnica of Bucharest in Romania. The simulator is the fifth in total, but the first outside the USA. The NuScale Energy Exploration Centre (E2 Centre) at the university's Faculty of Energy Engineering offers users a hands-on opportunity to apply nuclear science and engineering principles through simulated, real-world nuclear power plant operation scenarios. The E2 Centre employs state-ofthe-art computer modeling to simulate a NuScale VOYGR SMR power plant control room.

https://www.world-nuclear-news.org/Articles/ NuScale-SMR-simulator-opens-in-Romania

#### E. Ukraine

## Update 156 – IAEA Director General Statement on Situation in Ukraine

#### IAEA, May 6, 2023

International Atomic Energy Agency (IAEA) experts present at Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) have received information that the announced evacuation of residents from the nearby town of Enerhodar – where most plant staff live – has started and they are closely monitoring the situation for any potential impact on nuclear safety and security, Director General Rafael Mariano Grossi said today.

While operating staff remain at the site, Director General Grossi expressed deep concern about the increasingly tense, stressful, and challenging conditions for personnel – and their families – at Europe's largest nuclear power plant (NPP), located by the frontline in a southern Ukrainian region that has seen a recent increase in military presence and activity. The IAEA experts at the site are continuing to hear shelling on a regular basis, including late on Friday.

https://www.iaea.org/newscenter/pressreleases/ update-156-iaea-director-general-statement-onsituation-in-ukraine

## Impact of evacuations on Zaporizhzhia 'closely monitored' by IAEA

#### World Nuclear News, May 9, 2023

The evacuation of people from the town of Energodar, where many of the Zaporizhzhia

nuclear power plant's staff and their families live, is being closely monitored by the International Atomic Energy Agency (IAEA), with its director general warning the situation in the area was "increasingly unpredictable". The Zaporizhzhia nuclear power plant is the largest in Ukraine, and Europe, with six reactors. It is located on the current frontline between Ukrainian and Russian forces. It has been under the control of Russian military forces since the start of March 2022. IAEA Director General Rafael Mariano Grossi has spent months seeking to get agreement from both sides that the nuclear power plant should be protected and not be fired upon, or fired from, to reduce the risks of intentional or unintentional damage from the military conflict around it.

https://www.world-nuclear-news.org/Articles/ Evacuation-of-nearby-town-prompts-fresh-IAEA-Zapor

## Ukraine's occupied Zaporizhzhia nuclear plant faces possible staffing crunch

#### AP News, May 10, 2023

Russia intends to relocate around 3,100 Ukrainian staff from Europe's largest nuclear plant, Ukraine's atomic energy company claimed Wednesday, warning of a potential "catastrophic lack of qualified personnel" at the Zaporizhzhia facility in Russia-occupied southern Ukraine.

Workers who signed employment contracts with various affiliates of Russia's nuclear agency Rosatom following Moscow's capture of the Zaporizhzhia plant early in the war are the bulk of those set to be taken to Russia along with their families, Energoatom said in a Telegram post.

Energoatom didn't specify whether the employees would be forcibly moved out of the plant. It also wasn't immediately possible to verify Energoatom's claims about Moscow's plan.

https://apnews.com/article/ukraine-russia-warzaporizhzhia-nuclear-plant-0dc0cf34f2fb547f33d5b98bbaf200c1

## Update 157 – IAEA Director General Statement on Situation in Ukraine

#### IAEA, May 12, 2023

Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) still has enough essential staff for its current reduced level of operations, but the continued lack of maintenance personnel on-site could negatively impact nuclear safety and security and is not sustainable, Director General Rafael Mariano Grossi of the International Atomic Energy Agency (IAEA) said today.

Europe's largest nuclear power plant (NPP) – located by the frontline – has seen a considerable reduction in staffing numbers since the armed conflict in Ukraine began nearly 15 months ago. Concerns about the difficult and challenging circumstances for plant personnel and their families have deepened further amid signs of a growing military presence and activity in the region.

https://www.iaea.org/newscenter/pressreleases/ update-157-iaea-director-general-statement-onsituation-in-ukraine

### F. United States of America

## Amid China pressure, US and Philippines recommit to security alliance

#### Arab News, May 2, 2023

President Joe Biden told his counterpart Ferdinand Marcos Jr. on Monday that the US commitment to the defense of its ally was "ironclad," including in the South China Sea where Manila is under pressure from China.

Marcos, on the first White House visit by a Philippines leader in 10 years, stressed the importance of the US as his country's sole treaty ally in a region with "arguably the most complicated geopolitical situation in the world right now."

The two countries reaffirmed their decadesold security alliance in a trip that marks a dramatic turnaround in US-Philippine relations as both countries seek ways to push back against what they see as China's increasingly aggressive actions near Taiwan and in the South China Sea.

https://www.arabnews.com/node/2296606/world

## Russia 'very unlikely' to use nuclear weapons, US intel chief

#### Reuters, May 4, 2023

Russia is very unlikely to use its nuclear weapons, the top U.S. intelligence official said on Thursday, despite past saberrattling from the Kremlin and the heavy casualties that eMoscow is enduring in its invasion of Ukraine.

"It's very unlikely, is our current assessment," Director of National Intelligence Avril Haines told the Senate Armed Services Committee.

Nuclear tensions between Russia and the United States have increased since the start of the conflict with Ukraine with Putin repeatedly warning that Russia is ready to use its nuclear arsenal if necessary to defend its "territorial integrity."

https://www.reuters.com/world/europe/russiavery-unlikely-use-nuclear-weapons-us-intelchief-2023-05-04/

### U.S., South Korea Agree to Strengthen Nuclear Coordination

#### Arms Control Associaltion, May, 2023

The United States and South Korea announced steps to give Seoul more input into U.S. nuclear planning amid growing support in South Korea for a domestic nuclear weapons program to counter the threat from North Korea. U.S. President Joseph Biden and South Korean President Yoon Suk Yeol agreed to create the U.S-South Korean Nuclear Consultative Group during Yoon's visit to Washington on April 26. According to a declaration issued by the two leaders, the group will "discuss nuclear and strategic planning" and manage the North Korean nuclear threat. The declaration states that the United States "commits to make every effort to consult with [South Korea] on any possible nuclear weapons employment on the

Korean peninsula," consistent with U.S. nuclear policy, and will "maintain a robust communication infrastructure" for consultations. The two countries also will plan for South Korean "conventional support to U.S. nuclear operations in a contingency."

https://www.armscontrol.org/act/2023-05/news/ us-south-korea-agree-strengthen-nuclear-coordination

## US watchful for surprise Israeli attack on Iran as nuclear crisis intensifies

#### Al-Monitor, May 5, 2023

Israel is increasingly concerned over Iran's advancement on its nuclear program, yet Prime Minister Benjamin Netanyahu is preventing Defense Minister Yoav Gallant from traveling to the United States for security consultations until he is invited to the White House. The frosty relations between the Israeli government and the White House affect both sides. The Americans are now concerned over Israel's next step on the Iranian file and not sure where Netanyahu is heading.

https://www.al-monitor.com/originals/2023/05/ us-watchful-surprise-israeli-attack-iran-nuclearcrisis-intensifies

## US regulators OK spent nuclear fuel facility in New Mexico

#### AP News, May 10, 2023

U.S. nuclear regulators licensed a multibillion-dollar complex to temporarily store tons of spent nuclear fuel in New Mexico from commercial power plants around the nation, a decision likely to be challenged in court.

The Nuclear Regulatory Commission issued its decision Tuesday, saying it will allow the energy company Holtec International to build and operate the facility in southeastern New Mexico. New Jersey-based Holtec may still need to acquire permits from the state, and top New Mexico officials have vowed to fight the project. Hot and highly radioactive, spent fuel consists of uranium pellets inside metal rods. It can only be handled by machines and people have to be physically shielded from it, usually by steel or concrete.

https://apnews.com/article/nuclear-power-plantfuel-storage-radioactive-2019af77721db2869ee5165dda5d1cef

## Biden unlikely to deliver special nuclear disarmament message at Hiroshima G7

#### The Japan Times, May 10, 2023

Although nuclear disarmament and nonproliferation will be a key – and symbolic – topic of discussion at next week's Group of Seven leaders' summit in Hiroshima, U.S. President Joe Biden is unlikely to deliver a separate statement on the issue when he becomes the second American president to visit the atomicbombed city, Japan's ambassador to the United States has said.

"We are not going to try to ask President Biden to come up with a specific message this time because this is not a bilateral visit," Ambassador Koji Tomita said during a news conference in Washington on Tuesday. Instead, Japan will aim to have the G7 leaders release a "strong message" on the issue of nuclear weapons, likely in a joint statement.

## Microsoft to buy power from nuclear fusion company Helion

#### The Economic Times, May 11, 2023

Private US nuclear fusion company Helion Energy will provide Microsoft with electricity in about five years, the companies said on Wednesday, in the first such deal for the power source that fuels the sun but has been elusive on Earth. Government labs and more than 30 companies are racing to generate power from fusion, which could one day help the world slash emissions linked to climate change. Unlike today's fission reactors it could generate power without producing long-lasting radioactive waste. Fusion occurs when two light atoms such as hydrogen, heated extreme to

temperatures, fuse into one heavier atom releasing large amounts of energy.

https://energy.economictimes.indiatimes.com/ news/power/microsoft-to-buy-power-from-nuclearfusion-company-helion/100150728

## Milley Says Investments in Military Capabilities Are Paying Off

### U.S. Department of Defense, May 11, 2023

The U.S. military is the most lethal and capable armed force in the world because previous administrations and Congresses made the investments needed, Army Gen. A. Millev told the Senate Mark **Appropriations Defense Subcommittee** today. The chairman of the Joint Chiefs of Staff told the panel that the military's purpose is simple: "to defend the United States against all enemies, foreign and domestic." In this era, this means to deter great power war. "To do this, our No. 1 priority is readiness now and readiness in the future – and there is no other No. 1 priority," the general said.

https://www.defense.gov/News/News-Stories/ Article/Article/3393297/milley-says-investmentsin-military-capabilities-are-paying-off/

### West Asia

## G. Iran

## AEOI Head Hails Indigenous Nuclear Industry

#### Fars News Agency, May 3, 2023

Head of the Atomic Energy Organization of Iran (AEOI) Mohammad Eslami lauded the country's great progress in the nuclear industry, and underscored that the remarkable nuclear achievements have been merely obtained through the efforts made by the Iranian scientist and specialists. "We have a high standing in nuclear capacity; this highlevel position has been achieved through our efforts and is not borrowed or imported," the AEOI head said on Tuesday. "We have attained this position via research and with sincere efforts of all those who have been there since the very beginning," he added. Stressing that the AEOI has decided to eliminate the hype surrounding Iran's nuclear program,

Eslami criticized "the unfounded allegations" and the "propaganda campaign" aimed at limiting the country's nuclear work, which he said have stirred skepticism in some corners about the costs and benefits of nuclear technology for the country.

https://www.farsnews.ir/en/news/ 14020213000132/AEOI-Head-Hails-Indigens-Nclear-Indsry

## We have decided to end commotion over our nuclear program: Iran's nuclear chief

#### Tehran Times, May 3, 2023

Mohammad Eslami, chief of the Atomic Energy Organization of Iran, said in a ceremony in the Amir Kabir University of Technology on Tuesday that the Islamic Republic has decided to end "commotions" over the country's nuclear program. Salami said due to untruthful accusations against Iran for its nuclear program "our path of progress" has become more limited and more "hurdles" have been created every passing day and this has created a situation in which some Iranian citizens may ask what is the "advantage" of nuclear energy.

https://www.tehrantimes.com/news/484279/Wehave-decided-to-end-commotion-over-ournuclear-program-Iran-s

## IRGC to build aircraft carrier

#### Tehran Times, April 5, 2023

The Islamic Revolution Guards Corps (IRGC) is working to build a unique aircraft carrier with no par in the world, a senior IRGC commander announced late on Thursday. Alireza Tangsiri, who is the chief of the IRGC Navy, said the aircraft in question will be developed by Iran for the first time in the world. "In the future, we will see an aircraft carrier that does not exist in the world," he said, according to Iranian media. "This carrier has both the ability to carry aircraft and the ability to carry a number of missile-launching boats inside it, which has no equivalent in the world." According to General Tangsiri, the Shahid Mahdavi and Shahid Rodaki

vessels are a successful experience of entering this field and building vessels to improve the ability to sail for a long time, and "you will see newer generations of vessels with more capabilities in the future".

https://www.tehrantimes.com/news/484338/ IRGC-to-build-aircraft-carrier

## Iran Navy destroyers equipped with new missile

#### Tehran Times, May 6, 2023

The Iranian navy destroyers have been armed with cruise missiles called "Abu Mahdi", Commander of Iran's Army Navy Force Rear Admiral Shahram Irani announced on Saturday. The missiles are named after Abu Mahdi al-Mohandis, a senior commander with Iraq's Popular Mobilization Forces (PMF), who was assassinated together with General Qassem Soleimani in 2020. Abu Mahdi cruise missile is one of Iran's Aerospace Industries products with a range of over one thousand kilometers which can destroy any target, according to Iran's official news agency IRNA.

https://www.tehrantimes.com/news/484416/Iran-Navy-destroyers-equipped-with-new-missile

## Iran to get first shipment of SU-35 warplanes next week

#### Tehran Times, May 13, 2023

Iran will receive the first shipment of Russian SU-35 warplanes within the next week, according to a report on Friday. Facing severe Western sanctions, Tehran and Moscow have started to strengthen their relationship. In recent months, Iran and Russia have inked significant agreements to expand their economic, commercial, energy, and military ties. It was first reported by Iran's Persian-language media, which did not go into detail about the shipment. The SU-35 is a fourth-generation fighter aircraft primarily built for air superiority missions. There have been media reports in recent months alleging that Iran has received SU-35 aircraft from Russia.

https://www.tehrantimes.com/news/484677/Iran-to-get-first-shipment-of-SU-35-warplanes-next-week

## FM: Exchanges of Delegations Between Iran, IAEA Underway

#### Fars News Agency, May 14, 2023

Iranian Foreign Minister Hossein Amir Abdollahian said that great progress has been made in the course of cooperation between Tehran and the International Atomic Energy Agency (IAEA), and added that the two sides have been exchanging delegations away from media frenzy. Amir Abdollahian stated that "a good development has taken place in the course of cooperation" between Tehran and the UN nuclear agency, stressing the country had always been critical of IAEA chief Rafael Grossi's politically-charged approach towards the country and that he has even brought up the issue in a faceto-face meeting with him. The minister went on to underscore that President Seyed Ebrahim Rayeesi has declared it so transparently that Iran is serious about cooperation with the nuclear agency, and expects the IAEA to fulfill its duties within the technical frameworks and stay away from political issues.

https://www.farsnews.ir/en/news/ 14020224000665/FM-Exchanges-f-Delegains-Beween-Iran-IAEA-Underway

#### H. Israel

## BIRD completes deliveries of additional AMPS systems for Czech Mi-17 helicopters

Israel Defense, May 2, 2023

BIRD Aerosystems, an Israeli provider of innovative defense technology and solutions that protect the air, sea, and land fleets of governments and related agencies, announces that it has completed the deliveries of additional AMPS systems, including the MACS – a Missile Approach Confirmation Sensor, and a provision of SPREOS – the Self Protection Radar Electro-Optic System DIRCM, on Czech Mi-17 helicopters. This program is part of a follow-up program with the Czech Air Force that has been protecting its helicopters with the AMPS system for the last 15 years and has deployed them in the most complex environments, such as Afghanistan.

https://www.israeldefense.co.il/en/node/58037

## Israel Aerospace Industries awarded \$100 million contract to provide airborne SIGINT solutions to international customer

#### Israel Defense, May 2, 2023

Israel Aerospace Industries (IAI), through its defense electronics subsidiary, ELTA Systems, announced today that it has been awarded with a contract to provide airborne Signals Intelligence (SIGINT) solutions to an international customer. The contract size including systems delivery and maintenance will surpass \$100 million. Under the contract, ELTA will provide SIGINT systems and airborne communications suites for installation both on manned and unmanned aircraft. The SIGINT capabilities are designed to cope with the challenges of modern, dense communications and electronic environments, to analyze complex signal formats, and to build a real-time Electronic Order of Battle (EOB) providing time-critical intelligence. These systems will provide the customer with continuous, detailed intelligence on communications and enemy activity over a wide geographic area.

https://www.israeldefense.co.il/en/node/58038

## Estonia signs contract with Israel Aerospace Industries to acquire long-range loitering munitions

#### Israel Defense, May 3, 2023

The Republic of Estonia has signed an agreement with Israel Aerospace Industries (IAI) to procure advanced long-range loitering munitions, making it the one of the most expensive defense procurement Estonia has ever made. The procurement of long-range loitering munitions aims to strengthen Estonia's defenCe capability by significantly increasing its indirect fire capabilities. Along with extended range artillery ammunition, anti-ship missiles, and multiple launch rocket systems, Estonia will have various capabilities to influence the adversary from long distances in the near future.

https://www.israeldefense.co.il/en/node/58053

## Ukraine receives Israeli missile warning systems

#### Israel Defense, May 8, 2023

The first images of an Israeli-made radar on Ukrainian soil have surfaced online. These are likely to be radars intended for the "Red Alert" detection system that Israel had committed to install in Ukraine as a humanitarian measure of defense against missile attacks. The transfer of such radar systems requires the approval of the Israeli Ministry of Defense. Rada's are also used by the Israeli defense establishment o identify and classify aircrafts and rockets. The radars are connected to the "Red Army' system that alerts people within a threatened polygon. The actual warning can take place through horns or via cell phone. The radar's role is to alert that there is an imminent threat, as well as what kind of threat it is, where it will hit and when.

https://www.israeldefense.co.il/en/node/58094

## IDF launches Operation Shield and Arrow against the Islamic Jihad in Gaza

Israel Defense, May 9, 2023

Overnight, the IDF has launched a targeted campaign against Islamic Jihad in Gaza, named Operation Shield and Arrow. IDF fighter jets struck Khalil Bahitini, responsible for the rocket fire toward Israel in the past month. The IDF explains that Bahitini is the senior operational officer of Islamic Jihad and the commander of the Northern Gaza Division - entrusted with approving and carrying out all terrorist activities from northern Gaza and planning terrorist attacks on Israeli civilians. After the elimination of Tayseer Jabri during operation "Breaking Dawn" in August 2022, Bahitini took over his position. Bahitini was a member of the terrorist

organization's military council and had direct and active contact with senior members of the Islamic Jihads' Political Bureau.

https://www.israeldefense.co.il/en/node/58108

## Elbit Systems awarded \$71 million contract with British Army

#### Israel Defense, May 10, 2023

Elbit Systems announced that its UK subsidiary Elbit Systems UK was awarded a contract from the UK Ministry of Defence worth approximately \$71 million to supply, maintain and operate the Ground Manoeuvre Synthetic Trainer systems (GMST) for the Boxer armoured vehicles and Challenger 3 tanks under the British Army's Project Vulcan. The contract will be delivered over a three-year period with an additional nine year period that will include operation and maintenance services at UK facilities. The initial phase of delivery of Elbit Systems UK's systems will support the first arrivals of the British Army's new Mechanised Infantry Vehicle - Boxer. The initial capability provided by Elbit Systems UK will include a comprehensive Platform Trainer, delivering both collective and individual training requirements.

https://www.israeldefense.co.il/en/node/58125

## Day 3: Israel continues operation "Shield and Arrow" against the Islamic Jihad in Gaza

#### Israel Defense, May 11, 2023

Israel's "Shield and Arrow" operation against the Islamic Jihad terrorist group in Gaza has entered its third day. More than 500 rockets were fired at Israel since yesterday (Wednesday) afternoon. Overnight, the Israel Air Force targeted Ali Ghali, the commander of Islamic Jihad's Rocket Launching Force, as well as two other Islamic Jihad operatives in Gaza. The IDF tweeted that "Ghali was a central figure in IJ, as well as responsible for the recent rocket barrages launched against Israel."

Some 360+ rockets crossed over into Israeli territories, and most were either intercepted

or fell in open areas. According to the IDF, one in every five launches failed, with the rocket landing in the Gaza Strip, also resulting in civilian casualties. In Tel Aviv, the David's Sling air defense system was used for the first time to intercept a rocket.

#### https://www.israeldefense.co.il/en/node/58143

## Israel Aerospace Industries, ATLAS ELEKTRONIK unveil joint development integrated BlueWhale unmanned submarine

#### Israel Defense, May 11, 2023

Israel Aerospace Industries (IAI) and ATLAS ELEKTRONIK, a company of thyssenkrupp Marine Systems, officially launched their latest joint development for advanced anti-submarine warfare (ASW) missions at the Undersea Defence Technology (UDT) Conference and Exhibition in Rostock, Germany. In a festive ceremony at ELTA's exhibition booth, Eyal Shapira, Vice President and General Manager of ELTA's division for Air Defense and Naval Systems, and Michael Ozegowski, Chief Executive Officer of ATLAS ELEKTRONIK, unveiled the joint development, demonstrating an important milestone in the long-standing partnership between thyssenkrupp Marine Systems and the Israeli industry.

https://www.israeldefense.co.il/en/node/58144

## Shield and Arrow in numbers

#### Israel Defense, May 15, 2023

After five days, Israel's "Shield and Arrow" operation against the Islamic Jihad in the Gaza Strip has come to an end. The operation was launched following ongoing rockets fired at Israeli communities near the Gaza Strip. In an overwhelming opening move, the Israel Air Force targeted three of the Islamic Jihad's leaders, and throughout the operation it significantly damaged the organization's top command, launch capabilities, and reinforcement.

https://www.israeldefense.co.il/en/node/58170

## Iran claims it has added 2000-km range missiles to navy vessels

#### Israel Defense, May 15, 2023

Iran has mounted its domesticallydeveloped "Qadr-474" cruise missiles on two classes of the IRGC Navy vessels, namely Martyr Mahdavi and ì, according to Iranian state media. Rear Admiral Alireza Tangsiri, commander of the Islamic Revolutionary Guard's navy, was quoted in in the Tasnim news agency as saying that the cruise missile can hit targets within a range of 2,000 kilometers. Tangsiri added, that the advanced Soleimani warship (named after the former head of Quds force who was assassinated by the US in 2020), has been equipped with various types of missiles with ranges of 200, 300, 750 and 2,000 kilometers, and that the IRGC Navy is going to employ a new coast-to-sea cruise missile, named after Abu Mahdi Al-Muhandis.

https://www.israeldefense.co.il/en/node/58174

#### I. Syria

## Iran Ready to Arm Syria with Advanced Weapons: Defense Minister

#### Tasnim News, May 8, 2023

The Iranian defense minister, who was accompanying the Iranian president during a visit to Syria last week, held a meeting with his Syrian counterpart Ali Mahmoud Abbas in Damascus to weigh plans for closer cooperation between the two states.

Highlighting Iran's support for Syria in a full-fledged war against the Daesh (ISIL or ISIS) terrorist group, General Ashtiani said the Defense Ministry of Iran is prepared to arm the Syrian armed forces with the most advanced defense weapons. Voicing Iran's readiness to establish "defense and multilateral infrastructures" in Syria and strengthen the Arab nation's military arms capabilities, the defense minister said Iran can cooperate with Damascus in the construction of factories and production of "strategic defense equipment" in order to improve the Syrian people's security.

https://www.tasnimnews.com/en/news/2023/05/ 08/2891564/iran-ready-to-arm-syria-withadvanced-weapons-defense-minister

### J. Turkiye

## Türkiye's homegrown 5thgeneration fighter jet named KAAN

#### Daily Sabah, May 1, 2023

Türkiye's domestically developed 5thgeneration fighter jet will be named "KAAN," President Recep Tayyip Erdoðan announced Monday. Erdoðan's remarks came after the TF-X, known as the National Combat Aircraft (MMU), made a runway debut and successfully completed its first taxi test after starting its engines for the first time in mid-March. "Türkiye is now in every field, on land, in sea and submarine, in air and space," Erdoðan told the "Century of the Future" event in the capital Ankara. Erdoðan watched as KAAN and Hürjet, Türkiye's first nationally built jet-powered trainer and light attack aircraft, rolled on the runway of the Turkish Aerospace Industries (TAI) headquarters in Kahramankazan district.

https://www.dailysabah.com/business/defense/ turkiyes-homegrown-5th-generation-fighter-jetnamed-kaan

## 'Türkiye hopes to serve friendly countries for aircraft retrofit'

#### Daily Sabah, May 2, 2023

Türkiye wishes to retrofit friendly countries' aircraft in its factories in the near future, the country's defense chief said on Tuesday. "We believe that in the coming period, the retrofit operations of friendly and allied countries' aircraft will also be carried out in our factory, thus providing much more added value to the national economy," National Defense Minister Hulusi Akar said at the delivery ceremony of the fourth of A400M transport aircraft retrofitted in the central Kayseri province. The 2nd Air Maintenance Factory Directorate in Kayseri is one of the four centers in the world performing retrofit activities for A400M aircraft, which Akar described as a "source of pride."

https://www.dailysabah.com/business/defense/ turkiye-hopes-to-serve-friendly-countries-foraircraft-retrofit

## Turkish fighter jet KAAN to fly after high-speed taxi tests

#### Daily Sabah May 2, 2023

Türkiye's domestically developed KAAN fifth-generation fighter jet will make its maiden flight after completing high-speed taxi tests, a test pilot of the aircraft said. Gökhan Bayramoðlu told Anadolu Agency (AA) that the KAAN is on its way to becoming an effective weapon of the Turkish military with indigenous software and hardware. Its engine tests and system integration are already done, bringing it a step closer to its first flight, said Bayramoðlu. "We carried out taxi tests, and after successfully passing them, we will now work on the control systems and bring them to the flying position," the pilot added.

https://www.dailysabah.com/business/defense/ turkish-fighter-jet-kaan-to-fly-after-high-speedtaxi-tests

## Türkiye rejected US proposal to send S-400s to Ukraine: Top diplomat

#### Daily Sabah May 7, 2023

The United States asked Türkiye to send to Ukraine its Russian-made air missile defense system that triggered a major row with Washington, but Ankara refused the proposal, the country's top diplomat said Sunday. The decision to acquire the Russianmade S-400 anti-aircraft system eventually led to Türkiye being removed from the multinational program developing the fifthgeneration F-35 stealth fighter jet. Washington proposed to Türkiye that it gives control of the system to the U.S. or another country, including Ukraine, as it tries to fight off Russian forces, Foreign Minister Mevlüt Çavuþoðlu told an interview with private broadcaster Habertürk.

https://www.dailysabah.com/business/defense/ turkiye-rejected-us-proposal-to-send-s-400s-toukraine-top-diplomat

## Turkish UCAV Akýncý fires Roketsan cruise missile in global 1st

#### Daily Sabah, May 12, 2023

The Turkish defense industry giant Roketsan-made Çakýr mini cruise missile was successfully fired from the state-ofthe-art unmanned combat aerial vehicle (UCAV) Akýncý. The Çakýr was deployed at an altitude of 7,000 meters, marking its inaugural flight with the indigenous turbojet engine KALE KTJ-1750. Ismail Demir, head of the Presidency of Defense Industries (SSB) shared the images of the test-firing of the Çakýr missile on his social media account. "For the first time in the world, a cruise missile was fired from a UCAV," he wrote. Demir said that the missile was fired with an engine whose critical components were domestic and hit the target with pinpoint accuracy, congratulating the local defense industry.

https://www.dailysabah.com/business/defense/ turkish-ucav-akinci-fires-roketsan-cruisemissile-in-global-1st

## Türkiye's long-range air defense system Siper completes final test

#### Daily Sabah, May 12, 2023

Türkiye's domestically developed longrange air defense missile system Siper project has achieved another significant milestone with a successful test conducted in northern Sinop province. In its final predeployment trial, the system showcased its pinpoint accuracy by hitting the target with full precision. Ismail Demir, head of the Presidency of Defense Industries (SSB) commented: "Siper, the guardian of Turkish skies, has achieved a precise longrange hit in its final test before deployment. We are tirelessly working day and night to safeguard our independence and secure our future across land, air, sea, and space."

https://www.dailysabah.com/business/defense/ turkiyes-long-range-air-defense-system-sipercompletes-final-test

## K. United Arab Emirates

## UAE signs nuclear energy cooperation agreements with China bodies

#### India Today, May 8, 2023

Emirates Nuclear Energy Corporation (ENEC), the body responsible for developing the United Arab Emirates' nuclear energy sector, has signed three agreements with Chinese nuclear energy organisations as it looks to boost low-carbon nuclear power. The UAE, which is hosting the COP28 climate summit this year and wants to get 6% of its energy needs from nuclear as part of its 2050 net zero plan, has previously said China would be a key partner in its energy transition plan. The three Memorandums of Understanding cover cooperation in nuclear energy operations, in high-temperature gascooled reactors, and in nuclear fuel supply and investment, ENEC said on Sunday.

https://www.indiatoday.in/world/story/uae-chinanuclear-energy-cooperation-agreement-2376185-2023-05-08

### L. East Asia

## Singapore backs Aukus and says Australia could play 'bigger role' in regional security

#### The Guardian, May 1, 2023

Singapore has strongly backed the Aukus defence pact, with ministers saying they trust Australia to play a bigger role in regional security and don't want south-east Asia to become "an arena for proxy wars".

After talks with Australian counterparts in Canberra on Monday, Singaporean ministers reaffirmed Australia's nuclearpowered submarines would be welcome to visit once in service. Singapore, in turn, received assurances from the Albanese government that Australia would remain a reliable supplier of gas. Aukus has received a mixed response from members of the Association of Southeast Asian Nations, with Indonesia and Malaysia the most vocal in expressing concerns that the deal could add to a regional arms race.

https://www.theguardian.com/australia-news/ 2023/may/01/singapore-backs-aukus-and-saysaustralia-could-play-bigger-role-in-regionalsecurity

## Japanese, South Korean commanders tour US Navy nuclear sub in military 'first'

#### SCMP, May 5, 2023

US, Japanese and South Korean naval commanders toured a US ballistic missile submarine off Guam in a first last month, just weeks before the Pentagon announced it will deploy one of the nuclear-powered vessels on regular patrols to the Korean peninsula. The US Navy Seventh Fleet said on Thursday the commanders came together to inspect the USS Maine, an Ohio-class submarine, on April 18, the first time "senior commanders of the submarine fleets of the three nations" had done so. The Seventh Fleet said the tour was an example of how the US had advanced a trilateral relationship that was "forward-leaning, reflective of shared values, and resolute against threats that challenge regional stability".

https://www.scmp.com/news/china/military/ article/3219571/japanese-south-korean-commanders-tour-us-sub-military-first

### Japan, US, S. Korea discuss sharing of N. Korea missile data

#### AP News, May 10, 2023

Japan, the United States and South Korea are negotiating an agreement on sharing real-time data on North Korean missile launches, as cooperation among the three nations becomes increasingly important amid growing nuclear and missile threats from the North, Japan's chief government spokesperson said Tuesday. Chief Cabinet Secretary Hirokazu Matsuno said there has been no agreement yet, but "I understand that defense authorities are vigorously proceeding to set up an arrangement."

"The security environment surrounding Japan and South Korea is becoming more severe and more complex, and coordination between the two countries as well as trilaterally with the United States has become increasingly important," Matsuno said.

https://apnews.com/article/japan-south-korea-usnorth-missile-datae630842642598e9942be4f542a26717a

## M. North Korea

## North Korea Issues Warning After US-South Korea Summit

#### The Diplomat, May 1, 2023

Kim Yo Jong, the powerful sister of North Korean leader Kim Jong Un and Pyongyang's main voice on inter-Korean relations, denounced the "Washington Declaration" and "Nuclear Consultative Group," two main initiatives that were introduced during the South Korea-U.S. summit meeting on April 26.

"The 'Washington Declaration' fabricated by the U.S. and South Korean authorities is a typical product of their extreme anti-DPRK hostile policy reflecting the most hostile and aggressive will of action," Kim said in her statement published in Korean Central News Agency (KCNA), one of the main North Korean state-controlled media, on April 29.

https://thediplomat.com/2023/05/north-koreaissues-warning-after-us-south-korea-summit/

#### N. Japan

## France, Japan Sign Nuclear Partnership Deal

#### U.S. News, May 3, 2023

France and Japan have signed a nuclear cooperation agreement in Paris, the French ministry said on Wednesday. The joint declaration pledges to deepen and accelerate ties in the research and development of nextgeneration nuclear such as sodium-cooled fast reactors.

Work will continue on the safe life extension of existing reactors, decommissioning of nuclear plants including Japan's Fukushima Dai'ichi reactor, developing civil nuclear capacity in interested countries, and promoting the recycling of used nuclear fuel to minimize the need for uranium.

https://www.usnews.com/news/world/articles/ 2023-05-03/france-japan-sign-nuclear-partnership-deal

## IAEA Task Force Issues New Report on Regulatory Aspects of Water Discharge at Fukushima Daiichi

#### IAEA, May 4, 2023

The International Atomic Energy Agency (IAEA) Task Force assessing the safety of Japan's planned discharge of treated water from the Fukushima Daiichi Nuclear Power Station issued its latest report today.

The report – fifth in the series to be released under the IAEA's multi-year safety review of the proposed Advanced Liquid Processing System (ALPS) treated water discharge – is focused on Japan's domestic regulatory review of the water release. It covers the observations of the Task Force mission to assess Japan's Nuclear Regulation Authority (NRA) activities related to the discharge in Tokyo from 16 to 20 January 2023.

Japan's planned discharge of the water, scheduled for this year, is subject to final regulatory approval from NRA.

https://www.iaea.org/newscenter/pressreleases/ iaea-task-force-issues-new-report-on-regulatoryaspects-of-water-discharge-at-fukushima-daiichi

#### O. South Korea

# South Korea urges resolution of dispute with US over nuclear exports

#### Nuclear Engineering, May 2, 2023

Korea has called on the USA to co-operate in resolving the legal dispute between Korea's Korea Hydro & Nuclear Power (KHNP) and Westinghouse over Korea's planned reactor exports to the Czech Republic and other nations. Industry Ministry Lee Chang-yang made the request during a meeting with his US Energy Secretary Jennifer Granholm in Washington on the sidelines of President Yoon Suk Yeol's state visit, according to Korea's Ministry of Trade, Industry & Energy.

https://www.neimagazine.com/news/newssouthkorea-urges-resolution-of-dispute-of-with-us-overnuclear-exports-10806848

## Japan to reassure South Korean experts on safety of Fukushima water release

#### The Japan Times, May 9, 2023

The government hopes to make a case for the safety of a planned release of treated radioactive water into the sea from the disaster-hit Fukushima nuclear complex when South Korean experts visit the site later this month, the industry minister said Tuesday. "We hope the inspection will help deepen understanding in South Korea about the safety of the release," Economy, Trade and Industry Minister Yasutoshi Nishimura told a news conference after the two countries' leaders agreed Sunday to dispatch the experts, amid concerns among the South Korean public over the issue. But Nishimura noted that the purpose of the inspection is "not to evaluate or certify the safety of treated water."

https://www.japantimes.co.jp/news/2023/05/09/ national/fukushima-water-south-korea/

## P. Australia

## Secret China 'war-gaming' exercises expose Australia's defence weaknesses

#### The Sydney Morning Herald, May 1, 2023

Top-secret war-gaming exercises conducted for the Albanese government have found the Australian Defence Force would struggle to respond to alarming but plausible scenarios such as China establishing a military base in a nearby Pacific nation. Sources familiar with the classified version of the government's defence strategic review said former defence chief Angus Houston and former defence minister Stephen Smith commissioned detailed analysis from experts within the Defence Department about specific scenarios that could draw Australia into armed conflict and shatter stability in the Indo-Pacific. As well as a possible war fought between the United States and China over the selfgoverning island of Taiwan, the classified version of the review examined how Australia would deal with Beijing establishing a permanent military foothold in a neighbouring nation such as the Solomon Islands.

https://www.smh.com.au/politics/federal/secretchina-war-gaming-exercises-expose-australia-sdefence-weaknesses-20230501-p5d4ms.html

## UK and Australian visit to British home of next-generation nuclear submarines

#### UK Government, May 3, 2023

Australian Prime Minister, Anthony Albanese and UK Defence Secretary, Ben Wallace have today visited the shipyard where the next generation of AUKUS nuclear submarines will be built for the Royal Navy. Australia and the UK will both build the new submarines, known as 'SSN-AUKUS', to the world-leading British-led design, with construction of the UK's submarines taking place in Barrowin-Furness. Australia will work over the next decade to develop its submarine industrial base and will build its submarines in South Australia. This massive multilateral undertaking will create thousands of jobs in the UK in the decades ahead - delivering on the Prime Minister's priority to grow the economy and building on more than 60 years of British expertise designing, building and operating nuclear-powered submarines.

https://www.gov.uk/government/news/uk-andaustralian-visit-to-british-home-of-nextgeneration-nuclear-submarines

## US Clears \$207M Maritime Surveillance Systems Sale to Australia

The Defense Post, May 5, 2023

US State Department The has greenlighted the potential sale of Surveillance Towed Array Sensor System Expeditionary (SURTASS-E) mission systems to Australia. The proposed sale will reportedly enhance Canberra's maritime surveillance capabilities to detect enemy submarines. It would also help the country maintain a strong defense posture and contribute to regional stability, according to the US Defense Security Cooperation Agency (DSCA). Apart from the SURTASS-E mission systems, the Australian government is requesting a shore processing mission system, a spare SURTASS passive acoustic array, communications parts, and necessary support equipment.

https://www.thedefensepost.com/2023/05/05/usmaritime-surveillance-australia/

## New Agency And New Regulator To Deliver Australia's SSN Program

#### Naval News, May 7, 2023

The Australian Submarine Agency (ASA) will be established by Executive Order and be responsible and accountable for the management and oversight of Australia's nuclear-powered submarine program. Australia's acquisition of conventionally-armed, nuclear-powered submarines through the **AUKUS** partnership will be critical to ensuring our Defence Force has the capabilities needed to keep Australians safe. Work to deliver the pathway is already underway and remains a key priority for the Albanese Government, in line with the recommendations of the Defence Strategic Review.

https://www.navalnews.com/naval-news/2023/05/ new-agency-and-new-regulator-to-deliveraustralias-ssn-program/

## Australia to boost Pacific, defence spending in budget

#### Reuters, May 9, 2023

Australia said on Tuesday that it would spend billions of dollars to improve ties with neighbouring Pacific nations and shore up its defence capabilities, as it looks to counter China's growing strategic influence in the region. Prime Minister Anthony Albanese's second budget since his centre-left Labor government was elected in May last year has pledged A\$1.9 billion (\$1.3 billion) over the next five years to expand engagement with Pacific nations. "The Albanese Government is delivering a transformational package of support to the Pacific, to respond to Pacific priorities and ensure our shared interests in a peaceful, prosperous and resilient region," the government said in a statement.

https://www.reuters.com/world/asia-pacific/ australia-boost-pacific-defence-spending-budget-2023-05-09/

## Australia Invests in Local Production of New Bomb Disposal Robots

#### The Defense Post, May 9, 2023

Australia has contracted Queenslandbased L3Harris Micreo to deliver up to 80 explosive ordnance disposal robots for the country's military, Defence Industry Minister Pat Conroy announced during a visit in Cairns. Valued at 46 million Australian dollars (\$31 million), the agreement supports Australian defense efforts to bolster personnel safety during field bomb disposal operations. The robots will be integrated with enhanced sensors and cameras for a more effective examination, tracking, and neutralization of improvised explosive devices and related hazards.

https://www.thedefensepost.com/2023/05/09/ australia-new-bomb-disposal-robots/

#### Missile launcher a game-changer

## Australian Government Defence, May 10, 2023

After waiting years for a glimpse of Army's newest air-defence system, 16th Regiment, Royal Australian Artillery, gunners got their first look at the National Advanced Surfaceto-Air Missile System (NASAMS) during a trial and certification activity last month near Jervis Bay. Air defenders were invited to get hands-on with the equipment during the activity, which was designed to test system components before the regiment takes initial delivery this month. Qualification training is set to start soon after. Lance-Bombardier Mitchell North, of 110th Battery, will be among the first soldiers qualified. "We've been waiting for NASAMS for quite some time, so it's good to finally see the equipment and get it going," Lance-Bombardier North said.

https://www.defence.gov.au/news-events/news/ 2023-05-10/missile-launcher-game-changer

## Nuclear power at least 15 years away, says regulator

#### NCA Newswire, May 15, 2023

A senate inquiry examining whether Australia's ban on nuclear energy should be lifted has been told it would take 10-15 years to have a power plant up and running if the moratorium was lifted right now. The and Communications Environment Legislation Committee sat on Monday to discuss the Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022. The bill would see amendments made to the Australian Radiation Protection and Nuclear Safety Act 1998 and the Environment Protection and Biodiversity Conservation Act 1999, effectively paving the way for nuclear power generation.

https://www.news.com.au/technology/environment/nuclear-power-at-least-15-years-away-saysregulator/news-story/ 6b8c4ec9c94cd4d05471783678abdb59

#### **Contribute** Articles

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

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).

### **Disclaimer:**

Data included in this newsletter is only for educational purpose and wider dissemination. All liabilities and rights belong to respective writers & authors.

## Prepared by:

Mr. Kushal Agrawal Mr. Niranjan Oak Mr. Aasi Ansari

#### **Indian Pugwash Society**

No.1, Development Enclave, Rao Tula Ram Marg, Near USI, Delhi-110010 Tel. No (91-11) 2671-7983 Fax No. (91-11)2615-4192 Email: indianpugwashsociety@gmail.com