

S-400 Triumph Defence System

Why in news?

Russia has started supplying S-400 air defence system to India and the first division will be delivered by the end of 2021.

What is the status of the deal?

- India has signed a deal in 2018 with Russia for five S-400 Triumph regiments from Russia under a 5.43 billion dollar deal.
- The delivery was to begin by the end of 2020 but was slightly delayed due to late payments as well as the COVID-19 pandemic and is likely to be completed by April 2023.
- Both sides worked out a **Rupee-Rouble exchange** for payments following which India paid 15% advance amount triggering the delivery cycle.

The rupee-rouble arrangement means that the payment for S -400 will be done by India in Indian Rupees (INR) equivalent to the value of the weapon system in roubles, the currency of the Russian Federation.

What is the S-400 system?

- Named **SA-21 Growler** by NATO and developed by Russia's Almaz Central Design Bureau, S-400 Triumph is one of the world's most advanced air defence systems.
- It is a **surface-to-air** missile system that can simultaneously track and neutralise a range of incoming objects spanning aircraft, missiles and Unmanned Aerial Vehicles (UAV) over very long ranges.
- It can provide air interception against early warning aircraft, airborne missile strategic carriers, tactical and theatre ballistic missiles, medium-range ballistic missiles, etc.
- The S-400 is fully mobile and each system has a 3D phased array acquisition radar that can track around 300 targets up to 600 km.
- It has a command and control centre, automatic tracking and targeting systems, launchers and support vehicles.

- The missile system is tackle any aerial target within a range of **400km** and can simultaneously engage 36 targets.
- Each system has four different types to missiles for up to 40 km, 120 km, 250 km and 400 km and up to **30 km altitude**.
- It can be activated within five minutes and has the flexibility to be integrated into the existing and future air defence units of the air force, army and navy.
- The S-400 also comes with improved electronic counter-countermeasures to tackle the attempts at jamming.
- Another capability of S-400 is its **“fire-and-forget capability”** which does not require further guidance after the launch and can hit the target without the launcher being in line-of-sight of the target.

India inks S-400 Triumph deal with Russia

India has signed a \$ 5.43 billion (about ₹ 40,000 crore) deal with Russia to procure five S-400 Triumph advanced air defence missile systems

S-400 Triumph Features

Can engage all types of aerial targets including aircraft, unmanned aerial vehicles and all types of missiles	Locates targets at 600 km and can destroy them at 400 km range, up to an altitude of 30 km	The system can engage multiple targets simultaneously
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Integrates:

- Multifunction radar
- Anti-aircraft missile systems
- Launchers
- Autonomous detection and targeting systems
- Command and control centre

Range of missiles:

Capable of firing different types of missiles to create a layered defence shield

• 40N6: 400 km	• 9M96E2: 120 km
• 48N6: 250 km	• 9M96E: 40 km

Possible deployment options

PAKISTAN CHINA INDIA NEPAL

Map not to scale

KBK Infographics

Why is the S-400 important for India?

- The S-400 fills the gaps in India’s national air defence network and would complement India’s indigenous **Ballistic Missile Defence System** developed by the DRDO to create a multi-tier air defence over the country.
- The S-400 would be seamlessly integrated into the country’s existing air defence network of Indian Air Force.
- If it is deployed towards the Western borders, the system can track movements of Pakistan Air Force aircraft as soon as they take off from their bases.

- The S-400 air defence systems and Rafale fighter jets are “**game-changers**” for the IAF and said they were like a booster dose to the force.

Countries such as Algeria, Belarus, China, Turkey, etc. have already procured the S-400 defence system.

Why is the US upset with it?

- The US’s **Countering America’s Adversaries through Sanctions Act (CAATSA)**, 2017 has provided for economic and travel sanctions against countries and officials that transacted significant military and intelligence contracts with Russia, North Korea and Iran.
- The sanctions which were slapped on China and Turkey for buying the S-400 could also be used against India.
- For India, acceding to such sanctions challenges the nation’s principles of sovereignty and strategic autonomy.
- The U.S. has a choice to waive sanctions if the waiver is found to be in American vital national security interests or if India reduces its future dependence on Russian weaponry.
- **India-Russia Defence trade** - The defence trade between India and Russia was \$15 billion in the last three years because of several big-ticket deals.
- A report by SIPRI on the trends in international arms transfer said that while arms imports by India decreased by 33% between 2011-15 and 2016-20, **Russia remained the largest supplier to India** in 2011-15 and in the next half decade from 2016 -20.
- Deals related to Ka-226T utility helicopters, AK-203 assault rifles and Iglas Very Short Range Air Defence (VSHORAD) systems are in advanced stages of being concluded.
- **India- US Defence trade** - The USA is the fourth largest arms supplier to India in 2016-20.
- India is in the process of procuring additional P-8I maritime reconnaissance aircraft, AH-64E Apache attack helicopters with the US.
- Negotiations are in advanced stages for armed drones and Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) aircraft.
- India is a prized U.S. partner of the Quad, the Indo-Pacific and in countering China and hence sanctions will cause a rift in India-U.S. ties and could spur India towards Russia.
- The US must recognise that its unilateral sanctions which are not U.N. endorsed would undermine the multilateral system.

- New Delhi must make it clear to Washington that the law should be abandoned, as it nullifies the very “rules-based international order” which is the foundation of the India-U.S. global strategic partnership.

References

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