

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

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| 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

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

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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