



PERSPECTIVES

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Riyadh's Missile Defense Systems: Strategic Opportunities

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EXECUTIVE SUMMARY: Saudi Arabia needs missile defense systems to protect its territory from adversaries. While the US is the obvious choice as a supplier, Russia and Israel are also in the running.

The Iranian nuclear deal, Tehran's missile development program (which has proceeded despite UN Security Council Resolutions), and the ongoing Yemen crisis – in which Houthi rebels have used ballistic missiles against Saudi targets – have heightened the urgency of Riyadh's desire to field the most sophisticated missile defense systems currently available. Saudi Arabia is in fact one of the few countries to have witnessed the efficacy of a missile defense system in action: During the Iran-Iraq War of the 1980s, Scud missiles fired at Saudi Arabia were intercepted by the US-developed Patriot system.

A robust missile defense system would enable Riyadh to enhance its "defense by denial" capability, which would negate the deterrent value of its adversaries' offensive missile capabilities.

Not only is Riyadh engaged in enhancing its own defensive measures, but it is working towards a missile defense architecture for the Saudi- and UAE-led GCC countries (though an integrated GCC missile defense architecture would be challenging to accomplish as a host of issues need to be resolved).

Saudi Arabia currently operates the US PAC-2 Patriot air and missile defense system. The PAC-2, used during the 1991 Gulf War, is now obsolete, and spare parts are less available.

In 2015, Riyadh sought to acquire the more advanced PAC-3. It was also interested in the US Terminal High Altitude Area Defense (THAAD) system, which has an ex-atmosphere hit-to-kill capability that would have added to

Saudi Arabia's missile defense prowess. There were delays, however, in acquiring US approval to sell the \$15 billion THAAD system to Riyadh.

That delay resulted in Riyadh's agreeing to take a preliminary look at the Russian S-400 air and missile defense system. While this was a historic move, there are serious issues complicating any potential improvement in Saudi relations with Russia. Not only is the US – which is Riyadh's ally and its main provider of weapons systems – at loggerheads with Moscow over Ukraine, Syria, Iran, and North Korea, but until recently, Saudi Arabia itself was fighting Russia in Syria.

The kingdom's need for missile defense systems

Saudi Arabia recently experienced missile attacks from Yemen similar to those it experienced during the Gulf War. However, this time, the threat is more sophisticated. Most of the Houthis' missiles are accurate and more advanced than the Scud missiles used by Iraq in the 1990s. The new missiles are being supplied to the Houthis by Iran and probably also by North Korea. Saudi Arabia has been able to intercept them up to now.

Added to this, the Iranian nuclear deal, coupled with Tehran's ballistic missile development program (which flouts UNSC resolutions imposing restrictions on this activity), as well as Iran's venture into cruise missiles, have led Riyadh to pursue a robust missile defense architecture.

In October 2017, prior to the S-400 deal, Saudi King Salman made a [visit to Moscow](#) to meet President Vladimir Putin to improve bilateral ties. During this visit, Salman signed an arms deal with Russia worth [\\$3 billion](#). The S-400s were included in the package.

When Riyadh agreed to take a preliminary look at the Russian S-400s, reports appeared indicating that the US had [approved](#) a possible sale of the THAAD system to Saudi Arabia. The THAAD has already found its place in the Middle East market – it has been acquired by the [UAE and Qatar](#), for example – but the Russian S-400s are also capturing Middle Eastern interest, with countries like Turkey considering the system.

As for Saudi Arabia, an improved bilateral relationship with Russia – especially one based on arms and ammunition cooperation such as the S-400 deal – can do more than pave the way for a solution to the Syrian crisis. Russia, which has a close relationship with Iran, can also play a crucial role in [resolving](#) the Yemen crisis as the kingdom loses ground there to the Iran-backed Houthi rebels.

From the American and Russian perspectives, Riyadh is a major market for missile defense systems as ballistic and cruise missile threats against it continue to worsen. The kingdom's defense budget for 2018 has been increased to [US\\$56 billion](#).

Recent events, however, have prompted the kingdom to widen its horizons. After the experiences of Syria and Yemen and in light of the Iranian nuclear deal, Saudi Arabia is now willing to venture into new supply relationships with new friends. Since [2015](#), there have been reports that Saudi Arabia and Israel have improved relations.

Riyadh's interest in Israeli weapon systems is a clear indicator of this stronger relationship. For intercepting shorter range missiles and rockets, Saudi Arabia expressed interest this year in the Israeli Iron Dome air and missile defense system as well as Israel's Trophy Active Protection System, which can [intercept and destroy](#) incoming missiles and rockets.

The kingdom's motive for improving relations with Russia differs from its motive with Israel. With Israel, the strengthening of ties is a deterrent against the growing regional influence of Iran. With Russia, the improved relations are probably a precursor to Riyadh's seeking help from Moscow in mediating a solution in Yemen. Arms deals are an integral component of improved bilateral relations.

Debalina Ghoshal is an independent consultant specializing in nuclear, missile, and missile defense-related issues. Her papers and articles have been widely published, including in Washington Quarterly, Comparative Strategy, Asia Pacific Defense Forum, Defense Review Asia, Air Power Journal, Force, Naval Technology, RUSI Newsbrief, RUSI Defense, Indian Military Review, and Diplomat.

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