Assessing the Relevance of Nuclear Submarines

What is the issue?

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- India’s first indigenous ballistic-missile armed nuclear submarine (SSBN), Arihant, had successfully completed its first deterrence patrol. Click here to know more.
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- But the pursuit of nuclear-armed submarines reflects a security assessment that is becoming increasingly irrelevant.
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How did SSBNs evolve?

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- SSBNs (Ship, Submersible, Ballistic missile, Nuclear) were first deployed during the Cold War.
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- It was justified then as a tool of last resort to counter any attack destroying land-based missiles and paralysing air force.
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- The submarine, undetected at sea, could deliver a counter-strike, assuring the “mutual destruction” of both countries.
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Why are SSBNs not very relevant now?

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- The strategic function of SSBN mentioned above makes little sense in the modern Indian context.
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- There is no realistic threat that could wipe out India’s existing nuclear deterrent, which the Arihant could counter.

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- The range of the missiles carried by the Arihant is about 750 km, and so it can only target Pakistan and perhaps China.
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- **Pakistan** - Pakistan government has threatened to use “tactical nuclear weapons”.
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- This is to counter India’s cold-start doctrine that envisions a limited invasion of Pakistan.
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- However, these are relatively small nuclear weapons that could devastate a battlefield.
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- It would not certainly affect Indian military’s ability to launch a counter-strike using its existing land or air-based forces.
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- **China** - China has consistently pledged that it will never be the first to use nuclear weapons in a conflict.
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- However, even if China were to suddenly change its policy, any attempt would have unacceptable risks regardless of whether India possesses SSBNs.
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- **Global** - Even the U.S., which maintains such a large nuclear stockpile, is unwilling to militarily engage a limited nuclear power such as North Korea.
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- This is because it understands that it cannot reliably disable North Korea's land-based deterrent.
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- Much of the rest of the world has moved to outlaw nuclear weapons.
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- Last year, 122 nations voted in favour of the “Treaty on the Prohibition of Nuclear Weapons”.
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- The Indian government skipped these negotiations but claimed that it was committed to universal nuclear disarmament.
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- So the government's active pursuit of nuclear-armed submarines undermines India’s stated international position.
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What are the concerns?

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- **Risks** - In fact, nuclear-armed submarines increase the risks of an accidental conflict.
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- Traditionally, nuclear weapons in India have been kept under civilian control, and separate from their delivery systems.
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- However, the crew of a nuclear-armed submarine will have both the custody of nuclear weapons and the ability to launch them at short notice.
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- Reportedly, nuclear weapons on Indian SSBNs will be safeguarded by electronic switches, called “permissive action links”.
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- However, such a setup can dangerously weaken the civilian command-and-control structure.
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- E.g. Cuban missile crisis
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- During the crisis, U.S. warships recklessly attacked a Soviet submarine with practice depth charges to force it to surface.
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- The captain of the submarine, sailing under difficult conditions, was out of radio contact with the Soviet leadership.
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- He thought that war had broken out and decided to respond with nuclear torpedoes.
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- But with intervention of another senior officer on the submarine, Vasili Arkhipov, the outbreak of large-scale nuclear hostilities were prevented.
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- For averting a civilisation-threatening event, Arkhipov was posthumously awarded the “Future of Life” award last year.
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- **Costs** - Reportedly, the Indian Navy would eventually like about four SSBNs.
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- The government has not released precise figures, but the international experience reflects the costs of such a fleet.
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- E.g. British government recently estimated that the cost of four new SSBNs would be about Rs. 70,000 crore per submarine.
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- The lifetime costs of operating such submarines are even larger than the initial costs.
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- British and American estimates suggest that each SSBN requires between Rs. 2,000 crore and Rs. 5,000 crore in annual operational costs.
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Source: The Hindu

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