



מרכז תל אביב למדעי הטכנולוגיה ובטיחות
ע"ש פרופ' יצחק באסון

India's Space Program an Israeli Perspective on Regional Security

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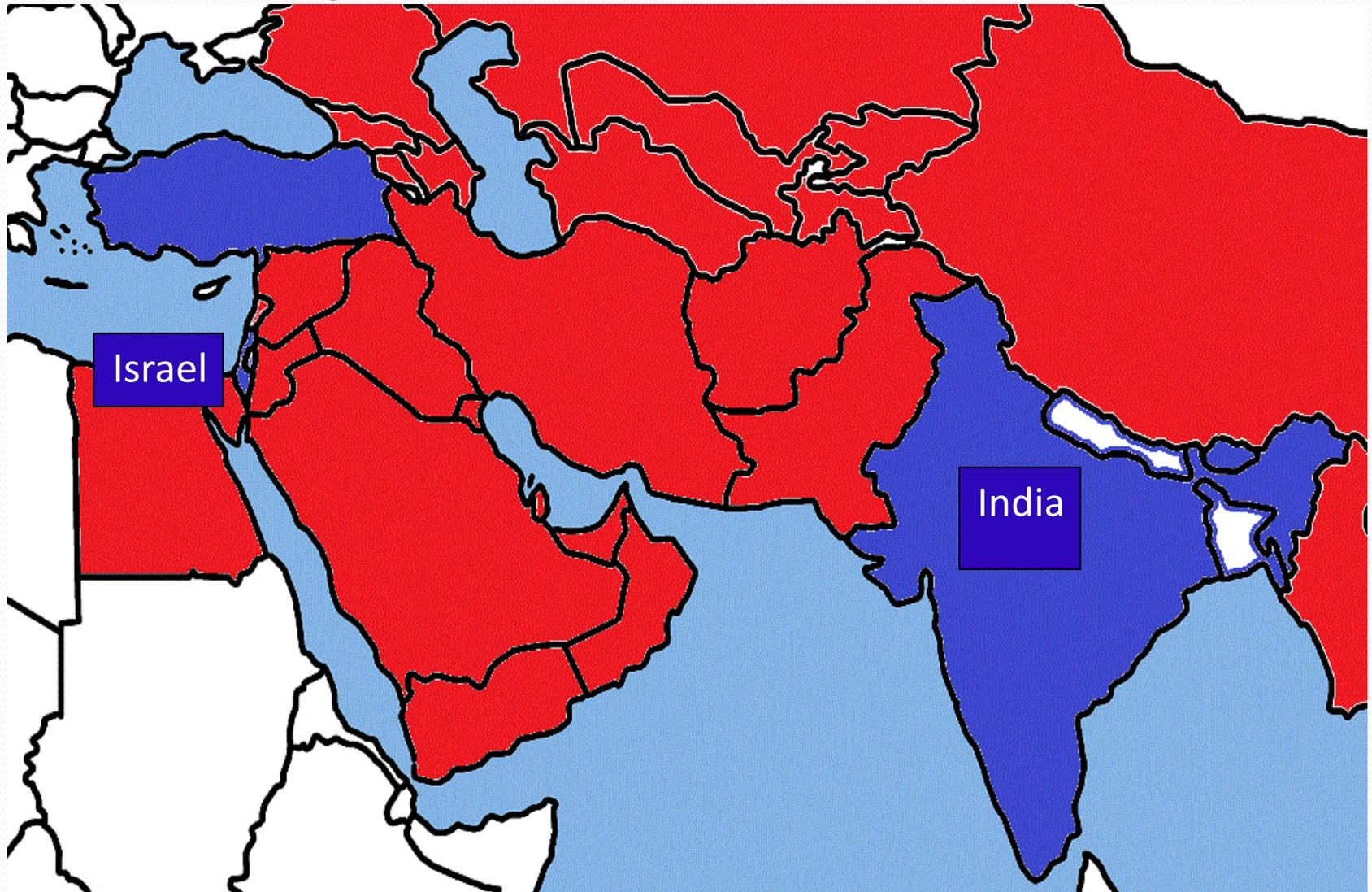
Outline

- The impetus of the Indian- Israeli relationship and cooperation in space
- Shared concerns
- ASAT technology as part of a country's space security capability
- Balance of power & security in the larger Asian region

The Impetus of the Indian – Israeli Relationship

- Democratic countries operating in the overall non-democratic atmosphere of Asia.
- Each country has large domestic Muslim minorities.
- Ancient cultures / new countries that matured out of the British Empire by struggle.
- National investments in science and technology for self-reliance and national development.
- Self-reliance and technological independence guides decision-making .
- National security challenges created by local and international terror of various Muslim groups.

“India being the first close friend Israel has to its east and Israel being the first close friend India has to its west.”



Facts

	India	Israel
Size	3,287,263 sk	22,072 sk
Population	1,156,897,766	7,233,701
GDP per capita	US\$3,100	US\$28,400
Independence	1947	1948
The Space Club	1980 (7 th)	1988 (8 th)

- Formal diplomatic relationship - 1992
- Trade and economic relations: US\$4B in 2008
- Israel is one of India's largest arms provider.

Impetus for Cooperation in Space

- India and Israel have **complementary capabilities** in space technologies– the Indian indigenous launch capability and the Israeli capability to develop small and advanced satellites.
- India and Israel share **a similar approach to national space activity**, and both nations adopted a pragmatic approach to space from the beginning stages of their space programs.
- In both countries, the **overall space activity is much larger than national security activity**. Both of them commercialized their space activity and also have a strong scientific sector.
- Israel sees India as an important companion in the quest for exploring and utilizing space and, it aspires to increase its bilateral cooperation in this field (**India is specifically mentioned in the new Israeli space policy as one of the countries Israel should work its way to upgrade the relationship with**).

Shared Concerns

- Both Israel and India enjoy and suffer a growing reliance on space systems for day-to-day functions of their critical national infrastructure.
- Both are concerned about the growing trend of space militarization in other countries which could lead to space weaponization and cause India and Israel to lose their current advantages.
- India and Israel are looking for ways to protect their satellites and achieve a sustainable space environment.
- It is in this context that Israel supports the Indian aspiration and effort to develop space security capabilities.

ASAT Technology as Part of a Country's Space Security Capability

- It allows a military to have the capacity for aggressive action against an adversary.
- It provides a capability to defend against hostile activities.
- It may be used for deterrence against potential aggressive actions.
- The risk is that ASATs for aggressive actions will be developed under the excuse of deterrence and defense reasons.
- **For this reason, advocates of non-weaponization of space often argue that India's declaration and actions to develop ASAT capabilities increase the potential for an Asian arms race with other Asian countries.**

ASAT and the Democratic Peace Theory

- Based on the Democratic Peace Theory in which democracies rarely go to war with one another, democratic nations involved in space security actions and ASAT capability development will not act against one another.
- **Their aspirations and actions should not be perceived by other democratic and responsible nations as threatening actions.**
- In an international system that does not officially prohibit such activities, India's efforts to develop space security capabilities are especially important because they upgrade capabilities among the democratic Asian nations, which are more likely to refrain from harmful interference against space systems.
- **Having such capabilities would allow them to better defend their satellites and deter harmful actions against space systems.**
- Sophisticated space capabilities for the democratic Asian nations along with stronger relationships and ties between them are of great potential to positively affect the balance of power and security in the larger Asian region.

Balance of Power & Security in the Larger Asian Region

- Better capabilities for the democratic countries will allow them a better chance to force greater security and sustainability in space, and the development of multilateral mechanisms for securing human peaceful activity in outer-space.
- Democratic nations such as India or Israel should not be concerned by other democratic nations acquiring such capabilities.
- We think that Israel should support greater cooperation among democratic nations in this field.

Space Security Regime

- A non-proliferation treaty for space to prevent irresponsible actors from acquiring ASAT capabilities.
- A formal "space club" that will have the responsibility to ensure freedom of action in space and security of space systems.
- International Space Technology and Research Agency (I-STAR Agency) –
 - promote safe, secure and peaceful space programs.
 - be responsible for regulating the use of space, space technologies, and traffic management to mitigate and minimize space debris, in accordance with the objectives and purposes of its code of conduct.
 - will have efficient tools to verify and enforce compliance
- This arrangement would:
 - provide a common understanding of acceptable and unacceptable behavior in the global commons of space for all nations to follow.
 - form confidence building measures.
 - improve cooperative efforts among spacefaring and "space-using" nations.
- **By taking these measures, the international community could ensure the right of safe use of space, exploration or other peaceful purposes of all nations.**

Final Remarks

- Israel respects and appreciates India's rationale to develop a space program to improve the country's social and economic conditions and upgrade its international status.
- Israel shares the international perspective that the Indian space program contributes substantially to India's position as a dominant political power in Asia.
- Israel perceives the national security aspects of the Indian space effort of great potential to contribute significantly to a stronger and better balance in Asia.
- Under the conditions suggested above, such efforts have the potential to maintain space as a safe global commons, serving the short- and long-term national security interests of Israel.



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Thank you!

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