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# Governance of Aerospace Technologies: Law and Trust in Public-Private Partnership

A presentation by

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# Governance of Aerospace Technologies

- **Finance Minister's 09-10 budget speech in Parliament had two salient points pertinent to the business plans of *aerospace* technology companies:**
  - >> Foreign-investment to be permitted in manufacture of military products
  - >> 150% of R&D expenditure (subject to being true!) deductible from profits before tax

# Governance of Aerospace Technologies

**As blue- , grey- and white-collar compensations in India rise, manufacture for global markets will tend to move from India to even lower-wage countries.**

**>> Value addition in India's export basket of manufactures will need to move to goods embodying a comparative advantage in brain-ware and/or manufacturing technology, characteristic of aerospace products**

**>> The impex of increasing proportions of the roots and fruits of that basket will - because of their dual-use nature - be regulated by both the foreign *and* the Indian state**

**>> A central tenet of that regulatory regime will be the need to assure *both* the Indian and foreign state of supply-chain security and end-use integrity.**

# Governance of Aerospace Technologies

- **Neither foreign investment, nor foreign *or Indian* aerospace technology will be available to companies without robust Industry Compliance Programmes for export controls and assurable supply-chain integrity, in both directions (impex).**
- **Such bi-directional state control of impex, and state supervision of the integrity of supply chains of goods, technology *and finance* of relevance to Weapons of Mass Destruction (WMD) is now mandatory for all member states of the United Nations under UN Security Council resolution 1540.**
- **Even for *non-WMD* relevant goods and technology, monitorable ICPs will likely be also be a conditionality of not only the *importing state* - e.g. pharma - but also of importing *companies*, whose reputation may well be more valuable to them than the Indian companies' exports to them.**

# Applicable Primary Indian Laws

- >> **AE Act**
- >> **CWC Act**
- >> **FTDR Act**

- The above laws govern, *inter alia*, impex transactions in notified goods and technology (e.g. SCOMET), whilst

## >> **WMD Act**

- is the national legal instrument for the implementation of India's obligations under UNSCR 1540. Legislates control over WMD-relevant
  - ++ Export of unlisted goods and technology ("catch-all")
  - ++ Instruments of WMD-relevant export transactions (e.g. financing, brokering)

# The Definition of Technology

- >> One enforcement-significant differentiator of these primary Indian laws from their foreign counterparts is the definition of 'technology'.**
- >> The WMD Act, and the notifications under the AE and FTDR Acts, define 'technology' identically and emphasise the content of information, rather than the means of transmission of this intangible.**

# Terrorists, Non-state Actors and the vulnerability of aerospace technologies

- The locus of attention of the international community is now the nefarious activities of terrorists and non-state actors -- most-notoriously exemplified by AQ Khan and his state-supporters
- While the concern globally [UNSCR 1540] is the exercise of strict and impermeable controls at the border of WMD- and missile-relevant goods and technologies
- Our concern in India will need to concentrate on mitigating the vulnerability of *domestic* supply chains, including
- As required by the WMD Act, the supervision of certain categories of 'technology' training provided in our educational institutions (public or private) to non-Indian citizens.

## 'Trust but Verify': The mantrum of Public-Private Partnership

- The most cost-effective way to control quality is to ensure that the manufacturing defect does not occur in the first place.
- Likewise, the most effective way to ensure compliance with export control law is to monitor and secure manufacture and the movement of export-controlled goods and services well before they reach the customs post or electronic border.
- It should be obvious that if supervising domestic trade in listed goods and services, not to say "catch-all" controls, is not to become an implementation nightmare, then
- A public-Private partnership based on the mantrum of **'Trust but Verify'** through state-monitored Industry Compliance Programmes (ICPs) is inevitable.

# Aerospace Technology Governance: The confluence of ATC and PPP

- It will take time, effort and minute attention to regulatory detail to set-up a government-monitored system of manufacture and trade (both foreign and domestic) in dual-use goods and services.
- As a country we are not new to this type of technology-based, full-chain, integrity-assurance. The Indian nuclear industry is familiar with the entire systematic of IAEA safeguards.
- After nearly forty years of LPQR, Indian industry has tasted the heady freedom of de-regulation. The next wave of expansion, growth and value-addition in their basket of exports will be increasingly laden by the products of foreign or domestic state-controlled technologies and services, particularly in aerospace.
- The India Chapter of IFFAAD and aerospace industry groupings, such a SIATI, would serve their membership well if they started their serious dialogue with Government about the *shlokas* in the mantram of 'Trust but Verify' chanted at the confluence of ATC and PPP