1. The 14th edition of the International Conference on Energising Indian Aerospace Industry, sub-themed “Flight plan for the Future” was held on 05-06 September, 2019 at India Habitat Centre, New Delhi. This conference, of international repute, brought together Government officials, serving Armed Forces officers, captains of industry (both Indian and foreign), MSMEs, academia and the users to discuss issues of concern for all stakeholders and arrived at recommended action points for the Government. The topics discussed, besides the Make in India drive, included the development of aerospace clusters as well as those pertaining to Start Ups and MSMEs, who are the real drivers of aerospace industry.
2. The conference was inaugurated by the Vice Chief of the Air Staff, Air Marshal RKS Bhadauria PVSM AVSM VM ADC who emphasised the urgent need to stem the drain of foreign exchange (due to the high imported content of ‘indigenous’ products). This was followed by a Special Address by Dr. S Guruprasad, DS & Director General - (PC & SI) who spoke about the need for a synergistic approach involving all the stakeholders. The Keynote Address was delivered by Shri Apurva Chandra, Director General (Acquisitions), Ministry of Defence (MoD), who indicated the extensive negotiations in progress for the revision of the DPP and the DPM with an aim to release it by first quarter of 2020. Mr Satish Kaura of CII delivered the Vote of Thanks and pitched in for early action on formulation of DPP 2020.

3. The one and a half day conference, spread over seven sessions, had exclusive addresses by the Deputy Chief of the Air Staff, Air Marshal VR Chaudhari AVSM VM and the Air Officer-in-Charge Maintenance, Air Marshal S Choudhary, besides a special address by Shri Sanjay Jaju, Joint Secretary (DIP) Department of Defence Production, MoD. Ms Vandana Aggarwal, Economic Advisor, Ministry of Civil Aviation, who also addressed the gathering, spoke about the various “Opportunities for Industry in Civil Aviation”.

4. During the discussions there was a general consensus that the frequency of interaction among the stakeholders through such forums must be increased. There was also a recognition of the fact that the primary challenge for Indian companies working in the aerospace sector remains that of meeting the timelines and those of quality related concerns. Recognition of these challenges is the first step towards finding a suitable solution.

5. There was also an acceptance of the fact that the development of national aerospace industrial capability must factor in a host of complex relationships between core national security interests, both external and internal, and geo political postures, strategic partnership between countries, technological advances and India’s economic compulsions.; for this, an all-round hand holding by all concerned departments of the Government of India is required.

6. Recommendations
   - There needs to be better communication, cohesion and convergence of ideas between the end users and the developers, with the users becoming a part of the design team which would aid in fostering a healthy relationship amongst them. The armed forces need to have their
own innovation centres and centres of excellence in order to clearly convey the user’s requirements; these centres would be vital catalysts to nurture deserving companies. This effort needs to be supplemented by regular stakeholder meetings.

- Indigenous capability build-up needs a “Spiral Development” model, with constant upgrades and clear and enforceable timelines. While this process must cater to the immediate capability requirements of the armed forces, it also needs to be clearly understood that foreign countries will give only second rung technology to other countries and not the “state-of-the-art”. We must therefore invest constantly in building indigenous capability to design and build military platforms.

- Several Indian industries have built niche capabilities in certain engineering disciplines, notably high-end mechanical engineering, aero-structures, near net shape titanium castings etc. The industries have also progressed from “build to print” to “Build to specifications” regime, reflecting higher level of design skills. There is a need to create suitable mechanisms to aggregate such capabilities through System Integrators.

- Offsets in defence contracts should be utilised towards acquisition of “targeted” technologies, not just by DRDO but industry also. Suitable methodologies for evaluation of technologies need to be formulated by the Acquisition Organisation in MOD to facilitate this. Several niche technologies are actually held by the Group companies or lower tiers of the OEM. There was a call by the industry that offset guidelines should be amended to permit their participation in discharge of offsets. Suitable multipliers for such “targeted” technologies should also be considered.

- Start-ups need to be aided by funding support during the development and prototype development stages; they need mentoring to enable them to absorb costs while providing innovative solutions. For this to happen, major defence manufacturers must be linked with private sector and enabling policies that afford lower duties for acquisition of technologies need to be in place.

- In the Strategic Partnership (SP) model, acquisition of technology must remain a priority and the offset clauses must have well defined clauses specifying the minimum technology
requirements to be met. These should be used as a leverage and must include a “Go-No Go” requirement for the acceptance and execution of the contract.

- The extant concept of NC-NC (No Cost-No Commitment) needs to be re-examined; the industry, especially the small players, do not have the financial back-up to meet this requirement.

- The “GOCO” (Government-Owned Company-Operated) concept needs to be promoted under which R&D resources available with defence PSUs and DRDO labs are utilized by private vendors; such facilities are prohibitively costly and cannot be set up in the private arena, even by most major Indian private entities. While rules exist for this even now in some form, the experience has been far from satisfactory as the will to implement GOCO is lacking; government may legislate accordingly to facilitate GOCO in the true spirit.

- Self-certification by the indigenous manufacturers may be started on a trial basis to overcome the time overruns in performance trials by certification agencies.

- To cater to the rapid expansion of the drone industry, specialist drone training academies, independent of flying training institutions, should be established.

- Due to the threat from drone based attacks, the government must tap private aerospace industry for R&D of anti-drone technologies; this is the need of the hour considering the recent high profile drone attacks.

- For a product development to meet a specific defence requirement, there must be an assured minimum order for it to be economically viable. This may be subject to successful demonstration of technology readiness prior to placement of order.

- Doing R&D is prohibitively expensive; the government must look towards establishing a state supported R&D infrastructure which provides an enabling environment for development of complex technologies; this will greatly help SMEs to enter global supply chains. The strength of Indian SMEs of being interactive and precision driven, with an ability to produce small volume high customization components, needs to be exploited.

- The MoD needs to have a single point contact to look after the MSMEs. Regular cash flow for MSMEs is an imperative that cannot be overlooked and can be aided by improving the
transparency in payments due from the DRDO and PSUs. This is a major sore point that can be alleviated through the availability of the payment status and associated details online.

- To ensure visibility of aerospace & defence manufacturers available in India, list of their credentials needs to be available for all and sundry; to do this, a rating agency can be formed. This agency can make available its compendium online.

- The MRO potential of the aerospace clusters being developed in various states should be harnessed by providing a suitable taxation environment, the lack of which is the cause for such money-spinning overhauls being done abroad. There is also a need to adopt global standards so that documents submitted by Indian MROs are accepted by foreign regulators. DGCA should enter into suitable MOUs with FAA / EASA for mutual recognition of skill, process and product certifications.

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