

# **PROCEEDINGS OF SEMINAR ON “SMALL ARMS-FROM CURRENT PARADIGM ON SMALL ARMS TO THE NEXT LEVEL”**

**BY**

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**20 FEB 2020**

## **Introduction**

1. CENJOWS and FICCI jointly conducted an International Seminar on Small Arms titled ‘From Current Paradigm on Small Arms to the Next Level’. The seminar was conducted at FICCI, Federation House, New Delhi on 20 Feb 2020.

## **INAUGURAL SESSION**

### **Welcome Address**

2. Mr Arun T Ramchandani, Co Chairman, FICCI Defence and Aerospace Committee welcomed all the delegates and the speakers to the seminar and highlighted the stupendous success of the Def Expo 2020 in showcasing the capabilities of the defence Industry. He explained the steps taken by the Industry in enhancing Make in India, the creation of Manufacturing facilities for the same and the efforts in joining the Global supply chain. He also highlighted the need for creating business opportunities for the Industry and handholding by the Government and the user for ensuring the requisite growth which will eventually result in self reliance. He gave certain recommendations which are being covered in the end of the paper. He once again thanked all the participants and wished them the very best of discussions.

### **Indian Industry Perspective**

3. Mr Ashok Wadhawan, Member FICCI Defence and Aerospace Committee and Chairman PLR Systems gave the Indian Industry Perspective wherein he highlighted the large market of Small Arms which exists in India as these are required by Armed forces, CAPFs, State Police and others. This was the main for PLR systems choosing this arena for installing manufacturing capacities in India. However, over the last few years, the major requirements of the forces like the assault rifles, LMG etc have been progressed with foreign OEMs. This has created a situation that while indigenous capabilities exist in manufacture of Small Arms, these are not being utilised or allowed to participate in procurement cases which makes their business model unviable. He highlighted the need to aggregate the requirement of all the services requiring Small Arms and ensure participation by Indian vendors in all these cases as the capabilities exist within the country. This will allow the Industry to grow and become part of the Global supply chain. He further stated that the Industry too needs to discuss and come out with a policy where only a limited number of vendors are participating in each category as this will allow the limited quantities to be shared adequately.

### **Special Address**

4. Vice Admiral R Hari Kumar, AVSM, VSM, CISC, HQ IDS delivered the special address and highlighted the importance of small arms to soldiering. He gave an overview of the growth of small arms through the last century, the increased technological advancements which have made small arms more potent, lethal, reliable and an invaluable part of any conflict. The increased use of asymmetric warfare will pose numerous challenges to the soldier and it is therefore essential to equip him with a reliable weapon which increases his confidence and consequentially his morale.

He elaborated on the huge requirement of small arms by various agencies in the country and thus the need to be self reliant in this basic equipment. He discussed the difficulty of the Industry in producing indigenously designed small arms and the steps taken to overcome these infirmities. He highlighted the changes in rules and policies which have been incorporated in order to encourage the domestic defence industry and the need to eye the global market to make the business model viable. He exhorted all stake holders to create home grown and cost effective solutions to meet the needs of the defence forces and assured the participants that the suggestions given would be acted upon, where feasible. He stressed upon the need of self reliance in defence manufacturing, which is an imperative for Strategic Autonomy.

**5. Release of FICCI Knowledge Paper on Small Arms and 'Synergy', The CENJOWS Annual Journal.** The session concluded with release of FICCI Knowledge Paper on Small Arms and 'Synergy', The CENJOWS Annual Journal.

### **Concluding Remarks and Vote of Thanks**

6. Lt Gen Vinod Bhatia, PVSM, AVSM, SM (Retd) in the concluding remarks reiterated the Aim of the seminar which was to get all the stake holders on a common platform to discuss pertinent issues and come up with actionable recommendations for improvements. He highlighted the importance of small arms for the soldier and the need of the Armed forces to be equipped correctly for fighting the current and the future battles as required by any world power. He stated that India does not qualify as a world power as almost 63% of our arms are imported and there is a pressing need to become self reliant in Defence for which all stake holders must strive. A number of policy changes have been put in place to encourage this; however the procedures and processes too need to change for the system to improve. In the end he thanked all the participants for their presence and wished the seminar the very best.

## **SESSION -1** **SMALL ARMS REQUIREMENTS : USER PERSPECTIVE**

7. This session was chaired by Maj Gen J S Sandhu, VSM, Officiating DG Infantry, Army HQ. He highlighted that the Infantry directorate was the Nodal directorate for procurement of Small Arms for the Indian Army. He gave an overview of the infantry modernization plan and the key challenges envisaged. He was assisted by representatives from the Services as the co-panelists.

### **First Speaker**

8. Maj Gen A K Channan, PVSM, SM, ADG PP (B), Army HQ gave an overview of the evolving nature of warfare and changes in doctrines, technologies and hardware. He gave an insight on the emerging threats and the importance of developing technologies to fight the future wars. He highlighted the latest measures being undertaken for capability building and the need for the Industry to start looking at future technologies like AI, RF guns etc now itself. He stated that the Indian armed forces and other users like CAPFs etc provide a good business opportunity which must be exploited.

### **Second Speaker**

9. Col Manish Rana, Director PP Directorate, Army HQ spoke on the long term requirement of small arms by the Armed forces. He highlighted the focus areas and the breakthrough technologies which would be required in the future.

**Third Speaker**

10. Col Amitoz Singh, Director Infantry 8, Army HQ gave an insight on the small arms cases in progress and the future requirements of the Indian Army. He highlighted capacities and capabilities being sought by the users and the need for the Defence Industry to focus on these to meet the requirements.

**Fourth Speaker**

11. Col V S Salaria, Special Forces spoke on the requirements of small arms by the Special Forces. He highlighted capacities and the quantities which would be required by the Special Forces in times to come.

**SESSION -2**  
**INSIGHT INTO PRESENT TECHNOLOGICAL ENVELOPE**  
**IN SMALL ARMS, AMMUNITION AND OPTRONICS**

12. This session was chaired by Lt Gen Subrata Saha, PVSM, UYSM, YSM, VSM\*\* (Retd), Member NSAB and former DCOAS (P&S), Army HQ. He gave an overview of the tremendous strides taken by the industry in building capacities, however the procurements are still not happening as desired. He was assisted by representatives from the Industry, OFB and MIDHANI as the co-panelists.

**First Speaker**

13. Mr Hitendra Singh, AGM, Rifle Factory Ishapore spoke on the critical technologies in manufacturing of Small Arms and highlighted the capacities existing in Rifle Factory, Ishapore.

**Second Speaker**

14. Mr Dinesh Kumar Likhi, CMD, MIDHANI and a Staff officer from MIDHANI spoke on the role of material sciences (Metallurgy, Composites, Polymers) in modern weapon systems. They highlighted the available technologies in MIDHANI and their utilisation for creating the desired weapon systems.

**Third Speaker**

15. Mr Ajay Soni, Director PLR Systems gave an overview of the company and highlighted that PLR systems was the first Indian company which had ventured into making Small Arms and was now capable of producing all types of small arms indigenously. He reiterated the need for procurements to be through Indian vendors for the industry to prosper.

**Fourth Speaker**

16. Mr Sanjay Soni, Director, Hughes Precision Manufacturing Pvt Ltd gave an insight on extremely relevant topic pertaining to improving the precision and lethality of small caliber ammunition.

17. The Chairperson summarized the discussion and highlighted the need to improve our Policies and procedures to ensure that the procurements from Indian vendors are encouraged and

also completed in the given timelines. Recommendations given by the Chairperson are summarized at the end of the paper.

### **SESSION -3** **CRYSTAL GAZING : COMBAT SYSTEMS FOR THE** **FRONTLINE SOLDIERS**

18. This session was chaired by Lt Gen Vinod Bhatia, PVSM, AVSM, SM (Retd). He was assisted by representatives from the industry as the co-panelists.

#### **First Speaker**

19. Maj PV Krishnan (Retd), CEO, Casseopia Design and Engineering LLP gave a detailed presentation on the unmanned munitions like Loitering ammunition and drones and the developments taking place in using AI for these.

#### **Second Speaker**

20. Dr TS Shivshankar, Vice President Operations, Indo-MIM Pvt Ltd gave an interesting talk on the futuristic technologies in manufacturing of small arms.

#### **Third Speaker**

21. Dr Fitz Visser, CEO, Rippet Effect System (Pty) Ltd gave an overview of the role of MGL and use of advanced ammunition in modern warfare and highlighted the advances taking place in this field.

### **SESSION - 4** **TRAINING AIDS AND SIMULATORS**

22. This session was chaired by Lt Gen Sanjay Kulkarni PVSM, AVSM, SC, SM, VSM (Retd), Former DG Infantry, Army HQ. He was assisted by representatives from the Services and Industry as the co-panelists.

#### **First Speaker**

23. Col Kapil Oberoi, HoD, SDD, Secunderabad, spoke on the very relevant topic of Training by use of Simulators and how the Simulators are being developed and utilised in the Indian Army for assisting in training the soldiers.

#### **Second Speaker**

24. Brig Amul Asthana (Retd), Vice President Zen technologies gave a detailed insight on the new technology trends in Simulators and training solutions for soldiers.

**SESSION 5**  
**CURRENT STATUS AND THE WAY FORWARD**  
**FOR MAKE IN INDIA IN SMALL ARMS MANUFACTURING**

25. This session was chaired by Maj Gen Ajay Oberoi (Retd), Former ADG Infantry, Army HQ. He was assisted by representatives from the Govt Officials and Industry as the co-panelists.

**First Speaker**

26. Dr V Venakateswara Rao, Outstanding Scientist and Director, ARDE, DRDO along with another officer from DRDO spoke on the R & D focus towards futuristic technologies.

**Second Speaker**

27. Mr P C Agarwal, Head Defence, Jindal Defence System gave an insight on collaborative approach for a successful partnership towards Make in India.

**Third Speaker**

28. Mr Sanjay Jaju, Joint Secretary DIP, DDP, MoD gave an overview of the policy initiatives and steps taken by the Government to encourage Make in India and exports of small arms wherein he highlighted the importance of Make in India both for self reliance as also for the Economy of the Nation. He spoke about the reforms in Licensing which have been put in place and the importance given to exports highlighting the comprehensive online portal on the DDP website which allows vendors easy access to all the policy and procedures in a single window. He thanked CENJOWS and FICCI for conducting this important seminar and also complimented the organizers for the excellent Knowledge paper which has certain actionable recommendations which will be acted upon.

**SUMMARY OF RECOMMENDATIONS**

29. The seminar provided an opportunity to all the stake holders to discuss the relevant issues pertaining to Make in India with special reference to development of Small Arms in the country. A number of important and relevant issues emerged which will provide the way forward in rejuvenating this programme and Small Arms manufacture indigenously. These are summarized as follows:-

(a) There is a need to transition from the TPCR to a defence Industrial planning document, which should be shared with the Industry and should highlight the requirement of the Armed forces in much greater details so as to assist the industry in planning and executing Make in India projects.

(b) There is a need to provide a level playing field to the Industry vis-a-vis the DPSUs so as to encourage their growth. It should be ensured that where options for Indian designed, import substitution exist, the suo moto Make II proposal route is encouraged.

(c) Technology development being planned may be in two or more timelines allowing for development in stages. This way, the MOD need not have to buy massive quantities in one go and can work with industry to progressively have upgrades coming in.

(d) DPP 2020 should factor the suggestions fwd by the Industry and include amendments which will rejuvenate Make in India. Ease of Doing Business should be facilitated. For example, any testing in the production facility will require the use of either Indian made or imported ammunition. The MoD could enable Indian OEMs to acquire ammunition cartridges from the OFB and/or facilitate import ammunition simply by issuing end user certificates on their name and by simplifying the import licensing process.

(e) The Indian Defence Industry, DRDO and DPSUs need to invest in R&D for developing niche technologies for our future needs. Exports need to be encouraged and indigenous cost effective solutions found to meet our future requirements. The Industry has to come with mission reliable weapons on priority.

(f) For export capabilities, especially for military markets, the Indian MoD should consider the DGQA or any other private agency to allow certification of products as per global norms. Recent initiatives by MOD to enable Private Sector to have access to testing facilities of Ordnance Factories, DPSUs and DRDO labs are on the correct lines. However, for logistical ease, the DGQA / end users may also consider to empower the Indian OEMs by conducting all main tests that require firing within the OEM's proof testing facility itself. This way, OEM's will not only be incentivized to invest in proof testing but also the production process need not be compromised for the lack of timely information. Needless to say, this will also enable large scale private sector companies to contribute towards creating testing facilities.

(g) DPIIT has an online process for application of Industrial License. MHA (which issues license for small arms and ammunition) should also move to an online process. Documents required need to be clearly stated, since the documents stated on the site and forms do not seem to suffice. Establish an Ombudsman for Industrial License and institutionalize a regular feedback mechanism and intimation to the industry on details lacking in their application as well as status.

(h) Tenders and Bids do have an RFI stage but the RFI should be used to agglomerate information on what are the key features of weapons. The user should as much as possible lay down performance parameters, test protocols to be matched and weapon capabilities instead of suggesting technical and/or production requirements. The user agency should focus on assigning compliance with test protocols - accuracy, reliability, ruggedization etc.

30. At the conclusion of the Seminar, Mr Vivek Pandit, Assistant Secretary General, FICCI gave the vote of thanks and complimented all the participants on the comprehensive discussions on all relevant issues.