



भारत इलेक्ट्रॉनिक्स
BHARAT ELECTRONICS

भारत इलेक्ट्रॉनिक्स लिमिटेड

(भारत सरकार का उद्यम, रक्षा मंत्रालय)

पंजीकृत कार्यालय :

आउटर रिंग रोड, नागवारा, बेंगलूर - 560 045, भारत

Bharat Electronics Limited

(Govt. of India Enterprise, Ministry of Defence)

Registered Office : Outer Ring Road,

To

National Stock Exchange of India Ltd



BEL Press Conference

30.05.2018

Financial Highlights of 2017-18



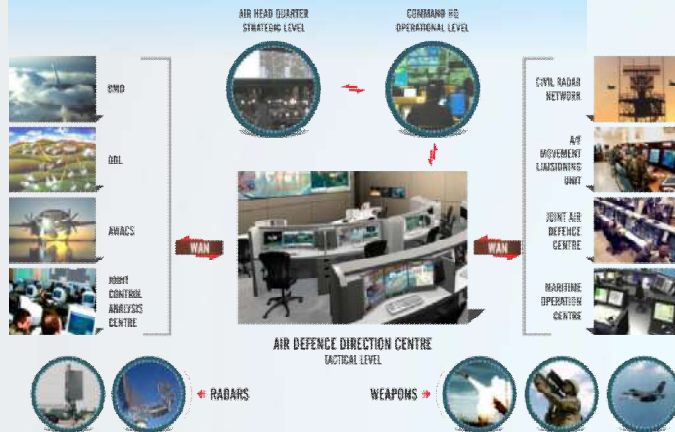
Parameter	2017-18 (Audited)	2016-17 (Audited)
Turnover (Rs. Crs)	10085	8825
Profit Before Tax (Rs. Crs)	1948	2029
Profit After Tax (Rs. Crs)	1399	1548
Export (US \$ Million)	26	65
Turnover per Employee (Rs. Lakhs)	103.69	90.83
Value added per Employee (Rs. Lakhs)	45.86	39.64
Order Book Value (Rs. Crs)	40115 as on 01.04.2018	40242 as on 01.04.2017
Expenditure on R&D (Rs. Crs)	988	777

Highlights of 2017-18

- Registered a turnover growth of 14% over previous year
- Export turnover of 26 Million USD
- Supply commenced for Ground Based Mobile ELINT System and Battlefield Surveillance System
- Inauguration of BEL developed Online Inventory Management System for Indian Navy
- Excellent “MoU” Rating for 2016-17
- Turnover from indigenous technology is 89%
- Sales from Defence business is 85%

Major Orders Executed in 2017-18

Integrated Air Command & Control System



Fire Control System



L70 Gun Upgrade



Akash Weapon System



Major Orders Executed in 2017-18



Weapon Locating Radar



Electronic Fuze



Electronic Voting Machine



Voter Verifiable Paper Audit Trail

Major Orders Executed in 2017-18



Schilka Upgrade



3D Tactical Control Radar



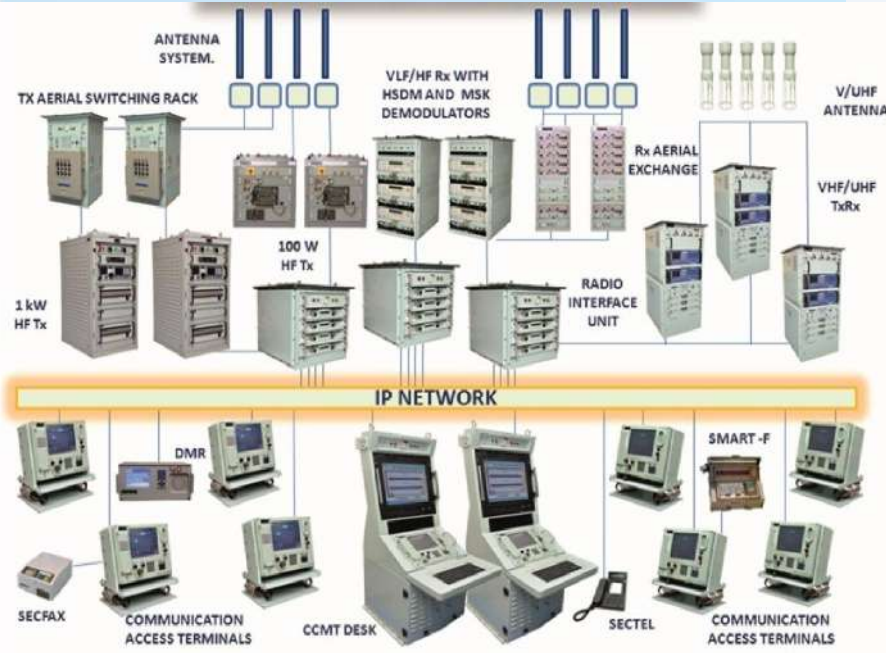
HHTI with LRF



Battle Field Surveillance System

Major Orders Executed in 2017-18

Advanced Composite Communication System

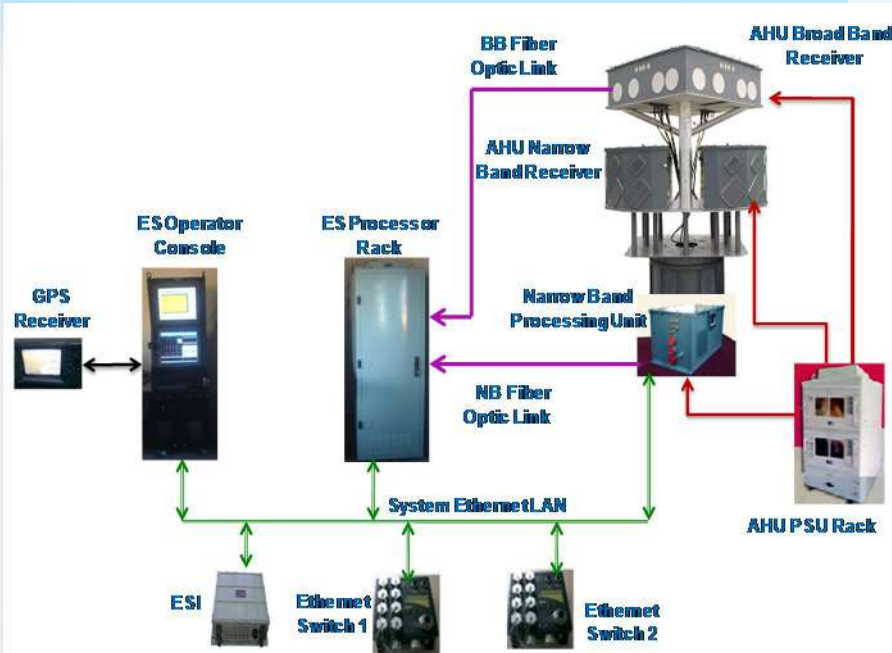


Submarine Sonar Suite (USHUS 2)



Major Orders Executed in 2017-18

Ship Based EW System (Varuna)



Ground Based Elint



New Products Introduced in 2017-18

- Ground Based Mobile Elint System
- Lynx U2 for SNF and P15
- Radio on the Move for QRSAM
- Advanced Composite Communication System for P15B
- Ship Data Network for P16A
- Multi Purpose Reflex Weapon Sight
- Universal Lab Test Rig for Radar Warning Receiver
- Mine Field Recording System
- Electronic Voting Machine Mk II
- Voter Verifiable Paper Audit Trail Mk II

Major Orders Received in 2017-18

- Voter Verifiable Paper Audit Trail
- Commander Thermal Imager Sights for T72
- Commander Thermal Imager Sights for BMP
- Low Intensity Conflict EW System
- Hull Mounted Sonar for P71
- Electronic Voting Machine
- Surveillance Radar Element
- Strategic Communication System
- Integrated Mobile System
- Compact Multi-Purpose Advanced Stabilized System (CoMPASS)

Export Performance

- Achieved Export sales of US \$ 26 Million
- Major products include Coastal Surveillance System, CoMPASS, Advanced Composite Communication System, Electro Mechanical parts etc.
- Participated in 3 International Exhibitions to showcase products & capabilities
- Export order book of US \$ 92 Million as on April 1, 2018; includes Offset order book of US \$ 35 Million
- Raksha Mantri award for Best Performance in Exports for the year 2015-16



Research & Development

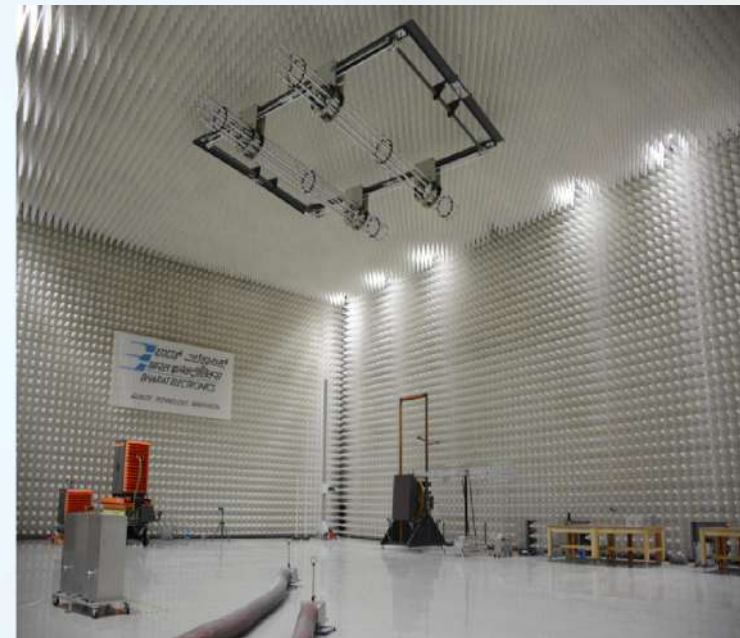
- Successful test firing of indigenous RF Seekers (developed along with DRDO) for Akash 1S Missile System
- Successful test flight of Rustom II drone (Medium Altitude Long Endurance Unmanned Aerial Vehicle – MALE UAV) developed along with DRDO
- BEL has signed LATOTs with DRDO and many in pipeline



- Future thrust areas are
 - Cognitive & Artificial Intelligence
 - Machine Learning
 - Cyber Security
 - Cloud Computing & Data Analytics
 - Image Analytics, etc

Manufacturing Initiatives

- Advanced EMC Testing Facilities of size 11m x 21m x 30m which can conduct testing of Systems / Platforms weighing up to 70 Tonnes.
- Near Field Antenna Test Range (NFTR) facility for calibration and testing of Radars and communication antennas
- Established High level Shock Testing Facility capable of imparting mechanical shocks up to 120g level for equipment weighing up to 800 kg
- Secured Manufacturing Test facility established for production of EVMs and VVPATs
- State of the art Electronic Artillery Fuze manufacturing



**Electro Magnetic Compatibility (EMC)
Chamber for system level testing**

Business Initiatives



- Acquiring land at High tech Defence & Aerospace Park at Devanahalli for pursuing business in areas like Satellite Integration, Space Electronics, Unmanned Systems, etc
- Engagement with potential Strategic Partners (identified by MoD) in the areas of aircrafts, tanks and submarines
- Dedicated Business vertical to address Cyber Security, Unmanned Systems and Composites
- Thrust on exports, offset and contract manufacturing
- Expanding Global presence with new overseas offices
- Progress on diversification initiatives of BEL in the areas of Homeland Security & Smart City Business, Ammunition Fuzes and RF Seekers have been satisfactory. BEL is having revenue inflow in these areas

Quality Initiatives



- All Units / SBUs certified for ISO 9001 QMS & ISO 14001-2004 EMS standards
- Seven Units / SBUs certified for AS 9100 Aerospace standard & 4 Units / SBUs under process for AS 9100 Certification
- Central Software Development Group at Bangalore Complex is CMMi level 5 certified and Central Research Laboratory at Ghaziabad is CMMi level 3 certified
- 23 Engineers participated in 'Robust Engineering Quality' Program conducted by Shin Taguchi from Japan
- Total 226 engineers certified as CRE (Certified Reliability Engineers) and 176 engineers as CQE (Certified Quality Engineers) 20 engineers as CSQE (Certified Software Quality Engineers) and 61 Executives as CMQOE (Certified Manager of Quality for Organizational Excellence) by American Society of Quality (ASQ)
- 454 PMPs (Project Management Professionals) are certified by Project Management Institute till date

'Make in India' Initiatives

- 89% of Sales Revenue from Indigenous technology
- BEL is focusing more on core areas and R&D to retain IP, all non-core areas are being outsourced to Indian Industries including MSMEs
- Outsourcing and Vendor Development Policy has been released
- “Make in India” Display Cells established in all Units of BEL
- Nodal officers for Outsourcing & Vendor development nominated
- Complied with Public Procurement Policy
- BEL’s Test facilities are being provided to Private vendors



HR Initiatives

- Inauguration of Nalanda : BEL Academy of Excellence (BAE)
- Release of 3 year Training Plan of BAE in technology, leadership and quality domains
- Company wide per capita training man days was 5.1 during 2017-18
- Commencement of in-house EDP programs
- Record PMP certification during the year (141 certified)
- Programmes on Contract Law and Contract Management, Negotiation Skills



Environmental Initiatives



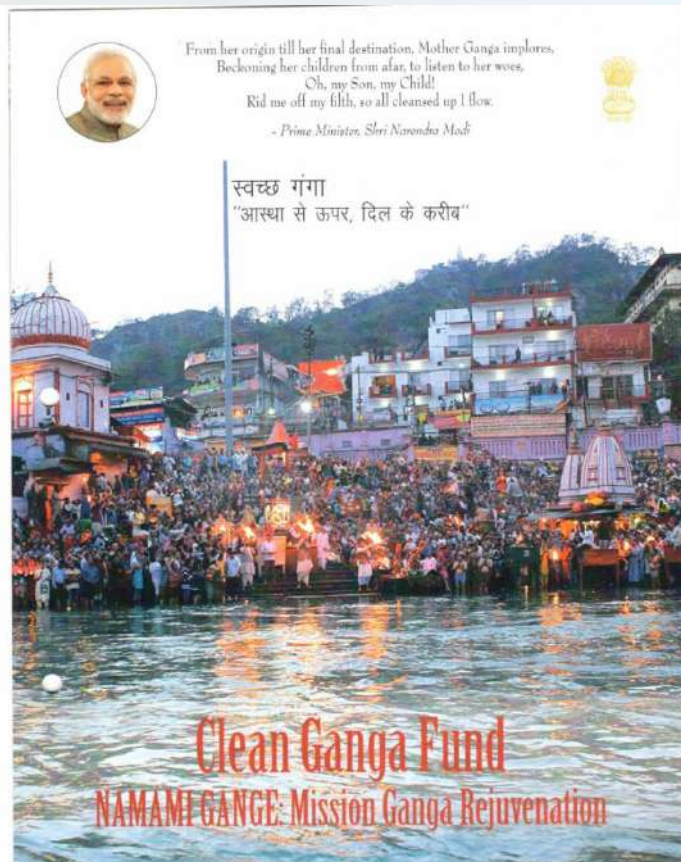
- All 9 Units of BEL are ISO 14001 (Environmental Standard) certified
- Well-established Environmental Management System with pollution control measures, Waste Water Treatment, Zero Effluent Discharge, Rainwater Harvesting, Energy Conservation and proper disposal of Hazardous Waste

Environmental Initiatives

- With a total capacity of 13.9 MW wind energy plants, 258 Lakh units generated has been wheeled during 2017-18
- Green energy generated during 2017-18 is about 283 Lakh units
- Green Building concept has been introduced in all new buildings, and all future buildings will meet Green Rating for Integrated Habitat Assessment (GRIHA) rating compliance
- BEL has taken up sustainable development initiative for replacing of conventional lighting with LED lighting system
- In addition energy conservation measures such as efficient VRV AC systems & screw chiller, DALI (Digitally Addressable Lighting Interface) Lighting control system are introduced



Corporate Social Responsibility



Contribution to Clean Ganga Fund



Contribution to Swachh Bharat Kosh

Corporate Social Responsibility



Foundation stone laid for the installation and commissioning of Sewage Treatment Plant at Doddabommasandra Lake, Bengaluru, Karnataka



Inauguration of the new Electronic Mechanic Lab and Fitter Workshop established at adopted Government ITI, Gowribidanur, Karnataka

Corporate Social Responsibility



**RO Plant installed at the adopted village
Chowdamma Gutta Thanda, Shadnagar, Mahabub Nagar district, Telangana**



Inauguration of the new facilities provided to the adopted Government ITI, Guindy, Chennai

Corporate Social Responsibility



Signing of MoU for providing Mobile Cancer Detection Unit to Kidwai Institute of Oncology



Donation of shoes to tribal youth of Panchkula, Haryana, as part of Tribal Youth Exchange Programme



New buildings with classrooms and toilet blocks constructed at Cheemasandra, Mallimakanapura and Ronur Govt schools (Karnataka)

Awards

- Prime Minister's Shram Award to our employees
- RM Award for Excellence in Performance, Export, Import substitution & Design effort
- Outstanding PSU of the Year 2017 Award from All India Management Association (AIMA)
- 'Responsible Organisation Excellence Awards' 2016-17 (PSU category) from ASSOCHAM.
- Vigilance Excellence Award – 2017 for Excellent Contribution in the category of “Best Institutional Practice to Fight Corruption”
- Scope Award-2017 for Excellence and Outstanding Contribution in the category of Digitalization.
- Dun & Bradstreet Corporate Award 2017 in Manufacturing Category.



Outlook for the Future

- BEL to continue indigenisation efforts in line with 'Make in India' initiative
- Radars, Missile Systems, Communication & Network Centric Systems, Tank Electronics, Gun Upgrades, Electro-Optic Systems and Electronic Warfare & Avionics Systems to drive BEL's growth
- Establishment of state of art new factories at Machilipatnam for Electro Optics and Anantapur for future Missile programs
- Company pursuing business opportunities in Space Electronics, Solar Energy, Homeland Security, Smart Cards and Telecom
- Strategies and action plans in place to face competition, maintain technological edge and retain leadership position in strategic electronics

Thank You