ANNEXURE-IV
MANAGEMENT DISCUSSION & ANALYSIS

Forward looking statements

Statements in this Management Discussion and Analysis of Financial Condition and Results of Operations of the Company describing the Company's objectives, expectations or predictions may be forward looking within the meaning of applicable securities laws and regulations. Forward looking statements are based on certain assumptions and expectations of future events. The Company cannot guarantee that these assumptions and expectations are accurate or will be realised. The Company assumes no responsibility to publicly amend, modify or revise forward looking statements on the basis of any subsequent developments, information or events. Actual results may differ materially from those expressed in the statement. Important factors that could influence the Company's operations include government's strategy relating to acquisition of Defence equipments, changes in government regulations, tax laws, economic developments within the country and such other factors globally.

Bharat Dynamics Ltd in Brief:

Established in 1970, Bharat Dynamics Limited (BDL), is a Government of India Enterprise under the Ministry of Defence and a manufacturer of Surface to Air Missile(SAM), Anti -Tank Guided Missile (ATGM), Torpedoes, and allied defence equipments. Head Quarters of the company is located in Hyderabad and has three manufacturing units, located at Kanchanbagh, Hyderabad,Telangana, Bhanur, Medak District, Telangana and Visakhapatnam, Andhra Pradesh. Two New Units are planned at Ibrahimpatnam, Ranga Reddy district, Telangana and Amravati,Maharashtra. During the recent years the company also commenced export of selected defence equipments and has entered into strategic alliances with public and private sector companies. The Company has 2950 employees as on 31 March 2020 and during the year 2019-20 reported a sales turnover of ₹ 3095 Crore.

1. Strategic Environment

The company operate in an environment characterised by both increasing complexity in factors influencing national security and continuing economic challenges in India and globally. A significant component of our business outlook in this environment is to focus on execution, improving standards and quality and predictability of the delivery of our products to the Indian Army. We also continue to invest in technologies to fulfil the requirements of the Indian armed forces and also invest in our people so that we have the necessary technical skills to succeed without limiting our ability.

BDL's business is influenced by its strategic environment comprising of Indian defence sector, Global defence spending, Government Policy & Emerging trends.

1.1 Global Defence Spending

The global military spending rose to $1917 billion in the year 2019. The overall military expenditure has increased to 3.6 percent between 2018 and 2019 and the largest annual growth in spending since 2010. The global military spending currently accounts to 2.2 percent of the world global gross domestic product (GDP). The global military spending in 2019 was 7.2 percent higher than it was in 2010, showing a trend that military spending growth has accelerated in recent years. This is the highest level of spending since the 2008 global financial crisis and probably represents a peak in expenditure.

The five biggest spenders in the year 2019 were the United States, China, India, Russia and Saudi Arabia, which together accounted for 62 per cent of global military spending. In atleast four of the world's five regions, military expenditure increased in 2019, the highest increase was in Europe (5.0 percent), followed by Asia and Oceania (4.8 percent), the Americans (4.7 percent) and Africa (1.5 per cent). The changes in the ranks of top five countries between 2018 and 2019 is shown as below:

Rank		Country
Year 2019	Year 2018	
1	1	United States
2	2	China
3	4	India
4	5	Russia
5	3	Saudi Arabia

The top 15 countries spent $1553 billion in 2019 and accounted for 81 per cent of global military expenditure.Among the top 15 military spenders in 2019, Japan had the lowest military burden, it devoted only 0.9 per cent of its GDP to military expenditure. Saudi Arabia had the highest, 8.0 per cent. Among the top 15, the military burdens of Israel (5.3 per cent), Russia (3.9 per cent), the USA (3.4 per cent), South Korea (2.7 per cent) and India (2.4 per cent) were also higher than the global military burden.

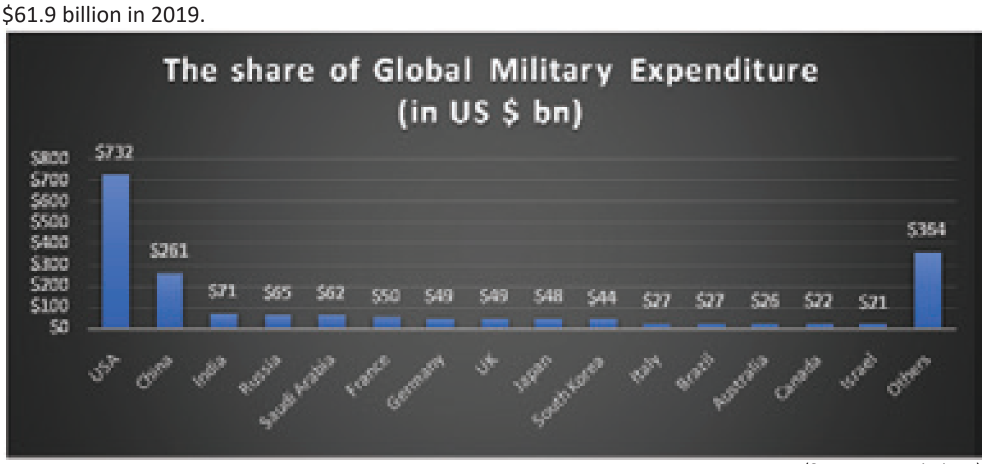
Military spending by the USA grew by 5.3 per cent to a total of $732 billion in 2019 and accounted for 38 per cent of global military spending. The increase in US spending in 2019 alone was equivalent to the entirety of Germany's military expenditure for that year. This is the second year of growth in US military spending following seven years of continuous decline between 2010 and 2017 spending fell by 22 per cent. China, the world's second-largest military spender, is estimated to have allocated $261 billion to the military in 2019 equivalent to 14 per cent of global military expenditure. Its military spending in 2019 was 5.1 per cent higher than in 2018 and 85 per cent higher than in 2010.

China's military expenditure has increased continuously since 1994 (for 25 consecutive years). The growth in its military spending has closely matched the country's economic growth. Between 2010 and 2019, China's military burden remained almost unchanged, at 1.9 per cent of its GDP.

In 2019, China and India are the top Asian Military spending nations, they were respectively, the second- and third-largest military spenders in the world. China's military expenditure reached $261 billion in 2019, a 5.1 per cent increase compared with 2018, while India's grew by 6.8 per cent to $71.1 billion.India's military expenditure has risen significantly over the past few decades. It grew by 259 per cent over the 30-year period 1990–2019 and by 37 per cent over the decade 2010–19. However, its military burden fell from 2.7 per cent of GDP in 2010 to 2.4 per cent in 2019. In addition to China and India, Japan ($47.6 billion) and South Korea ($43.9 billion) were the largest military spenders in Asia and Oceania. Military expenditure in the region has risen every year since at least 1989.

Germany leads military expenditure increases in Europe, Germany's military spending rose by 10 per cent in 2019, to $49.3 billion. This was the largest increase in spending among the top 15 military spenders in 2019. At the same time, however, military spending by France and the United Kingdom remained relatively stable. Russia was the fourth-largest spender in the world and increased its military expenditure by 4.5 per cent to $65.1 billion. At 3.9 per cent of its GDP, Russia's military spending burden was among the highest in Europe in 2019.

As regards the Middle East is concerned the two of the top 15 global spenders in 2019 are in the Middle East: Saudi Arabia (rank 5) and Israel (rank 15). Saudi Arabia is by far the largest military spender in the region, with an estimated total of $61.9 billion in 2019.



(Source: www.sipri.org)

While military expenditure varies widely between regions and between countries, the general trend is that military spending as a share of GDP has decreased in all regions since 1999. In Asia, higher defence spending by major regional powers such as India, China, and Japan will likely contribute to global sector growth. In Europe, members of NATO are also increasing defence budgets to reach a defence spending target of 2 percent of GDP. Apart from this, ongoing geopolitical tensions in the Middle East are creating a strong demand for military equipment. As such, increasing global defence spending would continue to create opportunities for defence contractors and their supply chains.

It is anticipated that overall global defence sector to grow at a CAGR of about 3.0 percent over the 2019–2023 period, to reach $ 2.1 trillion by 2023. (Source: 2020 Global Aerospace and Defence Industry Outlook, Deloitte). However, in view of COVID-19 pandemic, we have to wait and see how the growth in GDP and military burden on GDP evolves.

1.2 Indian Defence Sector

The sharp slowdown of the global economy, increasing trade tensions between the world's two largest economies, and challenges facing the domestic financial sector have put a downward pressure on Indian economy which has contributed to slowdown of economic growth to 4.2% per cent in 2019-20 according to provisional estimates released by the NSO, the lowest in last eleven years. In 2020-21, the economy is expected to rebound and further improve in the year 2021-22.

The Indian defence market is in a state of transition, as a result of new policies promulgated by the government. India is the second largest armed forces in the world and ongoing DRDO projects in India are worth around US$ 7.3 bn. The three services have several modernization plans underway, India plans to spend $130 bn on military modernization in the next 5 years, as achieving self-reliance in defence production is a key target for the Government of India. The Government has opened up the Defence industry for private sector participation to provide impetus to indigenous manufacturing. The opening up of the industry also paves the way for foreign original equipment manufacturers to enter into strategic partnerships with Indian companies. Annual Turnover by Private sector in Defence and Aerospace sector in 2018-19 is $2.4 bn.

A Defence export strategy has been formulated with a view of facilitating Defence Public Sector Enterprises (DPSUs) and private defence players in exploring business opportunities abroad. The total value of production for OFB & DPSUS together accounts for $8.0 bn.100% FDI is allowed in Defence industry; wherein 74% is allowed under automatic route and beyond 74% through Government route.

However, in view of COVID-19 pandemic, we have to wait and see how the growth in GDP and military burden on GDP of India evolves.

(Source:www.investindia.gov.in;www.idsa.in; www.mod.gov.in)

1.3. Budget 2020 proposals and key initiatives

India's defence budget for 2019-20 continues to be 2.1% of GDP, which is similar to last year. As 2019 was an election year the Government presented an interim budget in place of a regular budget as per the general practice. In the interim budget an allocation of ₹ 431011 crores (US$60.9 billion) was made. On its re-election the Government kept the military budget unchanged. However, the actual expenditure exceeded the estimated amount and final estimated spending of defence for 2019-20 stood at ₹ 448820 crores (US$62.71 Billions), So there was an increase of around 10% with respect to previous budget.Of the total defence expenditure, 34% is accounted for by capital expenditure, which includes land acquisition, construction of new buildings & roads and acquisition of new weapons and platforms. Among the defence services, the Army has the largest share in the defence budget 2019-20. The Indian Air Force comes a distant second, followed by the Navy, the Defence Research and Development Organisation (DRDO), and the Ordnance Factories (OFs)

There is continued focus on modernisation and enhancement of the operational capabilities of defence forces through the development of defence production capabilities and promotion of private investment in defence production by announcement of the following:

- Chief of Defence Staff (CDS), a four-star position has been created as part of a defence management overhaul with an aim to bring about jointness between the Armed Forces of the country in training, procurement, staffing and operations.
- Formulation of the industry-friendly draft DPP 2020 to promote domestic production by the public and private sectors and MSMEs
- Development of defence industrial corridors
- Promotion of the Make in India initiative will help to develop andnurture defence production capabilities.
- Implementation of Government e-Market Place (GEM) to facilitate online procurement of common user Goods & Services (which includes intangible products like software, technology transfer, licenses, patents or other intellectual properties) required by various Government departments/Organisations/PSUs with an aim to enhance transparency, efficiency and speed in public procurement.

Since the launch of the 'Make in India' initiative in 2014, the MoD has undertaken ahost of initiatives to promote indigenous defence manufacturing. These initiativespertain to the defence procurement process, industrial licensing, foreign direct investment, exports and innovation. Further capitalising on these initiatives, theMoD, during the past year, has also announced the setting up of two defence industrial corridors one each in Uttar Pradesh and Tamil Nadu and promulgated a draft defence production policy that aims at increasing defence production to ₹ 1,70,000 Crore by 2025. While these initiatives have largely been welcomed by the industry, one crucial initiative that has not taken off pertains to'Make' projects, the procedures of which have been simplified several times in therecent past. These projects are key to integrating local companies, especiallythe small and medium ones from the private sector, into defence production.

(Source:www.mod.gov.in;www.idsa.in)

1.4. Indian Defence Indigenization

Government has notified a Policy for indigenisation of components and spares used in Defence Platforms in March, 2019 with the objective to create an industry ecosystem which is able to indigenize the imported components (including alloys & special materials) and sub-assemblies for defence equipment and platforms manufactured in India.

Government has decided to establish two defence industrial corridors to serve as engines of economic development and growth of defence industrial base in the country. They span across Chennai,Hosur, Coimbatore, Salem and Tiruchirappalli in Tamil Nadu and Aligarh, Agra, Jhansi, Kanpur, Chitrakoot and Lucknow in Uttar Pradesh.

Department of Defence Production has notified 127 items under Public Procurement Order 2017 notified by Department for Promotion of Industry and Internal Trade (DPIIT). The Defence PSUs and OFB are thereby required to give preference to domestic manufacturers while procuring these items in accordance with the said policy. Accordingly, BDL has reserved a list of items for procurement from Micro, Small & Medium Enterprises (MSMEs). Further, as per Government of India guidelines issued from time to time,BDLis extendingits various testing facilities/ concessions to vendors registered with NSIC under its Single Point Registration Scheme.

Defence Procurement Procedure was revised in March 2016 (replacing DPP 2013) and added an additional category "Buy (Indian-IDDM)" i.e Indigenously Designed, Developed and Manufactured, as the most preferred way of defence goods acquisition, to encourage indigenous design, development and manufacturing of defence equipment.As a result of the aforesaid initiatives, the Government in the last three years i.e. from 2016-17 to 2018-19 and current year till December, 2019, has accorded Acceptance of Necessity (AoN) to 138 proposals worth ₹ 2,69,465.26 crore approximately, underthese categories of Capital Procurement which promote domestic manufacturing as per DPP-2016.

Under 'Buy & Make' Category of Capital Acquisition, the foreign vendor is required to transfer the Technology to Indian Production agency for indigenous production of the items.Foreign OEM can select Indian Production agency of its choice for transfer of technology. BDL is exploring various business opportunities with Foreign OEMs and in this regard during the year, BDL has entered into few MoUs with Foreign OEMs as below:

- MoU with JSC AlmazAntey Air & Space Defence cooperation, Russian Federation for exploring feasibility for the production of various sub systems of Air Defence Missile Systems

- MoU with M/s Javelin Joint Venture, comprising Raytheon Company, USA and Lockheed Martin USA, for productionizing the Javelin Missile Systems in India.
- MoU with ROXEL France on possible collaboration for indigenous manufacture of Composite Propellants and cast double base propellants required for Missiles and Rockets programs.

During the year, the Government formulated a draft DPP,2020 and uploaded for comments of the stakeholders. As per the draft DPP, 2020 it is proposed for overall enhancement in the requirement of Indigenous content and a simple and practical Indigenous content verification process has been instituted:

Category	DPP, 2016	Proposed
Buy (Indian- IDDM)	Min-40%	**Min-50%**
Buy (Indian)	Min-40%	**Indigenous design –Min-40% otherwise –Min 60%**
Buy & Make (Indian)	Min-50% of Make	**Min-50% of Make**
Buy & Make	-	**Buy & Min 50% of Make**
Buy (Global- manufacture in India)	-	**Min-50%**
Buy (Global)	-	**Min-30% for Indian Vendors**

BDL is putting up determined efforts towards increasing indigenization contents in the manufacture of ATGMs with the objective of increasing self-reliance, reduction of Foreign Exchange out flow and achieving cost reduction. Indigenisation of products like Konkurs-M, Invar, Milan-2T, Akash, TAL-XP and Varunastra has been achieved up to 96%, 78.6%, 71%, 96%, 82.9% and 86.8 % respectively.

The Government launched Innovations for Defence Excellence (iDEX) which primarily aims at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes & academia, and provide them grants/funding and other support to carry out R&D which has good potential for future adoption for Indian defence and aerospace needs. In the last one year about 500 start-ups have begun actively working in the defence and aerospace area. There are six incubator partners in the IDEX (Innovation in Defence for Excellence) programme. The iDEX challenges have been defence start-up challenges and this has created a very active start-up community for defence and aerospace. This has become the most powerful part of India's technology development ecosystem

(Source:www.mod.gov.in; www.pib.gov.in)

Offset Policy

The offset policy in capital purchase contracts with foreign defence OEMs, stipulates a mandatory offset requirement of a minimum of 30% for defence contracts. The minimum contract value for which offsets are mandatory has now been revised from INR 300 crore to INR 2,000 crore.Offset guidelines have been made flexible by allowing change of Indian Offset Partners (IOPs) and offset components, even in signed contracts.

1.5 Indian Defence Exports

In order to redefine the role and functioning of CPSEs in the context of Vision-2022, Department of Public Enterprises organized CPSE Conclave on April 9, 2018. Prime Minister had posed five specific challenges to the CPSEs and directed all the CPSEs to prepare action plans to achieve the targets emanating from recommendations of CPSE Conclave. In follow up of first challenge, i.e. Maximizing Geo-Strategic reach of Defence Public Sector Undertakings (DPSUs), it is proposed that 25% of Annual Turnover of respective DPSUs should be from Export by 2022-23 so that India becomes a significant exporter instead of being a mere importer. The second challenge which the DPSUs have to achieve relates to reduction in their import dependence for components and parts used by them in production of various platforms and equipment. Import substitution amounting to ₹ 15000 crore by 2022-23 through indigenization of products/ process is targeted as part of this effort. With regard to developing capability and capacity in latest technologies, the third challenge is that the DPSUs have been asked to develop a roadmap for developing Artificial Intelligence based technologies for their platforms/equipment and implement the same.

The government has taken many proactive steps to steer the country's indigenous defence industry into exports. As a major boost to Defence export, the Department of Defence Production notified a Scheme for Promotion of Defence Exports on 04.10.2018.India registered record-high defence export approvals worth ₹ 86.2 billion (USD1.1 billion) during the year 2019-20, which concluded at the end of March. The value of defence export approvals in FY 2019-20 was a year-on-year increase of 4%, compared with the ₹ 83.2 billion recorded in FY 2018-19, which represented a 78% increase over the ₹ 46.8 billion in approvals registered in FY 2017-18. The value of export approvals in FY 2016-17 was ₹ 15.2 billion. In FY 2019-20, India's private sector was attributed with 93% of defence export approvals in terms of value, with the remainder secured by state-owned defence public sector undertakings (DPSUs). In FY 2018-19, the private sector secured 89% of all export approvals.BDL primarily caters to the requirements of the Indian armed forces. However, with encouragement from Government of India, BDL is actively exploring export markets. The company is currently exporting the light weight torpedoes to a friendly foreign country through a private channel partner.During the year, BDL has registered exports value of ₹ 174 Crore through its Indian Channel partner.

(Source:www.mod.gov.in; MOD-Annual Reports;)

2. **Review of BDL's Business**

2.1 About the company

Founded in 1970, and Head quartered in Hyderabad, BDL is one of the leading defence PSUs in India engaged in the manufacture of Surface to Air missiles (SAMs), Anti-Tank Guided Missiles (ATGMs), underwater weapons, launchers, countermeasures and test equipment. Conferred with the Mini-ratna (Category -1), BDL is the sole manufacturer in India for SAMs, torpedoes, ATGMs. BDL is also the sole supplier of SAMs and ATGMs to the Indian armed forces. The company is also engaged in the business of refurbishment and life extension of stored and deployed missiles. We are also the co-development partner with the DRDO for the next generation of ATGMs and SAMs.

BDL's Products

SAMs	ATGMs	Torpedoes	Launchers	Counter-measures	Decoy Systems	Test Equipment
Akash Missiles MR-SAM	Milan2T, Konkurs-M INVAR	Light Torpedoes Heavy Weight Torpedoes	Launchers for Konkurs-M & MILAN 2T ATGMs	Chaffs& Flares Based Air Defence Systems, torpedo decoys	Submarine fired decoys	Health monitoring equipments for ATGMs& SAMs

2.2 Manufacturing facilities

The company has three manufacturing facilities located in Hyderabad, Bhanur and Vishakhapatnam. All our manufacturing facilities have ISO 14001:2004 certifications Environmental Management System (EMS). Our Milan, Akash, CP-IGMP, Electronics Division, Design & Engineering divisions and Bhanur Unit have been certified to AS 9100D Aerospace standard. Visakhapatnam Unit also successfully completed final certification audit and recommended for AS 9100D certification by M/s Novo Star Management Systems Solutions India Pvt. Ltd. All the three units of BDL at Kanchanbagh, Bhanur and Vizag have been certified with ISO 14001:2004 Environmental Management System (EMS). The Company has been certified with ISO 27001:2013 (Information Security Management System) Standard. Material Testing Lab of Bhanur Unit has been accredited with ISO / IEC 17025: 2005 (NABL) Certification in the field of testing.

During the year, Corporate Office of the company has been certified with ISO 9001:2015 certification by M/s Novo Star Management Systems Solutions India Pvt. Ltd. The Certificate is valid for a period of 3 years.Electronics Division has been certified with AFQMS (Approval of the Firm and its Quality Management System) by DGAQA (Directorate General of Aeronautical Quality Assurance). The Certificate is valid for a period of 3 years.

The Company is also in the process of setting up two additional manufacturing facilities at Ibrahimpatnam (near Hyderabad) and Amravati in Maharashtra which shall be used to manufacture SAMs and Very Short Range Air Defence Missiles (VSHORADM) respectively.

2.3 Order Book

Our current order book as on 01 April 2020 is ₹ 7413 Crore.

2.4 Financial Performance

i) Performance of the Company in financial terms is summarized below:

Particulars	₹ in Crore		% of Increase/ (Decrease)
	2019-20	2018-19	
Sales/Revenue from Operations	3095	3069	0.85%
Value of Production	2592	3235	(19.88%)
Profit Before Tax	742	671	10.58%
Profit After Tax	535	423	26.48%
Value Added	1555	1416	9.82%
Earnings per share#(₹)	29.18	23.06	26.54%
# EPS has been calculated based on profits excluding the other comprehensive income.			

Note – Reasons for Increase/decrease in performance:

The reduction in value of production from ₹ 3235 Crore in FY-2018-19 to ₹ 2592 Crore in FY 2019-20 is due to completion of order book of Akash Weapon System. The Increase in value added and profit before tax in FY-2019-20 as compared to FY-2018-19 is due to better operational efficiency and product mix. The increase in profit after tax in FY-2019-20 as compared to FY-2018-19 is due to adoption of reduced income tax rate for the FY-2019-20 in exercise of the option permitted under section 115(BAA) of the income tax act 1961 to compute income tax at the revised rates from the current financial year.

ii) Following data reflect the financial position of the Company:

Particulars	₹ in Crore		% of Increase/ (Decrease)
	2019-20	2018-19	
Gross Block	1011	1008	0.30%
Depreciation	258	196	31%
Net Block	753	812	(7.27%)
Working Capital	2260	1390	62.59%
Capital Employed	3192	2347	36%
Net Worth	2607	2269	14.90%

Note- Reasons for increase/decrease in financial position:

1) Reduction in net blocks during the FY-2019-20 to ₹ 753 Crore from ₹ 812 Crore in FY-2018-19 is due to adoption of lease accounting with effect from 01 April 2019 and accordingly leasehold land amounting to ₹ 33 crore has been deleted from net block and shown separately in the balance sheet under the head of Right to Use of Assets.

2) Working capital is increased by ₹ 870 Crore which is due to

- Reduction in current liability by ₹ 605 Crore
- Increase in current assets by ₹ 265crore, which is mainly due to increase in trade receivable (billed and unbilled amount) by ₹ 829 Crore, reduction of inventory by ₹ 808 Crore and increase in cash & bank balance by ₹ 292 crore

iii) Key Financial Ratios:

In accordance with the SEBI (LODR) Regulations, 2015 the Company is required to give details of significant changes (change of 25% or more as compared to the immediately previous financial year) in the following key sector specific financial ratios along with the detailed explanations there for.

Particulars	FY 2019-20	FY 2018-19	Change (in %)	Explanation for change of 25% or more
Debtors Turnover Ratio (times)	1.18	1.51	(22%)	NA
Inventory Turnover Ratio (times)	2.46	1.71	44%	refer below Note 1
Interest Coverage Ratio (times)	Nil	Nil	Nil	NA
Current Ratio (times)	1.98	1.48	34%	refer below Note 2
Debt Equity Ratio (times)	Nil	Nil	Nil	NA
Operating Profit Margin (%)	20.24	17.44	16%	NA
Net Profit Margin (%)	17.29	13.77	26%	refer below Note 3
Return on Networth (%)	19.85	18.63	7%	NA

Note:

1) Reduction in inventory by ₹ 808 Crore due to completion of order book of Akash Weapon System resulted in increase of Inventory Turnover ratio

2) Current Ratio increased due toreduction in current liabilities by ₹ 605 Crore and increase in current assets by ₹ 265 crore (which is mainly due to increase in trade receivables by ₹ 829 Crore and increase in cash & bank balances by ₹ 292 Crore on account of realisation of trade receivables)

3) Net profit margin has increased due to reduced income tax rate for the FY-2019-20

iv) All the applicable Accounting Standards are followed except IND-AS-108 relating to Segment reporting keeping in view of the nature of business and the sensitive nature of the disclosure. However, such non-disclosure does not have any financial effect on the accounts of the Company.

2.5 Company Objectives

- To become self-reliant and competitive in Guided Missile and Underwater Guided Weapon Technology and Production.
- To maximize utilization of existing production capacities.
- To become a prime competitor in the world market and export products to friendly countries

2.6 Opportunities & Threats

Opportunities

- BDL's multiple years of expertise in manufacturing various defence equipments coupled with its advanced facilities enable the company to expand its market in India and abroad.
- BDL has an experienced senior management and staff having vast experience in defence equipment manufacturing.
- Increased thrust on defence indigenisation under the "Make in India" policy has thrown up more opportunities for BDL.
- BDL has a strong supply chain comprising of technically qualified vendors and suppliers to ensure timely delivery of materials.

- BDL's primary customer is Ministry of Defence, Govt of India. GOI has been allocating increased budget for acquiring defence equipments.
- The opening up of the export market and ease of clearances from Govt. of India. Company has successfully executed export orders in the recent times and has also been receiving more enquiries from neighbouring countries.

Threats

- Slowdown in the economic activities and lower defence budget by GOI could adversely impact BDL's business.
- Higher dependency on single customer i.e. Ministry of Defence (MoD)
- Cancellation of orders can weaken the order book and future revenue

2.7 Key Strategies

Key strategies of BDL are aimed at enhancing the company's market position by expanding capabilities, capitalising on opportunities in domestic and international markets, and enhance the company's competitive advantage focusing more on indigenisation.

To achieve our strategic goals,we would focus on the following:

2.7.1 Expanding Infrastructure: We would continue to invest in infrastructure. Our upcoming manufacturing facilities at Ibrahimpatnam and Amravati will enable the company to cater to the growing demand of our customers. These two manufacturing facilities shall be utilised to manufacture SAMs (including a new generation of SAMs) and VSHORAD missiles respectively. We are also in the process of establishing a test fire range in Rachakonda, Telangana which will result in operational advantages and cost efficiencies.

2.7.2 Automation: We intend to automate our production systems at our manufacturing facility to increase the production of SAMs.

2.7.3 Focus on Research & Development: We believe that the recent changes to the government policies allowing private sector companies to participate in defence contracts will provide significant competition to us. In order to address these challenges, we intend to increase our R&D activities to develop innovative products to our customers. Our R&D expenses have also grown up significantly over the past few years. We believe that development of new products will enable us to diversify our offerings and mitigate product dependencies. We have established the missile development group with the objective to design and develop missiles. We are striving to develop Artificial Intelligence based products.

2.7.4 Improving Processes. We also intend to carry out process improvements, with the aim of improve our productivity and efficiency of our operations and thereby lower costs.

2.7.5 New Generation SAMs & ATGMs. We intend to leverage our experience to develop new products such as new generation SAMs, ATGMs, and heavy weight torpedoes which will enable us to further increase our revenues. We are also the joint development partner with the DRDO for the next generation of ATGMs and SAMs. The MoD has identified us as the production agency and the lead integrator for one of the new generation of SAMs and the nominated agency for the third generation of ATGMs. We have also entered into several MoUs and non-disclosure agreements with various companies for developing new products and transfer of technologies.

2.7.6 Exports: BDL primarily caters to the requirements of the Indian armed forces. With encouragement from Government of India, BDL is actively exploring export markets. The company is currently exporting the light weight torpedoes. The company intend to interact with potential overseas customers with a view to exporting products such as Akash SAM, light weight torpedoes and counter measure dispensing systems to friendly nations. During the year 2019-20, your company has registered exports valueof ₹ 174 Crore through its Indian Channel partner.

2.7.7 As a part of Government of India Initiative, BDL is planning to invest in Start-Up Eco System for Defence & Aerospace through Defence Innovation Organisation (DIO).

3. Future Outlook

Indian Armed forces are the major customers of your company and your company is aware that its Nominated Production Agency Status is being slowly transformed into that of a Competitive Bidder.In the last few years, private sector participation in India's defence sector has been rising and large Indian private sector conglomerates have increased their exposure to Indian defence market. This is facilitated by several policy interventions by Government support and specifically the 'Make in India' Program. The impact of these initiatives has created more opportunities for domestic industry to tie-up with global defence companies for products and technologies. Increased focus on the Indian defence market by Indian private sector and global players is likely to further increase the competition for your Company in the coming years.

Keeping in view of above and to address these challenges, your company intends to increase R&D activities in association with DRDO and continue to have joint-development programs. Your company is also exploring various business opportunities with foreign OEMs and towards this, your company has signed few MoUs with the foreign OEMs during the year under review. Your company's R&D expenses have also grown up significantly over the past few years. Your company believes that development of new products will enable us to diversify our offerings and mitigate product dependencies. We have established the missile development group with the objective to design and develop missiles. We are striving to develop Artificial Intelligence based products.

Currently your company has a healthy order book position of ₹ 7413 Crore as on 01 April 2020. During the year under review, your company received Akash Order worth ₹ 1700 Crore and Heavy Weight Torpedo (i.e. Varunastra) order worth of ₹ 1188 Crore, which will keep the production lines busy in the years ahead. Your company see good visibility in future orders and as such it is aggressively pursuing with MoD for new orders which are under various stages of approvals.

To sum it up, based on the Order book position and anticipated orders, the future outlook of the Company is looking bright and with decades of experience under its belt, your Company is well positioned and geared up to face challenges in future.

4. Risks and Concerns:

Various risks identified with mitigation plans includes risks related to industry, increased market competition, time to market, decline or recession in market segments and product and product inputs prices, cost control and change demand risks. Also risks related to environment, health and safety, IT, R&D, intellectual property and new technical demands such as digitalization/smart industry are high on the agenda and proactively mitigated, managed with identified improvement activities and followed up on regularly.

4.1 Business Risk: The company primarily dependent on a single customer, the Indian armed forces through the Ministry of Defence, Government of India ("MoD"). A decline or reprioritization of the Indian defence budget,the reduction in their orders, termination of contracts or failure to succeed in tendering projects and deviations in the short term and long term policies of the MoD or the Indian armed forces in the future will have a material adverse impact on our business, financial condition, and results of operations,growth prospects and cash flows. We also operate in evolving markets where a level playing opportunity is given to private sector which makes it difficult to evaluate our business and future prospects.

Mitigation: Having rich expertise in this business, Company has ability to handle adverse situations and also geared up to face competition from private sector. Further in order to expand the customer base BDL is actively exploring export markets with the encouragement from the Government of India. The company is currently exporting the light weight torpedoes.

4.2 Policy Risk: The company is subject to a number of procurement rules and regulations of the MoD, Government regulations and other rules and regulations. Our business and our reputation could be adversely affected if we fail to comply with applicable rules. Restrictions on current and future export of our products and other regulations could adversely affect our business, results of operations and financial conditions

Mitigation: Company is complying with all rules and regulations as per the policies of Government of India and taking all necessary precautions in this regard

4.3 Operational& Labour Risk: The company's operations are based out of three units in Telangana and Andhra Pradesh. The loss of, or shutdown of, our operations at any of our units in Telangana and Andhra Pradesh will have a material adverse effect on our business, financial condition and results of operations. Some of our workforce is represented by labour unions so our business could be harmed in the event of a prolonged stoppage of work

Mitigation: The Company always continues to maintain cordial relations with all the employees and as such do not foresee material adverse effects in this regard.

4.4 Supplier/Service Provider Risk: Company is dependent on multiple key original equipment manufacturers ("OEM") for subassemblies / components, single source suppliers and sub-contractors. Any failure on the performance of any of them could have a material impact on our operations

Mitigation: The Company is continuously striving to expand its vendor base and sufficiently safeguarded with liquated damage clause in case of any failure on the performance.

4.5 Technology Risk: We manufacture and service products that incorporate advanced technologies. The introduction of new products and technologies involves risks and we may not realize the degree or timings of benefits initially anticipated.

Mitigation: The Company has activated its own Research & Development department and started increasing its investment in R&D to encounter technology risks. In addition to this the Company also concurrently works with DRDO in development of several projects.

5. Internal control systems and their adequacy:

Your Company has put in place all required internal controls and systems commensurate with its size and nature of the business to meet the canons of financial propriety. The effectiveness of the internal controls is continuously monitored by an in house Internal Audit Department comprising of professionally qualified personnel. Internal Audit's main objective is to provide to the Audit Committee and the Board of Directors, an independent, objective and reasonable assurance of the adequacy and effectiveness of the organization's risk management, control and governance processes. The scope of the Internal Auditor is approved by the Audit Committee of the Board. Appointment of External audit firms has been continued to ensure adequacy and report thereon. These audit firms are in addition to Internal Audit Department supporting the department. A detailed analysis of reports of Internal Audit Firms as well as reports of Internal Audit Department of your Company are placed before the Audit Committee for its review and advice.

a) **Cost reduction initiatives:** During the year under report, an amount of around ₹ 40.79 Crore has been achieved under cost review/reduction programme by way of reduction in process change, Indigenization, In-house training by own personnel, energy saving, inventory carrying cost, insurance cost, procurement cost, e-waste, scrap disposal and dry fitment of Akash missile.

b) **Economy Measures:** In line with Ministry of Finance Office Memorandum on Expenditure Management, Economy Measures and Rationalization of expenditure and keeping in view of COVID-19 pandemic, Company has observed financial prudence and economy on areas like travelling expenses, advertisement and publicity expenses, purchase of new vehicles, conducting seminars and conferences, courtesy and entertainment, etc during the year 2019-20. Inventory of raw-material, work-in progress and spare parts is maintained at optimal levels. Energy consumption, fixed and variable overheads and Contingency expenditures are being constantly reviewed and pruned to bare minimum.

6. Material developments in Human Resources, Industrial Relations front, including number of people employed

6.1 The manpower strength of the Company as on 31 March 2020 is as under:

Particulars	Non- Executives	Executives	Total
Male	1801	804	2605
Female	203	105	308
Total	**2004***	**909***	**2913***
Previous Year	2055*	946*	3001*

* Excluding temporary employees.

Your company has very well defined training and development programmes for the Executives and Non-Executives. During the year under review, your company certified with PCMM (People Capability Maturity Model) Level 2 rating. It is a maturity frame work for implementing the workforce practices that continually improve workforce capabilities and major source of gaining Competitive advantage and strategic advantage. Implementation of PCMM will give scope to your company for attracting and retaining the talent.Your company is first Defence PSU to implement the PCMM Level certification for HR Process.

Your company has institutionalized the Succession Planning Process through Gap Analysis, identifying critical roles and identifying key bench strength for each critical role position, Readiness index of the successors based on Performance Management Systems and other criteria as per the succession planning policy of the company. Inputs from Assessment Development Centers were also taken while grooming the successors. The vacancies of all critical posts as per succession plan are filled meticulously through regular incumbent with the internal talent pool and if required with outsiders in case internal talent pool is not available.Your Company has conducted assessments for 198 executives in the grade VI and above and Individual Development plans are kept in place for bench Strength as per Succession Plan.

6.2 Industrial Relations

Your Company continues to enjoy cordial and harmonious Industrial Relations with the Cooperation and support of all sections of employees viz. Recognized Trade Union, Associations such as SC, ST, OBC and Officers Association. Statutory and Non Statutory Committees such as Works Committee, Safety Committee, and Welfare Committee are contributing to workplace discipline.

7. Environmental Measures:

Your company contributes in all aspects for clean and green environment by systematically integrating best practices to bring in cleaner technologies and greening the environment through recycle, reuse and reduce approach. Effluent treatment plant, Sewage treatment plant are being operated. Various environmental protection activities such as water conservation, tree plantation, disposal of hazardous waste and metal scrap, planting of saplings and landscaping, utilizing treated effluent water and domestic water have been carried out. Company has been reviewing status of various types of pollutions through ISO 14001 core team meetings, internal audits and management review meeting at regular intervals. Annual surveillance audits are being carried out at all the three units to assess the effectiveness of EMS.

8. Foreign Exchange Conservation

Your Company is striving constantly to conserve foreign exchange by reducing import of components and subsystems from OEMs by increasing indigenous content in the assembly of final products.