

# SEIZING OPPORTUNITIES. BRIGHTENING FUTURE.



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Forward Looking Statements  
Certain statements in this Annual Report relating to the Company’s future growth prospects are forward-looking statements, which involve a number of risks and uncertainties that could cause actual results to differ materially from those in such forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.



# SEIZING OPPORTUNITIES. BRIGHTENING FUTURE.



The Digital India mission is intensifying rapidly. The scope, scale and spread of the digital quotient is monumental. From safer cities to enhanced data and security, speedy railways to smooth city traffic, secured border to connected hilly terrains, the magnitude and multitude of the Digital Mission needs more from HFCL.

Aware of our abilities and cognizant of our expandable potential, at HFCL, we are fast raising our legacy strengths besides extending it in adjacent domains, forging complementing partnerships towards co-developing technologies and solutions, localising manufacturing and indigenising IPRs. Committed to raise the digital quotient of the country, HFCL is rising as a diversified digital solutions provider, one that integrates products, engineering and design solutions, network development, commissioning and maintenance, manufacture and supply of sovereign defence critical equipment and surveillance platforms, among others.



## STRENGTHENING THE CORE



Optical Fibre Cable (OFC) continues to be the backbone of the digital world. With rapid spread of broadband connectivity and increasing usage of internet towards online financial transactions and sharing of confidential data, the need for secure transmission of data is gaining prominence. Exponential increase in the digital population and a consequential explosion in data consumption are necessitating the increase in carriage capacity and speed of the OFC network. Emerging trends in overhead carriage lines are opening up newer consumption possibilities of OFC.

The OFC demand would continue to increase in India and elsewhere over the coming decade at a very healthy rate. World-class quality and cost efficiency of the Indian OFC industry continues to fuel the export potential of OFC. However, the supply constraint of optical fibre, a key raw material for OFC, becomes a growth bottleneck for OFC manufacturers.

Having rightly sensed the opportunities and challenges, we prepared a strategic blueprint to sustain our market share leadership in OFC manufacturing in India. The three-pronged strategy involves steady expansion of installed capacity, intense development and roll out of next generation value-added OFC and foray into manufacturing of optical fibre, the key raw material as part of our integrated OFC play. Steady evolution of our product mix with rising contribution from value-added special OFC, geographic diversification of market and increasing contribution from exports are integral part of this strategy.

During the financial year 2016-17 (FY17), our Goa plant underwent a wholesome modernization and also added new lines to raise its installed annual capacity to 7.2 MFkm from 5.0 MFkm. The Chennai plant of our subsidiary, HTL Limited also added another 1.5 MFkm to raise its annual capacity to 4.5 MFkm. Consequently, our OFC capacity including that of HTL Limited grew by 46% to reach 11.7 MFkm per annum. This also included doubling of Spiral Wire Armoured cable capacity. Our consistent efforts to add higher margin products culminated in addition of FTTH cable to our product basket.



Increased focus is being allotted on new products and application development. The world-class products are being marketed and supplied not only in India but also across the globe. We maintained our India market share and also grew our exports by 25% to close FY17 with a consolidated OFC revenue of Rs.700 crore.

In a material development of FY18, we decided to add in-house manufacturing of optical fibre with a view to reduce our dependence on external sourcing for this key raw material and consequent increase of operating margin. With an estimated investment of Rs.225 crore, a new facility will be developed at Hyderabad with initial installed capacity of 6 MFkm. With expected commissioning of this facility in the last quarter of FY19, our OFC value proposition would further get strengthened.





## BUILDING NEXTGEN TELECOM NETWORKS



In order to develop and deploy modern telecom infrastructure, India has to overcome a multitude of challenges across its difficult terrains and topographies. From geographical hurdles of hilly terrains to left wing extremist area (LWE), erection and commissioning of efficient telecom network across the regions of strategic importance is critical for emergence of a unified and homogenous India. A Pan-India dedicated OFC network is being developed by the Government of India for Indian Armed Forces at a planned outlay of more than Rs.13000 crore under Network for Spectrum (NFS) project.

We are leveraging our proven credentials in delivering next generation telecom infrastructure and network across the country and especially in challenged topographies like LWE areas and far off hilly terrains in the Himalayas. We are also partnering Country's vision of a truly digitized India that can boast of broadband connected villages and a next generation telecom infrastructure capable of carrying multitude of data at a much higher speed than the current levels. We continue to work towards One India, Digital India; region-specific challenges notwithstanding.

Developing and commissioning a GSM network in LWE region with deployment of more than 500 sites across 6 states proved to be a major accomplishment of the year gone by. The successful delivery was met with customer appreciation and shall open the doors for similar orders in future. The reach of this network would further get expanded upon completion of an extension order being carried out at another 48 sites.

Our order book consists of a WiFi network turnkey project worth Rs.200 crore which entails rolling out of WiFi services across 16 states in the Northern and Eastern India. Another order of Rs.180 crore involves supply, commissioning and maintenance of about 10,000 microwave backhaul radios. Our order pipeline includes an NFS project worth Rs.1250 crore entails building a dense wavelength division multiplexing based transmission network for armed forces, the work on which is expected to commence soon.

We have also emerged as the lowest bidder in three major tenders where orders worth Rs.3700 crore are expected to be received soon. This includes two NFS tenders and one GSM tender. The first order of Rs.500 crore is for deployment of Microwave Radio across Jammu & Kashmir and North eastern (NE) states. The second order of Rs.2650 crore is for GIS based Optical Fiber Network Management System (GOFNMS). Another order worth Rs.550 crore entails setting up of GSM network by deploying 924 towers and related green energy solar-based GSM infrastructure.

## CONTRIBUTING TO SAFE AND EFFICIENT RAIL TRANSPORT



The opportunity in the railway segment is huge where Speed, Scale and Safety are of critical significance. New rail lines ought to deploy next generation telecom and signalling systems – across passenger and freight transport, cross country lines as well as intra-city metro/mono rail. Additionally, thousands of kilometers of legacy rail lines need a mammoth overhaul in their telecom and signalling system to strengthen speed and safety across our railway network.

We are rising to the occasion in deploying our telecom products as well as network development capabilities towards modernization of railway signalling and information management framework. We are also exploring meaningful collaboration and co-development opportunities with Indian as well as foreign players to further enhance our value proposition in the railway sector. Forging collaborative partnership with Indian as well as global railway network aggregators, OEMs and implementers, we are headed to transform the face of railway telecom and signalling systems in India and also in some neighbouring countries.

We bagged two orders with a combined contract value of Rs.208 crore. The first order of Rs.113 crore from Alstom Systems India Pvt. Ltd. is for setting up turnkey telecommunication system including OFC network of 343 km length in Eastern Dedicated Freight Corridor (EDFC). The second order of Rs.95 crore is from Larsen & Toubro Limited for phase 2 of Western Dedicated Freight Corridor (WDFC). We have also submitted few other tenders for Train Protection and Warning Systems to a major OEM for Indian Railways. Few overseas bids for turnkey telecommunication solutions have also been submitted through a leading Indian EPC company. Across the similar scope of work in metro rail segment, we have also submitted few bids in India and overseas.



Besides EPC telecom work, we are also exploring some co-development projects with some leading international OEM and design companies. We are in discussion with a global OEM and Design Company to co-develop and patent certain technologies for railway signalling and automatic train control systems. Indigenization of few products in the Railway Signalling segment is also being assessed as an import substitution.



## BUILDING SMART AND SAFE CITIES



Rapid urbanisation and rising consumption patterns are adding stress on available resources such as water, electricity, transport infrastructure, etc. Advancement in information technology can be leveraged in making our cities smart and safe. Integrated information management coupled with big data and analytics can help channelize resources. Government of India's push in fast-tracking its Smart City mission is yielding results with Special Purpose Vehicles getting formed in most of cities. Appointment of Project Management Consultants has been completed in many of these cities and the process of floating RFPs is gaining momentum.

Our recently added division of Safe and Smart City is scripting smart success stories in Ludhiana and Jaipur. The city of Ludhiana is adopting Smart Surveillance & Intelligent Traffic Management Systems, being developed and deployed by us. The project contains deployment of in-house developed software for crime surveillance, vehicle number plate reading and traffic signal violation detection.

In Jaipur, we are deploying WiFi hotspots, Interactive Information Kiosks, Surveillance Cameras, Environmental Sensors, Structural Sensors, Smart Lighting Solutions and Remote Kiosks along with the Facility Management Services. The command and control center has been set up at the Jaipur Development Authority premises to monitor relevant applications. The commercial value of these two Smart City projects is Rs.70 crore, out of which Rs.23.67 crore has been realized in FY17 revenue.

Besides this, we have participated in a large tender of RailTel for turnkey ICT Systems Integration across 4 regions for Video (CCTV) Surveillance of 1,000 Railways stations for enhancing the safety & security of the passengers.

We are currently sharpening our skills across CCTV Surveillance, Traffic Enforcement and Adaptive Traffic Management System, City Command and Control Centers including Data Centers and ICT Infrastructure as our core strengths. Our vision of shaping Smart Cities blends smart ICT elements across hardware, software, data and analytics. An equal focus is also being allotted towards building a strong foothold in the System Integration space.

While the Government's Smart City mission is still at a nascent stage, we believe that the experience gained from Ludhiana and Jaipur Smart and Safe City projects would bolster our qualification for bigger projects and wider application segments, besides adding to the reservoir of knowledge. And act as a springboard for our deeper penetration and wider spread across more Safe and Smart city projects in times to come.

## FORAYING IN DEFENCE MANUFACTURING



From its current status of being the largest importer of defence equipment, India is slowly and steadily heading towards attaining self-sufficiency in production of Defence related equipment and logistics support. Considering the pace of policy reforms and removal of intermittent bottlenecks, the country is surely moving towards realizing the vision of Hon'ble Prime Minister, Shri Narendra Modi to make defence related manufacturing as the fulcrum of his flagship mission – 'Make in India'.

Among many emerging Defence opportunities, we, at HFCL, have identified some very critical equipment which are technologically challenging and operationally necessary for our armed forces. As our immediate focus, we have identified four major operating domains namely Opto Electronics equipment, Electronic Fuses, Radio Communication and Unarmed Aerial Vehicles (UAVs). Having identified operating domains, we have intensified our efforts to forge meaningful partnerships with global OEMs in respective domains. Some of these partnerships are gradually crystalizing.

Having already cleared the RFI stage, we are now working on RFP for electronic fuses and some weapon sights for the Indian Army. Additionally, we are working on a RFP for manufacture of Mini UAVs. We are also actively pursuing the Border Management and Surveillance System due for implementation by the Indian Government.



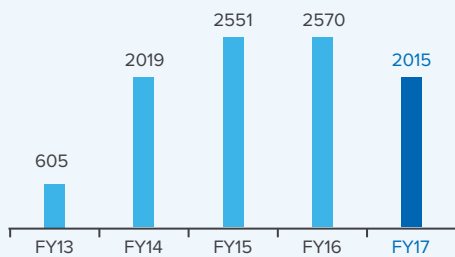
We have signed an MOU with a French MNC as our Technology Partner for Portable Opto Electronics to manufacture a wide range of Portable Night Vision Devices. We are planning to create a facility for manufacturing of Opto Electronics equipment at our Solan plant.



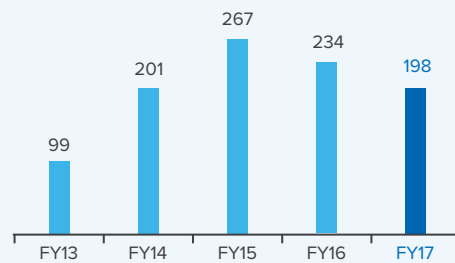


# FINANCIAL HIGHLIGHTS

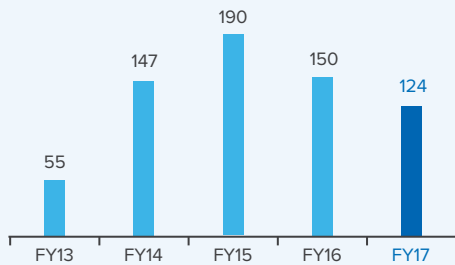
## REVENUE (₹ in crore)



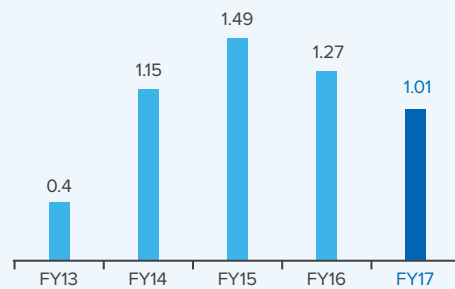
## EBITDA (₹ in crore)



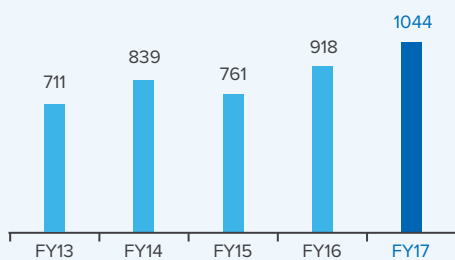
## NET PROFIT (₹ in crore)



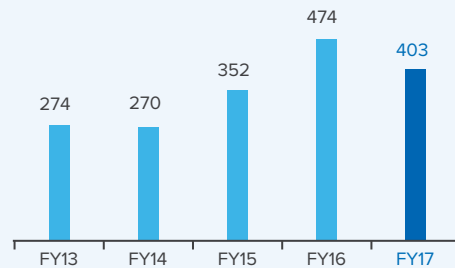
## EPS (in ₹)



## NET WORTH (₹ in crore)



## GROSS DEBT (₹ in crore)



# MANAGING DIRECTOR'S MESSAGE



## Dear Shareholders,

One of the most widespread socio-economic transformations of global significance is taking place in India. An ambitious all-encompassing vision is being fast converted into reality. The vision comprises of a globally competitive manufacturing sector that contributes about 25% of the national GDP, a modernised railway network that redefines passenger and freight transport, a broadband proliferation program that connects 250,000 Gram Panchayats, a holistic agricultural uplift that doubles farmers' income, a vibrant urban infrastructure that makes the cities smarter with a perfect blend of technology and amenities, and an inclusive social progress agenda that ensures housing and power for all in the country.

It is a matter of great privilege for us to be part of such a grand vision and make our enhanced contribution in realising the India of our dreams. At HFCL, we are spreading our operational universe to leverage our technological, manufacturing and telecom infrastructure development prowess in order to profitably serve a larger part of the opportunity universe.

The year gone by was a year of greater significance for our Company. Building upon the strategic groundwork of the previous year, we made decisive foray into railway and smart city segments while also making some inroads in long-gestation defence segment. We strengthened our OFC business with capacity, capability, range and market expansion while adding a few marquee deliveries in our turnkey business.

## Strengthening our OFC offerings

FY17 proved to be a year of significant achievement for our OFC business. We modernized and expanded the installed capacity of our Goa plant. Capacity expansion was also undertaken at the Chennai facility of HTL Limited, a subsidiary company. Addition of FTTX cable in our manufacturing capability and increasing contribution of margin accretive value-added products and export sales augurs well for future. Recording a handsome growth of 25%



in export revenue, OFC business clocked consolidated annual revenue of Rs.700 crore.

Worldwide shortage of optical fibre, a key raw material has been posing a challenge of sustainable sourcing for OFC manufacturing in the recent years. In order to reduce our dependence on external sourcing, we are entering into in-house manufacturing of optical fibre with an initial installed capacity of 6 MFkm per annum. With an estimated investment of Rs.225 crore, the new plant at Hyderabad shall commence production by the end of FY19.

## Raising Turnkey Business Capabilities

In Turnkey business, our ability to develop and deliver telecom networks, even in difficult terrains such as LWE area and hilly