FORM B
Format of covering letter of the annual audit report to be filed with the stock exchanges

1	Name of the Company:	Sterlite Technologies Limited ('the Company')
2	Annual financial statements for the year ended	31 <sup>st</sup> March, 2013
3	Type of Audit qualification	Following qualification has been given by the Auditors in the audit report on Standalone financial statements of the Company:
		Basis for Qualified Opinion As stated in Note no. 43(A) in the accompanying financial statements, the Company had in an earlier year received an order of CESTAT upholding a demand of Rs.188 crores (including penalties and excluding interest) (Rs.188 crores as at March 31 2012) in a pending excise/customs matter. The Company's appeal against this order with the Honourable Supreme Court has been admitted. Based on the current status and legal advice received, provision for liability as recorded and disclosed in Note no. 8 of the accompanying financial statements is considered adequate by Management. In the event the decision of the Honourable Supreme Court goes against the Company on any of the grounds of appeal, additional provision against the said demand may be required. Pending disposal of the matter by the Honourable Supreme Court, we are unable to comment on the adequacy of the provisions made towards the amount of excise / customs duty payable. Our audit opinion on the financial statements for the year ended March 31, 2012 was also qualified in respect of this matter.
		Qualified opinion
		In our opinion and to the best of our information and according to the explanations given to us, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraph, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
		<ul> <li>(a) in the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2013;</li> <li>(b) in the case of the Statement of Profit and Loss, of the profit for the year ended on that date; and</li> <li>(c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.</li> </ul>

Γ	4	Frequency of qualification	Annearing since Financial V
-	5		11
	5 Draw attention to relevant notes in the annual financial statements and management response to the qualification in the directors report:		Please refer Note 8 and Note 43(A) in the Standalone Financial Statements of the Company.  Management Response to the Qualification in the Directors' Report:
			The remark of Auditors at basis for Qualified Opinion paragraph of the Auditor's Report over Note No. 43(A) in Notes to Accounts regarding demand of excise duty and penalty amounting to Rs. 188 crores is self-explanatory and does not require further comment.
		•	In the year 2004-05 CESTAT upheld the demand of Rs. 188 crores and interest thereon for alleged breach of norms pertaining to Export Oriented Unit (EOU). The Company had filed an appeal before the Hon'ble High Court of Bombay against this order. The Department had also made an appeal against the same CESTAT order before the High Court of Bombay. The Company's appeal against this order was dismissed by the Hon'ble High Court on the grounds that appeal is not maintainable in High Court. However continued the stay granted by CESTAT, without prejudice to the rights of the Company. Subsequently, the Company had filed a Special Leave Petition (SLP) and appeal before the Supreme Court of India which was admitted by the Court. Hon'ble Supreme Court has also maintained the stay granted by Hon'ble High Court.
			The Hon'ble Supreme Court considering that the departmental appeal against the CESTAT order was still pending before the High Court, disposed of the Special Leave Petition of the Company and directed that the records of the departmental appeal be transferred to the Supreme Court and both the Appeals i.e. Departmental Appeal as well as Civil Appeal of the Company be heard together by the Supreme Court.
			Based on merits of the case and the legal opinion obtained, the management believes that the Company has a strong case and it has been carrying adequate provisions for contingencies in the Books of Account in this matter and does not require any further provisioning.

6	The Company has obtained legal opinion from a leading Law firm in India having expertise on Indirect tax matters which states that the Company has a strong case in its favour and the provision made in respect of the above matter is adequate. The Audit Committee agrees to the view expressed by the Law firm that the Company has a strong case and that the current provisioning in the books is adequate.
//	

In back her EL Let For S.R. Batliboi & Co. LLP

For Sterlite Technologies Limited

Firm Registration No. 301003E

Chartered Accountants

Pravin Agarwal

Anupam Jindal

**Arun Todarwal** 

Partner

Whole-time Director

Chief Financial officer Audit Committee Chairman

Membership Number: 89802

Date: April 26, 2013

Place: Mumbai

sterlitetechnologies.com

Volume - 13

# CONNECTING

**EVERY HOME ON THE PLANET** 



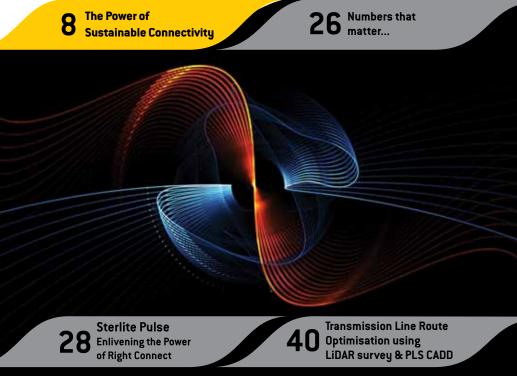
**FEATURE STORY:** 

**LEADER SPEAK:** PROFIT BY NUMBERS | FROM THE CHAIRMAN'S DESK



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# STERLITE TECHNOLOGIES LIMITED

### ANNUAL REPORT 2012-2013

sterlitetechnologies.com

### REGISTERED OFFICE:

Survey No. 68/1, Rakholi Village, Madhuban Dam Road 396 230, Union Territory of Dadra & Nagar Haveli, India.

### LOCATIONS:

China, India, Netherlands, Russia, South Africa, Turkey, United Arab Emirates, United Kingdom, United States of America, Vietnam.

### **BOARD OF DIRECTORS:**

Anil Agarwal, Arun Todarwal, A. R. Narayanaswamy, Haigreve Khaitan, C. V. Krishnan, Pravin Agarwal, Anand Agarwal, Pratik Agarwal.

**CHIEF FINANCIAL OFFICER:** Anupam Jindal

**COMPANY SECRETARY:** Sandeep Deshmukh

### MANAGEMENT COMMITTEE:

Pravin Agarwal (Whole-time Director), Anand Agarwal (CEO & Whole-time Director), Anupam Jindal (CFO), K. S. Rao (COO — Telecom Business & Power Conductors), Pratik Agarwal (Head — Infrastructure Business), Prasanth Puliakottu (CIO), Pankaj Priyadarshi (CCO), Ajay Bhardwaj (COO — Grid Business), Vijay Jain (COO — Networks Business), Ankit Agarwal (Global Head-Telecom Business), Rajendra Mishra (Head — Power Cables), Kamal Sehgal (Leader — Business Excellence), Vimal Malhotra (Head — Human Resources).

AUDITORS: S. R. Batliboi & Co. LLP

### BANKERS:

Axis Bank, Bank of Baroda, Bank of Maharashtra, Citibank, Corporation Bank, EXIM Bank, HDFC Bank, ICICI Bank, Kotak Mahindra Bank, Oriental Bank of Commerce, State Bank of India, Union Bank, Yes Bank, Deutsche Bank.

### **REGISTRAR & TRANSFER AGENTS:**

Karvy Computershare Private Limited, Unit – Sterlite Technologies Limited, Plot No. 17 to 24, Vittalrao Nagar, Madhapur, Hyderabad – 500081, Andhra Pradesh, India. Phone: +91.40.23420818/828. Fax: +91.40.23420814. E-mail: einward.ris@karvy.com

### **FORWARD-LOOKING & CAUTIONARY STATEMENT:**

Certain words and statements in this release concerning Sterlite Technologies Limited and its prospects, and other statements relating to Sterlite Technologies expected financial position, business strategy, the future development of Sterlite Technologies' operations and the general economy in India, are forward-looking statements. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of Sterlite Technologies Limited, or industry results, to differ materially from those expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding Sterlite Technologies' present and future business strategies and the environment in which Sterlite Technologies Limited will operate in the future. The important factors that could cause actual results, performance or achievements to differ materially from such forward-looking statements include, among others, changes in government policies or regulations of India and, in particular, changes relating to the administration of Sterlite Technologies' industry, and changes in general economic, business and credit conditions in India. Additional factors that could cause actual results, performance or achievements to differ materially from such forward-looking statements, many of which are not in Sterlite Technologies' control, include, but are not limited to, those risk factors discussed in Sterlite Technologies' various filings with the National Stock Exchange, India and the Bombay Stock Exchange, India. These filings are available at: www.nseindia.com and www.bseindia.com.

Exchange, India. These filings are available in the second of the second



fluctuations in business cycles, a structural shift in economies, and epicenters of growth changing. In all this, my underlying belief that 'Growth is integral to human evolution and will always be a perpetual phenomenon' has always been reinforced in more ways than one. For instance, in the year gone by, even amidst looming political challenges and economic risk, we recorded a global GDP growth of approximately 3.2%. While there would be disparities regionally on account of growth rate, where economies across the world would showcase different levels of maturity during any given interval of time, the human mind would never rest and will always be propelled to evolve and grow continually.

With this growth comes an even greater need to focus on innovation and technologies. Mobility and connectedness will be at the heart of future business environment, with communications shifting from focused one-to-one relationships, to many-to-many. In such a scenario, a well-developed communications infrastructure network is a prerequisite for the access of less-developed communities to core economic activities and services. Economies equally depend on electricity supplies that are free of interruptions and shortages, and increasingly generated from renewable sources, so that businesses and factories can work unimpeded. In this regard, it is imperative to develop an extensive energy and data transmission network, which will allow rapid and free flow of information.

At Sterlite, we realise this underlying need for connectivity in an increasingly integrated world, and sense that this perpetual phenomenon will continue to increase the per capita consumption of bandwidth and energy. In our journey of more than a decade, I believe that our company's successes have come from recognising and capitalising on market transitions before they occur. Our goal is to capture these market transitions as per applications desired by our customers, and by investing in major technologies and markets, that would play a crucial role in the future of power and Telecommunications industry. We continue to drive our business through scaling of volume, enhancement of our global client footprint, stringent focus on costs and advances in technology.

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I believe that our company's successes have come from recognising and capitalising on market transitions before they

occur.

Going stronger year on year, following our vision to "Connect every home on the planet", we continue to refine our global business strategies to ensure sustained value creation for our stakeholders.

As a company, we remain highly sensitive to the needs of the society and environment and continue to take initiatives to bring sustainable change in the lives of people around us. In FY 2013, we made several important strides in community environmental stewardship and we gave equal impetus to the ongoing CSR activities that promote our social advancement cause.

### Outlook

A nation of smart buildings, high-speed transportation, clean energy, light-speed communications and sustainable architecture are all within our reach now. And, the key to this more efficient and productive future is in sustainable technologies. While this will create a better, long-lasting and more sustainable infrastructure, it will also benefit both the economy and the environment.

Going forward, Sterlite will continue to develop a green and sustainable high-speed data and energy transmission infrastructure that will have a huge, positive impact on our economy and the environment.

Frence

**Anil Agarwal**Chairman, Board of Directors
Sterlite Technologies Limited

# The year that was... | Here's a look back at Sterlite's achievements and milestones attained in FY 13.

Highest volume sales for all core businesses in the year including optical fiber, optical fiber cables, power conductors and structured data cables.

More than 5% of the revenues were from new products enabling the customers to reduce their losses and total cost of ownership while ensuring high speed data and power transmission.

The company continued to expand its global footprint with 28% of the total sales for the year coming from international markets.

The JV in China commenced production of optical fiber at the new facility located in Haimen, Jiangsu Province.

Grant of 1 more patent in FY 13; taking the total up to 46 patents granted in USA, Europe, India & China.

Financial closure for all three B00M projects and execution on stream.

# **Awards & Certifications**



ISO 27001:2005
Certification
(all units)



Annual Report Wins Gold Award at LACP 2011-12

# Sterlite Technologies accelerates FTTH deployment in the Netherlands

MARCH 12, 2013: Sterlite Technologies Limited announced that it is involved in several landmark Fiber-to-the-Home (FTTH) deployments in the Netherlands, a country that is experiencing a significant upswing in FTTH connectivity. As a leading provider of optical fiber-based products and services, Sterlite is bringing high-speed, fiber-based broadband access to people living in the Netherlands.

By December 2012, Sterlite had 10,000 connected homes across 2 cities in the country. The company now aims to add another 40,000 households to the fiber-optic network by the end of 2013, thereby extending its services to 5 cities. Sterlite's scope of work includes delivery of all optical fiber passive components, project management, warehousing, logistics and product training.

In the Netherlands, Sterlite will continue to implement projects in a phased manner. This will involve deploying more than 400 km of fiber cable and 3,000 km of direct buried fiber access cable together with ducts, micro-tubes, ODF drawers and cabinets, as part of the entire project requirements to complete the FTTH installation.

"The key to Sterlite's success in rollouts of complex FTTH networks has been working closely with customers to develop innovative solutions," said Ron Bron, Head-Benelux Region for Sterlite. "In fact, Sterlite is helping its customers to minimise the cost of installation, reduce delays in deployment, and design networks offering simple on-site integrations."

# Sterlite and Tongguang joint venture in China starts production of optical fiber

FEBRUARY 18, 2013: Jiangsu Sterlite Tongguang Fiber Co. Ltd. (JSTFCL), the joint venture (JV) company formed between Sterlite Technologies Limited (Sterlite) and Jiangsu Tongguang Communication Co. Ltd. (TGCI) announced the commencement of

production of optical fiber at their new facility located in Haimen, Jiangsu Province, China.

The green-field factory has been set up with an investment of around US \$25 Million. With the benefits of extended product lines, Jiangsu Sterlite Tongguang Fiber Co. Ltd. would make it faster, easier and more cost-effective for utilities and service providers to build new age communication infrastructures.

"This joint venture leverages the strengths of two great companies to offer high-quality and competitive optical fiber to our China customers," said Pravin Agarwal, Director, Sterlite Technologies Limited. "Additionally, it strategically positions both companies for global growth in the Telecommunications segment."

"This partnership combines the expertise of both companies to become a technology leader for the global market," said Tang Jinming, Chairman of Jiangsu Tongguang Communication. "We look forward to continued cooperation and innovation with Sterlite to provide our customers the best in class products at competitive prices."

The first phase of the project, which has started operations, has an installed capacity of 5 Million km optical fiber annually and the state-of-the-art facility today provides direct employment to over 90 people.

# Sterlite wins V&D 100 'Top Telecom Cables Company' award

OCTOBER 19, 2012: Sterlite Technologies Limited received the Voice&Data "Top Telecom Cable Company 2011-12" award for being India's biggest player in FY 2011-12. As per Voice&Data 100 - India's most comprehensive survey of Indian Telecom market - Sterlite with revenues worth Rs. 804 Crore from global sales of Telecom cables, registered the highest market share in India. The trophy was presented to Rahul Sharma, Business Head - System Integration, Sterlite Technologies Limited by Debjani Ghosh, MD, Intel South Asia, during the awards function held at Hotel Taj Palace in New Delhi. Sterlite is the only company to have won this award for nine consecutive years from 2004-12.

# Sterlite Grid successfully type tests towers for 765 kV double and single circuit transmission line projects

SEPTEMBER 26, 2012: Sterlite Grid Limited, a wholly owned subsidiary of Sterlite Technologies Limited announced that it has successfully completed full-scale type testing for its 765 kV double circuit Dharamjaygarh-Jabalpur transmission line (JTCL) project for all the four types of towers.

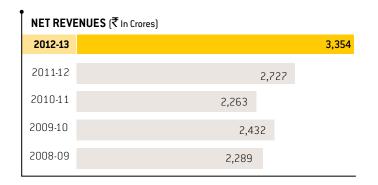
"We perform full-scale prototype testing on a wide variety of structures and have the unique distinction of being one of the few companies in the world to have a portfolio of tested tower designs at 765 KV class for both single as well as double circuit configurations. Our in-house engineering, procurement and project management capabilities give us an unmatched ability to get a transmission tower project done on time and on budget," said Ajay Bhardwaj, COO and Business Head, Sterlite Grid Limited.

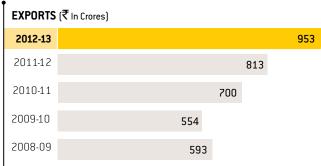
# Sterlite signs financial agreements for two of its grid projects

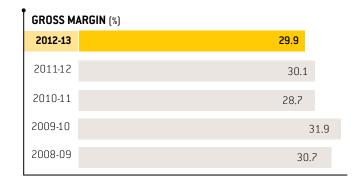
JUNE 19, 2012: The Bhopal-Dhule Transmission Company Limited (BDTCL) and Jabalpur Transmission Company Limited (JTCL), both wholly owned subsidiaries of Sterlite Technologies Limited have received Rs. 2,200 Crores as Debt Syndication for their power transmission projects. The syndication has State Bank of India as the lead participant.

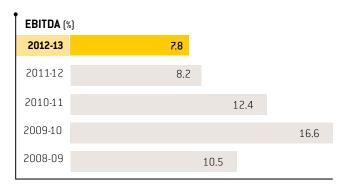
These 765 kV projects are a part of the 'System Strengthening Common for Western & Northern Region'. The JTCL project would connect Dharamjaygarh-JabalpurBina and features India's first private sector developed Double Circuit Line. The BDTCL project includes Single Circuit Lines from Vadodara-Dhule-Aurangabad and Indore-Bhopal-Jabalpur, along with two 765 KV substations at Dhule and Bhopal another first for a private sector player.

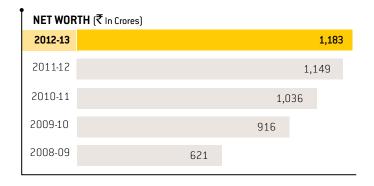
# Delivering growth through Excellence

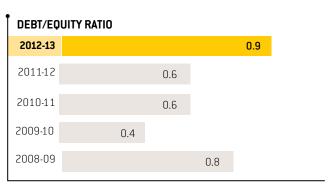












Note: All graphs are for Standalone Financials

	2012-13	2011-12	2010-11	2009-10	2008-09
₹ IN CRORES					
Net Revenues	3,354	2,727	2,263	2,432	2,289
Growth%	23	21	-7	6	36
EBITDA	260	223	282	404	240
PBDT	155	128	234	366	150
PAT	47	44	141	246	90
Diluted EPS (₹)	1.20	1.11	3.72	7.34	2.78
LICO IN MILLION					
US\$ IN MILLION	caa o	<b>545 5</b>	4F2 F	40C 2	457.0
Net Revenues	632.8	545.5	452.5	486.3	457.8
EBITDA	49.1	44.6	56.3	80.8	48.1
PBDT	29.2	25.6	46.8	73.1	30.0
PAT	9.0	8.8	28.1	49.2	18.0
RATIOS					
EBITDA Margin	7.8	8.2	12.4	16.6	10.5
PBDT Margin	4.6	4.7	10.4	15.0	6.5
PAT Margin	1.4	1.6	6.2	10.1	3.9
Effective Tax Rate [%]	31.0	22.8	21.1	22.5	18.4
Constant Foundaries of (IND Constant)	2252	4.042	4 700	4 224	4.470
Capital Employed (INR Crores)	2252	1,813	1,722	1,334	1,173
Return on Capital Employed (%)	7.6	8.0	13.6	27.9	17.3
Debt Equity Ratio	0.9	0.6	0.6	0.4	0.8

# Notes:

ROCE = EBIT/Capital Employed Interest Coverage Ratio = EBIT/Interest Working Capital Ratio = Current Assets / Current Liabilities Debt Equity Ratio = Debt/Net Worth

Conversion rate 1US\$ = ₹53



# Letter to the shareholders



Today, we are riding on a wave of concentrated research and development efforts aimed at developing newer and better products for our customers.

# Dear Shareholders,

We are happy to present our Annual Report for the financial year 2012-13. The business environment globally and in India continues to be challenging and has affected us as well, but we are happy to report that the company has been able to sustain its volume and revenue growth even amidst this tough environment.

The company continues to take strides at the passing of each year towards its vision of 'Connecting every home on the planet'. We remain committed towards excellence and delivering superior value to our customers, thereby helping them to improve their offerings, reducing their total cost of ownership and integrating sustainable value creation through collaboration.

Recalling our last year's letter to you in the annual report for 2011-12, we had presented the following outlook for 2012-13:

- "Continued volume growth, capitalising on organic expansions"
- "Increased offerings to our customers by adding new products that ride on innovation and application engineering"

 "Strengthened global presence by entering into new geographies and expanding our customer portfolio"

We are happy to report that the journey in 2012-13 has been as planned and we have made good progress on all of these focus areas. We witnessed volume growth, in all our businesses accomplishing record volume sales. Today, we are riding on a wave of concentrated research and development efforts aimed at developing newer and better products for our customers. We added several new product designs in the year based on customers' application requirements, including 96/288 dry core ribbon cables in our Telecom segment for faster installations in dense city requirements. Overall, the year witnessed more than 5% of the sales from new products which are focused towards addressing customers' pain points. The company also added a new patent to its intellectual property portfolio taking the total up to 46. Our geographical presence continues to expand across the globe adding new customers,

thus reducing dependence on any single region or territory. Today, we have a broad geographical reach covering a diverse set of cultures and communities, having a client footprint across more than 75 countries. The year marked yet another milestone with our Joint Venture facility in China starting commercial production of optical fiber towards later part of the year.

In terms of financial performance, we ended the year with sales of Rs. 3,354 Crores, EBITDA of Rs. 260 Crores and Net profit of Rs. 47 Crores at a standalone level. Earnings per Share was Rs. 1.21 for the year. At its meeting held on April 26, 2013, the Board of Directors of the Company recommended a dividend of 15% for the year, subject to approval from you, our shareholders. Adjusted for an exceptional item of Rs. 26 Crores, the EBITDA for 2012-13 translates into a 28% growth over the last year. During the year, we also added two new members to our board of directors namely, Mr. C V Krishnan and Mr. Pratik Agarwal.

Let us take a brief look at each of our business segments:

### Telecom segment

In this segment, Sterlite provides optical fiber, optical fiber cables, and structured data cables, along with a comprehensive systems and solutions portfolio. The optical fiber industry demand continued on growth trajectory with FTTx deployments across the globe being one of the major driving factors for increase in fiber consumption. Sterlite is well positioned in all key fiber markets, with China, India and Europe being the high priority markets, where we enjoy a healthy market share. We have, in the last few years, grown faster than the industry and continue to keep up the momentum. Our facilities in Aurangabad had an exit capacity of 13.6 Million km for optical fiber and our facility in Silvassa had an exit capacity of 6 Million fkm for optical fiber cables.

# **Power segment**

In this segment, Sterlite provides overhead aluminium power conductors, HV/EHV power cables, and optical ground wire (OPGW) cables along with related solutions. The power transmission industry in India has been increasingly laying emphasis on introducing efficiencies into the system by reducing losses, besides reducing the mismatch between the demand and supply. With a portfolio of high performance conductors and complementary solutions such as OPGW, we plan to lead the way in the domestic market towards making the power transmission systems more efficient and eco-friendly. Globally, the focus is towards adding new capacity for renewable sources of energy, which in turn require new transmission lines and our comprehensive portfolio is well suited to address these global requirements. Our facilities in Silvassa, Haridwar and Jharsuguda had a combined exit capacity of 160,000 MT.

# Infrastructure segment

Sterlite is also the largest player in private power transmission sector in the country with a portfolio of three projects operating on a Build Operate Own and Maintain (BOOM) basis, namely, East North Interconnection Company Limited (ENCIL), Jabalpur Transmission Company Limited (JTCL) and Bhopal Dhule Transmission Company Limited (BDTCL). These projects will require a total investment of close to\$ 900 Million to be funded as mix of debt and equity. The first project, ENICL, will start generating revenues from the coming year, while the other two projects are expected to be completed in the following year and will have revenue flow from 2014-15 fiscal. Another important highlight was the installation of the first private 765 kV double circuit tower in the country by the company as part of these projects.

With a portfolio of high performance conductors and complementary solutions such as OPGW, we plan to lead the way in the domestic market towards making the power transmission systems more efficient and eco-friendly.



### Outlook

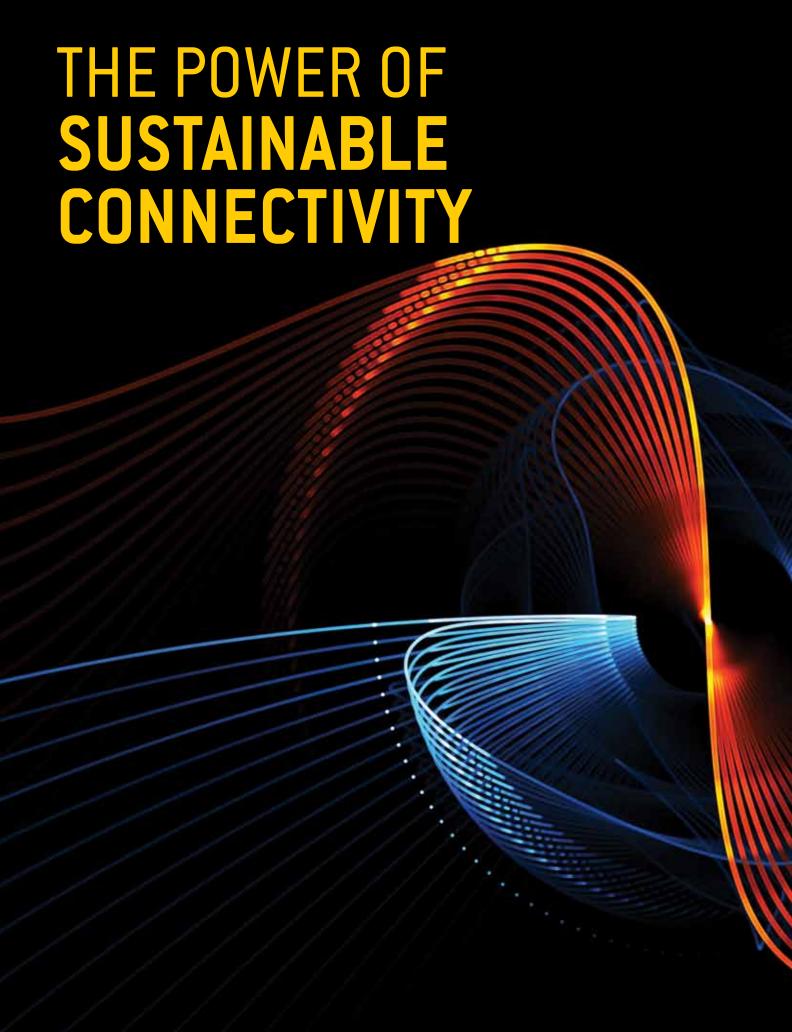
The fundamental belief of Sterlite remains rooted in faith that the growth of data and power consumption globally will be a perpetual phenomenon. Equipped with a comprehensive portfolio of product & solutions for power & data transmission that is unparalleled globally, product development capabilities, a team of talented & committed people, and an extensive global reach, we are well positioned to not only be a part of this growth but also enable it.

As we move to FY 14, we remain focused on our long-term strategic objectives. In the coming year, we will continue to drive growth of the company with the on-going organic expansions. We plan to further increase optical fiber capacity towards 20 Million km over the next couple of years and to start utilising 100% of existing conductor's capacity of 160,000 MT to grow the company further. The new infrastructure vertical will also start contributing to the company's top-line and bottomline as our projects are moving closer towards completion. The focus of the company remains to develop and nurture a culture of excellence in all facets of the organisation.

We take this opportunity to thank the entire Sterlite family of over 1500 employees who have played a pivotal role in our success and whose endeavour has continuously been reaching new milestones. We would also like to thank you, our shareholders, whose confidence and trust we must earn every day. We appreciate your support in making this company what it is today and look forward to a long-term association.



Anand Agarwal
Chief Executive Officer



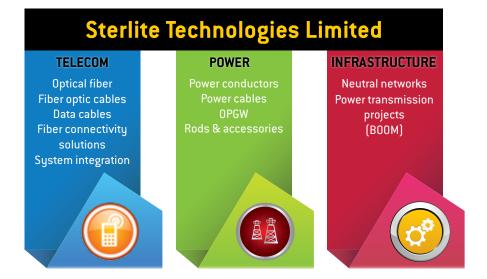


# By Jeetendra Bisht & Benoy Varghese - Business Analysts

There are no... limits to the carrying capacity of the earth that are likely to bind any time in the foreseeable future. There isn't a risk of an apocalypse due to global warming or anything else. The idea that we should put limits on growth because of some natural limit, is a profound error and one that, were it ever to prove influential, would have staggering social costs. —Lawrence Summers, Chief Economist, World Bank, November, 1991

Well, this was then... a time when most of us ignored the fact that there may be limits to growth. Almost 20 years later, circa 2013...who would deny the fact that though we may choose to ignore environmental problems for a long time, when they catch up to us, they catch up very fast. So, what really happened between then and now?

"Development" with growth in production as well as consumption of goods & services, and eventual exhaustion of precious capital represented by the world's endowment of natural resources has been reflective of how social needs are met. It is projected that by the year 2030, there will be three Billion more people on earth than today. Hence, the task of providing them with food, clothing and shelter will be enormous. Besides, the need to provide them with education, employment, and a healthy environment will be even more pronounced. While these facts of life cannot be ignored, it is even more imperative that we invent solutions that are sustainable in the long run..



Also, with the current high level of global environmental consciousness, management of sustainability is considered to be crucial for the paradigm shifts ahead. It goes without saying that the manufacturing industries must pursue innovations that are sustainable.

But what is sustainability? It is Tikkun Olam, a Hebrew phrase that means 'repairing the world' (or 'healing the world') which suggests that it is humanity's shared responsibility to heal, repair and transform the world. Thus, sustainability refers to improving technologies and practices, more in terms of conserving energy, being more costefficient, and reducing pollution, among others. Today, much progress has been made in all these aspects.

Technology, as we all know has been advancing at an enormous speed and we never know what comes next. While the innovations of the future may still be taking shape, the data-dominated network and relentless development of new applications and platforms have paved way for the digital age. This has also changed the manner in which we communicate and conduct business... all the while making global markets more accessible for business and improving the quality of life.

Further, the green revolution in Telecom and power that we experience today is being driven by a number of factors. For instance, optical fiber has essentially unlimited bandwidth, and is immune to environmental effects.

We at Sterlite are preparing the world towards the future of technological evolution. The electricity consumption and data consumption is a phenomenon which will move only in one direction which is up and we help utilities across the with globe solutions which will prepare them for the future when these needs are moving towards the zone of infinite.

# **TELECOM SEGMENT**

# We are in Internet's Golden Age

The diffusion of each technological revolution witnessed by humankind has been marked by two distinct periods of more than half a century each: (i) 'Installation period'- when innovation concentrates to set up the new infrastructure (ii) 'deployment period' - when innovation spreads across the board to reap the full economic and social benefits. The Internet is no different and is arguably the biggest revolution mankind has seen in the last four centuries. Thus, we are now heading from the installation phase to the deployment phase. In line with this, the last decade focused on getting the core Internet eco-system in place. Subsequently, the focus has shifted, and we are now entering the realm

Experts believe that the Internet today belongs to what we call the Golden Age. Each golden age in a revolution has brought about a change in lifestyles with new life-shaping goods and services that open vast new market directions. Also, each surge in the golden age opens new frontiers — reshaping markets and in the current situation, Internet is right up there... on top of this list.

of reaping the benefits of this evolution,

which will necessitate mass deployment

of broadband infrastructure.

GREAT SURGE	Year Country	INSTALLATION PERIOD  Bubble Prosperity	TURNING POINT Collapse & Recessions	DEPLOYMENT PERIOD  "Golden Age" Prosperity	Maturity
1 <sup>st</sup>	1771 Britain	Canal mania	1793-97	The Great British Leap	
2 <sup>nd</sup>	1829 Britain	Railway mania	1848-50	The Victorian Boom	
3 <sup>rd</sup>	1875 Britain/USA Germany	Infrastructural bubbles of first globalisation (Argentina, Australia, USA)	1890-95	Belle Epoque (Europe) 'Progressive Era' (USA)	
4 <sup>th</sup>	1908 USA	The roaring twenties	Europe 1929-33 USA 1929-43	Post-war Golden Age	
5 <sup>th</sup>	1971 USA	Internet mania and financial casino	2007/08 -???	Global Sustainable 'Golden Age'?	

The future we see for the world of communications will be very different from the present one: there will no longer exist a distinction between the "on-line" and "off-line" world. The prosperity of individuals, businesses and nations will all be linked to the growth of the Internet. It is for the same reason that the Governments around the world are also increasingly viewing broadband Internet as the 'fourth utility' alongside water, gas and electricity.

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# Video is exploding Traffic online

Do you know it will take over 6 Million years for a single person to watch the number of videos that will cross global IP networks each month in 2016. Every second, 1.2 Million minutes of video content will cross the network in 2016.

In the last 10 years, the rise in the number of Internet users has been phenomenal.

Likewise, it will be a daunting task to accurately predict the number of users and devices that will be connected to the Internet in the coming decade. Beyond the number of users, the statistic which will be more difficult to predict is the IP traffic that each of those users will create on the Internet. What we do know is that this growth will be astronomical!

We will be "always on", always connected, through all the things that surround us, whether close to us or not.

The term "access to the network" will be meaningless, because the access will be automatic and involuntary and may even accompany a person's birth. Being born will signify getting into the Net. "Online" will be fully meshed with our daily lives. Whatever we do - communicate, carry out research, play games, watch films, socialise, pay bills, pay taxes - almost everything will be online. While all these can simply be perceived as a vision; we believe it is a view, because it is closer to reality than one may think.

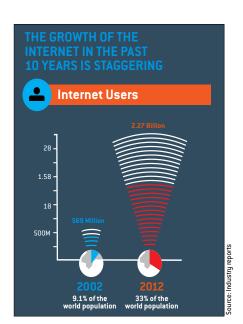
Just five years ago, it was difficult for one not only to comprehend the features of iPhone but also the potential of tablets or touch screen devices. The use of these devices is rising exponentially with no sign of a slowdown. At the beginning of 2010, tablets were all but non-existent. Today, over 30% of American consumers have access to a tablet computer.

No longer desk-bound, the computer screen has just moved into the living room, and now competes with the TV for eyeballs and attention.

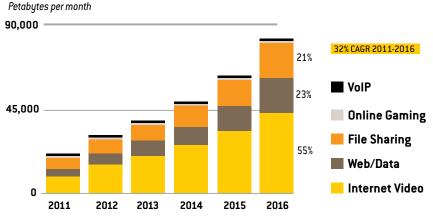
Online video has become a familiar sight on our computer screens. If you peep into your co-workers' cubicles, you are likely to catch them sneaking a quick video on YouTube, watching news on CNN.com, or enjoying videos which their friends have embedded on Facebook. At home, your kids might be watching the latest episode of 'The Bachelor' on ABC.com or new music videos on iTunes store, or maybe they are streaming the entire season of TV shows from their Netflix account.

The sum of all forms of IP video (Internet video, IP VoD, video files exchanged through file sharing, video streamed gaming, and video conferencing) will ultimately reach 86% of total IP Internet traffic. Taking a more narrow definition of Internet video that excludes file sharing and gaming, Internet video will account for 55% of consumer Internet traffic in 2015.

Busy-hour Internet traffic will nearly quintuple between 2011 and 2016, while average Internet traffic will nearly quadruple. The below figure provides a view of the historical benchmarks for per capita Internet traffic.



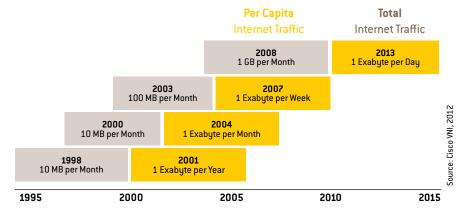
### Global Consumer Internet Traffic

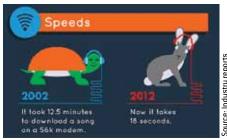


Global gaming and VoIP forecast to be 1% of all consumer Internet traffic in 2016.

# 'Speed' - Internet's new demand

In reality, the need for speed goes beyond the desire for faster navigation. Consumers today are drawn to a wide variety of content and features that require a "broader" broadband connection. In fact, they might not even be aware of their growing appetite for broadband as they access their favourite online content.





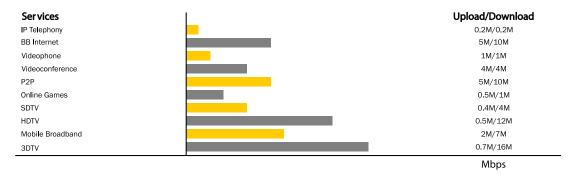
Probably, the most well-known of these bandwidth-hungry applications relate to TV. For example, interest in high-definition television (HDTV), which can require an up to 10 Mbps broadband connection when accessed through Internet Protocol television (IPTV), has increased from 23 to 38% in the last three years.

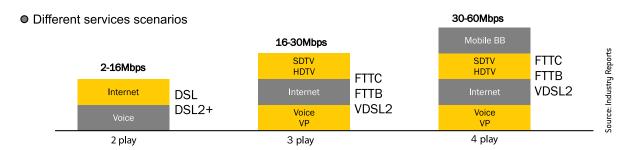
Broadband speed is a crucial promoter of IP traffic. Broadband speed improvement results in increased consumption and use of high-bandwidth content and applications. Further, the growth in usage per device outpaces the growth in the number of devices. About 20-50 Mbps will be needed per home in the next 3-5 years. Usage will also be driven by the extent of multi service play in the home segment.

As things stand today, the only bottleneck of innovation diffusion, new interactions and communications goals across the world, is from physical connections, ie, Telecommunications network.

With video growth,
Internet traffic is evolving
from a relatively steady
stream of traffic to a more
dynamic one. With video,
the Internet now has a
much busier busy hour.

# Higher bandwidth demand in the next 3-5 years





# Now the 'BIG' question... is our bandwidth infrastructure ready?

Are the copper heavy networks of today equipped to handle this explosion in data traffic as anticipated and meet the consumer expectations for immediate & high speed access from multiple devices? It should not come as a surprise to anyone that the answer is no.

xDSL technologies have allowed the wireline industry to expand the lifetime of legacy copper networks for broadband Internet connectivity. Despite several innovations in DSL technology, copper is gradually reaching its limits, because homes which are connected with copper loops of 1 km or more, which do not allow for bandwidths of 50 Mbps (megabits per second) or greater (for example, the equivalent of two full high-density streams and a high speed Internet connection).

In Internet history, consumers' insatiable hunger for ever-increasing bandwidth and new innovative services have always strained the seams of copper networks. The capacity of legacy copper networks in the ground in different phases could never reach the 'sell-by' date, without getting exhausted.

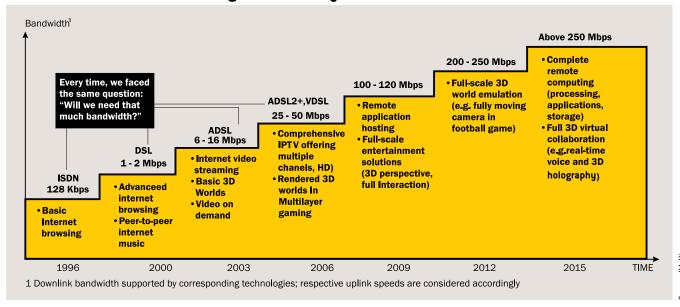


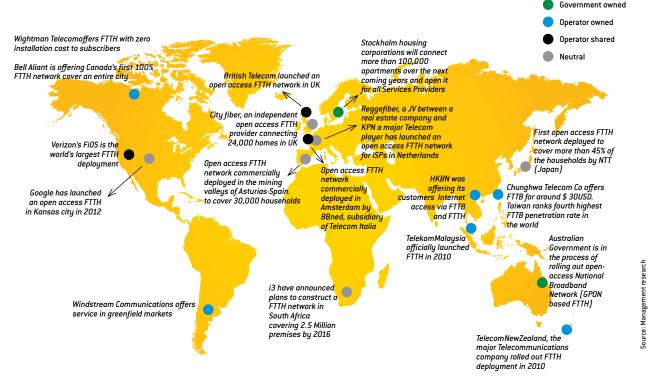
Skyrocketing demand for high-speed Internet services is necessitating another wave of infrastructure investment. The fact remains that fiber is THE future and fixed-line networks globally require upgrade and investments.

The proponents of fiber have been often dismissed for their 'fiber only' mentality. But this is not the case, future has a place for both wireless and fixed line and the two go hand in hand. A future without mobile connectivity is unthinkable, but it has limitations and it depends on fiber to succeed.

While the whole world is talking about wireless and going gaga over 3G, 4G and a possibility of 5G, an interesting figure here depicts the usage pattern of wireless devices. Almost 70% of data consumption on wireless devices globally happens over Wi-Fi networks. This means while people need mobility, they love accessing high-speed Internet through fixed wireless networks which are connected by fiber/copper. Nevertheless, the remaining 30% data, which is consumed on cellular networks also ultimately, terminates at the nearest wireless tower connected by fiber.

# Historically bandwidth-hungry products always emerged to fill newly available bandwidth.





# Fiber: The key to sustainable networks

While we cannot say what will be the 'Facebook' or 'iPhone' of the 2020s, the infrastructure that powers your broadband connection is here to stay. We are faced with an exceptional increase of data traffic and need to question ourselves on whether the current model of the Internet development is sustainable in the long-term. Today, telcos are at a crossroad because the last wave of Telecommunications infrastructure investment occurred under circumstances remarkably different from the situation operators and regulators face today.

One could adopt several directions but only one route will guarantee that the infrastructure is future proof — the usage of fiber.

To go another route may be faster and initially lower cost but may lead to stranded investment in the future or worst still there may be no additional funding available which will deny the use of next generation services to a large volume of end users. We have to think

Sky

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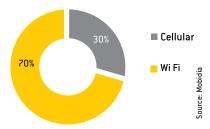
about fiber in a long-term way — not as a risky venture that must pay back in seven years, but as a renewal of our communications highways so they are fit for the future — whatever applications and services consumers might be demanding in coming 10, 20 or even 40 years' time.

Why wait until the planet forces us to change course?

# The World is adopting fiber

World over, national governments are realising the need to break out of their comfort zones on fixed line networks. To realise the many benefits of broadband, governments around the world are implementing comprehensive nationwide plans for networks, as well as tightly focused broadband programmes.

# Global smartphone-originated data traffic distribution

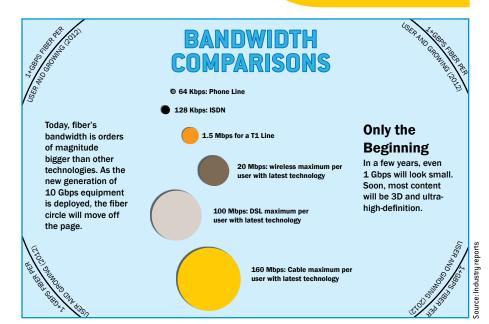


Different countries within APAC are at different stages of FTTH adoption realising the social and economic benefits that the technology brings. Today, Asia Pacific (APAC), is the land of ambitious National Fiber Programs such as the A\$37.4 Billion NBN in Australia, and Crown Fiber Holdings in New Zealand. Their mandates are ambitious - in New Zealand (75% of the population to be covered via FTTH by 2019) and in Australia (93% of Australian Homes FTTH to be covered by 2021).

China, the world's largest consumer of optical fiber, plans to increase the number of households with broadband access to 175 Million, with more than 70% of China's Internet users getting 4M broadband service by the end of 2013. 'Broadband China' programme's goal is to have at least 40 Million homes connected to FTTH networks by 2015. The mandate has been enforced since April 1, 2013.

Already the country's telcos, including China Telecom and China Unicom, are aggressively rolling out their own FTTH networks. China Unicom added 10 Million families to its FTTH project in 2012, while China Telecom at end of 2012 reached a total of 2.3 Million subscribers. Besides the telcos, utilities will also play a part in China's FTTH drive. Utilities like State Grid Corporation of China (SGCC) are using the optical fiber networks for two purposes: powering their smart grids and offering FTTH services to consumers and businesses. The total spend is expected to be between \$1.5 to \$2 Billion for components and equipment.

However, for other developed economies, despite the semi-recessionary business environment, the pace at which they are advancing towards FTTH is quite impressive like the European Union. The European Commission also recently created the 'Connecting Europe' Facility to help fund the rollout of next-generation networks and pan-European digital



services. It plans to lend out Euro 9.2 Billion between 2014 and 2020.

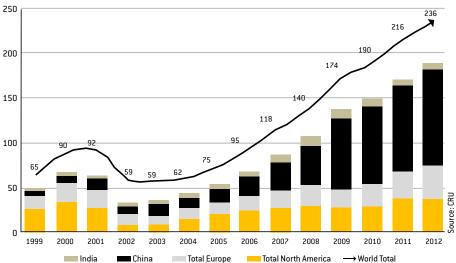
Google is known for innovative experiments - the self-driving car or the Google Glasses. 'Google Fiber' is another such experiment, wherein it is building a broadband Internet network infrastructure using fiber-optic cables in chosen cities and provides super high speed Internet i.e. 1Gbps. Kansas City, was chosen first, followed by Austin, Texas and Provo, Utah; all in USA.

Google Fiber is influencing the change both directly and indirectly. Early users in Kansas City report that instant access to video content, without buffering, has been one of the network's most appealing aspects. Google Fiber's influence is impacting other carriers as well: within a week of Google's announcement of expansion to Austin, wireline incumbent AT&T announced a 1 Gbps plan for Austin and Time Warner Cable announced new city-wide wireless service for its Austin customers.

These developments have been driving the growth of fiber demand across the globe with China, Europe and North America contributing a significant portion to it.

We at Sterlite believe that the demand growth is here to stay, as the need for bandwidth is insatiable and the networks of today are not enough to sustain the surge in bandwidth. One of the significant contributing factors to the demand growth could come from India, which is at the trigger point.

# Global Optical Fiber Cable Demand (Million fkm)



# India - Hotspot for fiber deployment

### **Present status**

The Internet revolutionised the lifestyle of many Indians by creating a new means of communication, knowledge sharing, governance, employment and the delivery of services. Although the Internet is a function of various factors such as literacy, access to personal computers and electricity, it has made significant inroads in the urban market especially metros and Tier-1 cities. Further, the evolution of technology and increase in bandwidth has given rise to Internet connections at speeds faster than traditional dial—up connections of up to 256 kilobits per second (kbps) or more.

Wireline Internet has had a slower than expected journey in India. Low PC penetration coupled with limited wireline infrastructure including right of way challenges and high tariffs constrained the growth of broadband in the country in its formative years.

# India is at tipping point

India had 15 Million fixed line broadband connections at the end of 2012. Only, a small share of these connections are consuming bandwidth commiserate with the usage expected from a true broadband connection already evidenced

in developed countries. India's base of 120 Million Internet users is the world's third largest. Yet this figure is a function of sheer population, not deep adoption.

However, the future could look very different for India with an unlocking of latent demand facilitated by two important drivers. First, the emergence of the middle class will mean that there will be nearly 3-4 times more consumers in a 10 year timeframe who can afford high speed broadband prices. Second, with increasing affordability of access devices, higher quality of access technology, superior services and content such as video and value added services will lead to a greater spend on connectivity services. Globally, whenever high quality supply is made, available data demand increases 10 to 12 times.

# Gearing up for Broadband Infrastructure creation

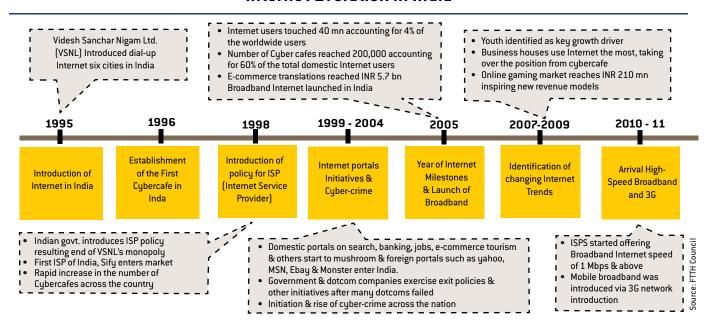
There is a need for broadband infrastructure creation as most of the existing infrastructure for the wireline based broadband services is concentrated mainly in urban and semi-urban areas with limited presence in rural. Further, the legacy wireline infrastructure is not scalable for providing high speed broadband services.

Notwithstanding the economic progress over the last decade, the digital divide in the country continues to be significant. Hence, there is an urgent need for inclusive growth through deployment of a National Broadband infrastructure in the country. With a view to enhance the ability of the poorer sections of the society, both in rural and urban areas, to benefit from technology, the Government of India (Gol) launched an ambitious 'National Telecom Policy (NTP) - 2012'. Gol is looking at Broadband networks to provide a more efficient and less expensive way to deliver essential public services such as health care, education, public safety and emergency services.

NTP-12 has the vision of 'Broadband on Demand'. It aims to provide affordable and reliable broadband-on-demand by the year 2015 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand. It will also provide high speed and high quality broadband access to all village panchayats through a combination of technologies by the year 2014 and progressively to all villages and habitations by 2020.

The government is making large investments to overcome the hurdles to achieve its vision. Under the aegis of this policy, Gol has launched its flagship program 'National Optical Fiber network (NOFN)', a project to connect 2,50,000 Gram Panchayats (GP) through optical

# Internet Evolution in India



fiber cables (OFC) in 2011. The network will bridge connectivity gap between Gram Panchayats and Block offices in the entire country and will ensure availability of 100Mbps at each GP along with non-discriminatory access to all categories of service providers. The project implementation will be in next 24 months. The selection of partners for this mega project is already in the final stages

# **Network for Spectrum (NFS)**

Another mega fiber rollout is being undertaken in India, owing to spectrum shortage arising due to scarcity of this critical wireless resource. The Telecom Regulatory Authority of India (TRAI) estimates that to meet the growing needs of 2G and 3G services in India will require around 500 to 800MHz of spectrum in the next 5 years. The Department of Telecom (DoT) and the country's Defense forces have come together to make available this spectrum.

The defense forces are vacating 80 Mhz for commercial use in lieu of alternative backbone network i.e. Network For Spectrum (NFS) also known as 'Nationwide Communication Network', being built by state-owned telcos. The groundwork for this project to lay 57,000 kms of optical fiber cable is already underway. All these developments concur with our

belief that the demand for optical fiber across the globe is there to stay with the ever increasing IP traffic. Today fiber is the only medium which can enable this data traffic complementing wireless and legacy copper networks. Sterlite's extensive portfolio of fiber solutions helps service providers and utilities in creating efficient and future proof networks to enable the explosion of data across networks globally. Another segment that Sterlite caters is the power segment, enabling transmission infrastructure to meet the growing electricity needs of the people across the world.



Service Provider	Total Fiber Laid	Cities / Towns Covered	Metros/ Tier I Cities	Other cities /Towns	Gram Panchayats	Mid Sized Villages	Small Villages	
BSNL	614.755 Rkm	All Cities & 28 K gram panchayat	•	•	•	0	0	
RELIANCE	190,000 Rkm	44	•	•	0	0	0	
🥏 airtel	126.357 Rkm	130	•	•	0	0	0	
THESE COMMUNICATIONS	40,000 Rkm	00		•	0	0	0	
	37,720 Rkm	800	•	•	•	0	0	
	21.652 Rkm	110	•	•	0	0	0	
SAILTEL	13.000 Rkm	200	•	•	0			

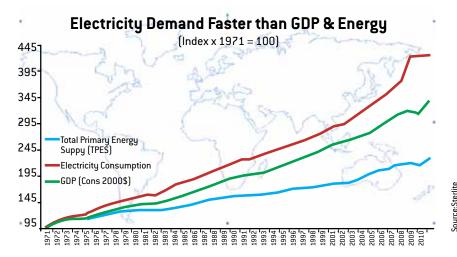
Level of Backbone Infrastructure Coverage: Very High A High A Medium Low

# **POWER SEGMENT**

# In a Changing Landscape: Sustainable Energy = Sustainable Development

Energy landscape in the long-term is almost always steered by the manner in which governments intervene to thwart energy related challenges. Global energy demand, as per International Energy Agency (IEA), is projected to increase by 35% between 2010 and 2035, rising from nearly 12,730 Million tonnes of oil equivalent (Mtoe) to around 17,197 Mtoe. Population growth, economic growth, urbanisation and industrial production are key factors spurring demand for energy. The world's population will rise by more than 25% from 2010 to 2035, in other words there will be nearly 8.6 Billion energy consumers by 2035.

While emerging economies are set to determine market dynamics in the coming decades, China will play a decisive role in the global energy space. India, on the other hand, will account for the second largest energy demand, underpinned by burgeoning population and rapid economic activities. Energy demand growth will also be strong in Russia on account of the highest per-capita energy consumption and in the Middle East due to heavy subsidies for fossil fuels, along with other demand drivers.

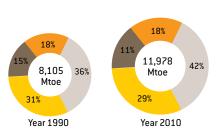


### A surge in the demand for electricity

The growth of energy consumption is heavily weighted towards electricity. Demand for electricity is set to continue to grow faster than for any other final form of energy, globally. Moreover, electricity demand is closely linked to economic growth and industrialisation.

electricity, while 2.6 Billion people rely on traditional biomass for cooking. Just five countries including – India (23%) - account for those 50% of those without electricity, representing a serious barrier to social and economic development. Energy poverty is also often the root cause of perpetual poverty.

# Use of Energy in 1990, 2010 and 2030 (e), % of Mtoe



Demand for electricity is further pushed higher by a demand shift to electricity in households and industries, mostly supplementing or displacing traditional biomass, coal, oil and natural gas.

Despite rising energy use across the world, almost 1.3 Billion people or around 20% of the global population lack access to

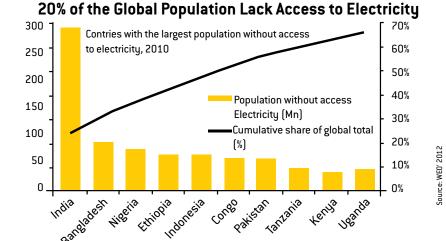
Electricity generation in 2035, to keep pace with rising demand, will be 71% higher than it was in 2010. China, overtook the US to become the world's largest electricity consumer in 2011, will account for largest share of incremental global demand. India's electricity demand is expected to grow at 5.2% annually, driven by rising population and per-capita incomes.

20,000 By 2035, Primary Energy Demand will increase by 35% from 2010 Levels, Mtoe

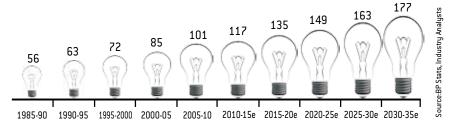
15,000 Global Primary Energy Demand Growth and Outlook, (Mtoe)

1965 1970 1975 1980 1985 1990 2000 2005 2010 2015 2020 2025 2025 2030 2035

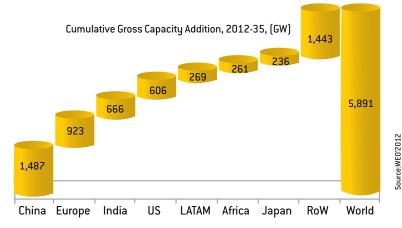
Electricity generation in 2035 – to keep pace with rising demand – will be 71% higher than it was in 2010. In fact in 2011, China which overtook the US to become the world's largest electricity consumer, will account for the largest share of incremental global demand. India's electricity demand is expected to grow at 5.2% annually, driven by rising population and per-capita income. The electricity consumption is expected to increase to 177 GwH globally by 2035, and to meet this demand, significant additions need to be done in the generation and transmission capacity.



# Global Electricity Consumption, 1985-3035 (GWh)



# Over 37% of the Cumulative Gross Capacity Addition in China and India alone, 2012-2035, (GW)



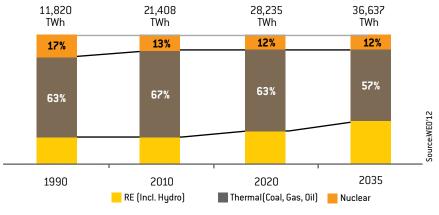
Modern Renewable Energy (RE) sources such as wind and solar PV have cemented their positions in the energy mix after years of mainstreaming. It is projected that wind will achieve about 20% of penetration in the European Union (EU) in next two decades. Strong growth in markets like the US, China and India is projected, thus underpinning the government support. Also, wind power capacity is set to reach 1,098 GW by 2035 growing at a CAGR of 6.6% from the levels of 2011, as per IEA estimates. Solar sector has witnessed a sky-rocketing growth in recent years on account of substantial falls in solar PV costs. Globally, the solar PV sector is expected to add another 662 GW by 2035 large capacity additions expected in EU, the US, China, India and Japan.

In 2012, the United Nations launched a global initiative - "Sustainable Energy for All", which aims to double RE share in global energy mix by 2030, double the global rate of improvement in energy efficiency and to ensure universal access to modern energy services. Energy sustainability - based on these three core dimensions – is inextricably interwoven such that reaching these goals by 2035 would mean RE's contribution of 31% of total electricity, second only to coal. Essentially, subsidies offered to make the RE proposition attractive, fueled the growth of RE sources. World Energy Outlook 2012 reports that the subsidies will rise from US\$88 Billion globally in 2011 to US\$240 Billion in 2035.

# RE's Contribution of 31% of Total Electricity, Second Only to Coal

# Capacity additions to meet the rising demand

Globally, generation capacity additions by all sources would be needed to keep pace with rising demand and to replace capacity that will be retired (1980 MW) over 2012-2035. It is expected that the gross capacity additions from 2012-2035 will be about 5,891 GW. Further, over 37% of the cumulative capacity addition will be in China and India alone, as these countries seek greater access to electricity.



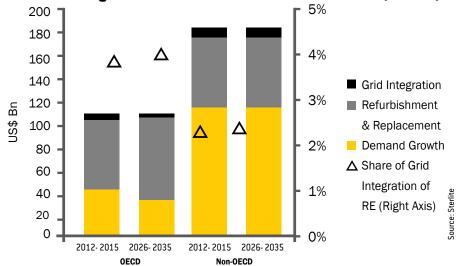
# Capitalising on large RE Instead of being overwhelmed by it

Since 2010, RE capacity addition received more than 50% of new power generation investment. By 2011, the renewable energy industry was investing US\$260-290 Billion annually; Solar PV attracted largest shares of US\$127 Billion followed by wind power at US\$84 Billion. The projected increase in global RE capacity requires an annual US\$300 trillion for next two decades. Renewable account for 62% of total investment in power generation capacity from 2012-2035, reaching almost 70% in 2035. Investment in wind power has also been higher than for any other source, at US\$2.1 trillion, representing 35% of total investment in renewable capacity. RE, by all measures, is a high impact opportunity to driving our energy related commitment.

# Investments in Transmission to follow the capacity additions

According to IEA, cumulative investment in the power sector will contribute 45% of all energy sector investment during 2012-2035. This amounts to US\$16.9 trillion, roughly equivalent to the gross domestic product of the entire EU in 2011. Investment in power plants accounts for 57% of the power sector total. Further, cumulative investment in T&D grids during 2012-2035 amounts to US\$7.2 trillion, representing 43% of the total investment in the power sector.

# Annual Average Investment In T&D Infrastructure, \$ Bn (2011 \$)



the US and Europe is essentially to upgrade and uprate existing T&D network, while China, India and Brazil makes up for a third of the total T&D investment through 2035.

Stronger grid integration and balancing large shares of variable renewables are reckoned as critical parts of reaching the higher levels of renewable energy envisaged. To accommodate more renewable-based capacity, often in remote locations to capture the best renewable energy sources, additional transmission lines will need to be built and some existing transmission and distribution networks reinforced.

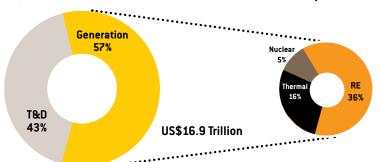
# World's largest blackout: Darkest before dawn

India suffered a massive blackout on July 30, 2012 as its Northern grid collapsed leaving 300-360 Million people powerless. And while the country was still coming to term with this incident, grids in the Northern, Eastern and North-Eastern region collapsed together at 1pm the very next day. This time approximately 600 Million people were impacted, making it the world's largest blackout.

To put things in perspective, India recently overtook Russia to become the world's third-largest energy consumer. Also, India makes the second largest contribution to the increase in global demand after China in mid-term.

The Government appointed an independent committee to examine the reasons for the grid disturbances and the remedial actions to be taken to secure safe and sustainable operation of the grid. The Committee concluded that grid indiscipline i.e. overdrawal by Northern Region (NR) utilities and inadequate response by State Load Despatch Centres (SLDCs) to the instructions of Regional Load Despatch Centres (RLDCs) to reduce overdraw, were the primary reasons of grid failure. Other factors such as weak inter-regional corridors due to multiple outages, high loading of some links, etc. also contributed to the failure.

# US\$ 7.2 Trillion Cumulative Investment in T&D, 2012-35

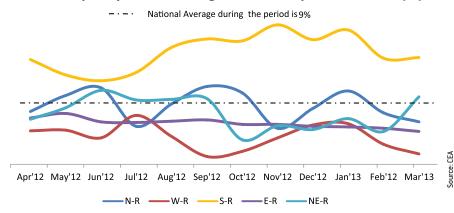


Investments in T&D networks is a strategic imperative to improve the quality of power delivery to existing customers by replacing and refurbishing T&D assets, to connect new power plants and to accommodate the increasing contribution of variable renewable sources.

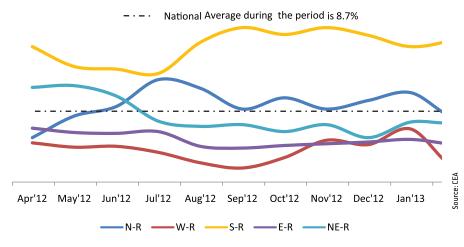
Investments in mature markets such as

A growing share of T&D investment in all regions is needed to integrate renewable into the system, about US\$230 Billion from 2012-2035 or 3.2% of the total investment in electricity networks. This includes the additional cost of connecting new, often remote and fragmented sources of supply to the transmission network and of reinforcing other parts of the system.

# Peak Capacity Deficit in Regional Grid, Apr'12-Mar'13, (%)



# Energy Deficit in Regional Grid, Apr'12-Mar'13, (%)



### **India's Transmission Sector**

In India, strategy of transmission development is commensurate with generation and load growth, creation of highways leading to strengthening of National Grid and conservation of Right-of-Way. Government policies also point to a huge thrust on transmission sector in terms of capacity buildup and planned expenditures for the 12th Plan. A total of about 1,07,440 ckm of transmission lines; 2,70,000 MVA of AC transformer capacity and 12,750 MW of HVDC systems are estimated as needed during the 12th Plan.

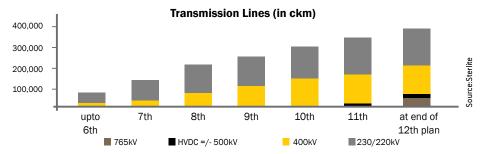
The 12th five-year-plan is expected to register maximum growth in terms of capacity addition through 400 kV lines - backbone of transmission infrastructure in India.

Historically, the focus of the power sector in the country has primarily been on addition of generation capacities. There is also a clear trend in terms of shift of focus on transmission. The share of investment in transmission for the 12th Plan and the 13th Plan is substantially higher than it was for the previous five-year-plans.

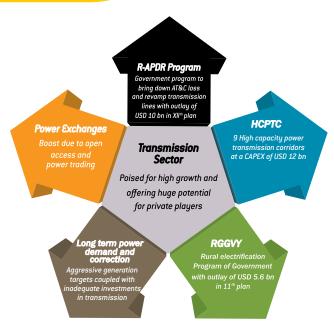
Two consecutive grid blackouts raised fundamental questions about the aptness of the regulations, the government's investment strategy in transmission system, technological uptake philosophy and system operating practices governing transmission system security. However, amidst inadequate infrastructure, a crippling power shortage, fuel shortage, bleeding DISCOMs and yawning absence of state-governmental action, Power Industry's response to the blackout and short-to-long-term solution-finding efforts are likely to provide the leadership and drive needed to avoid unduly exposing transmission systems to the risk of further substantial power failures.

Central agencies are initiating steps to enhance the ability of a power transmission system to withstand the unexpected loss of key components.

# XII Plan to register maximum growth in terms of capacity addition through 400 kV lines - backbone of transmission infrastructure in India



Development and deployment of new and existing technologies ranging from high temperature low sag conductors to power monitoring devices to Ultra high voltage lines to Automatic Control Systems are envisaged. Investment into expansion of transmission line capacity to alleviate transmission congestion has also been planned.



# Clear Thrust on T&D Sector reflected in Planned Expenditure on T&D

High capacity transmission corridors comprising 765 kV AC as well as DC lines will facilitate transfer of power from remotely-located generation complexes to bulk load centers. A total of 27,000 ckm of 765 kV transmission system is planned during 2012-17. Further, growth in HVDC transmission system up to the 12th Plan and in the early 13th Plan period is expected. The total outlay for development of transmission system is estimated to be of the order of US\$ 36 Billion – Central sector accounts for US\$ 20 Billion alone. In the 13th Plan, this is expected to increase further to US\$ 40 Billion.

Given the need for large capacity addition, there seems no option but to galvanise the

private sector to make sizeable investments in transmission sector, especially in intra-state transmission of electricity. Furthermore, recognising the criticality of large scale development of RE capacity and its integration with grid, Ministry of New & Renewable Energy (MNRE) and Forum of Regulators (FOR)/Central Electricity Regulatory Commission (CERC) have entrusted Power Grid to prepare a strategy framework for integration of RE capacity addition planned under the 12th five-yearplan. Building a sustainable and resilient transmission infrastructure necessitates optimal utilisation of existing transmission infrastructure by enhancing transmission capacity using emerging technologies and the uptake of enabling technologies to reduce transmission losses.

# Private Participation in Transmission Sector: Quasi-EPC to a Stakeholder

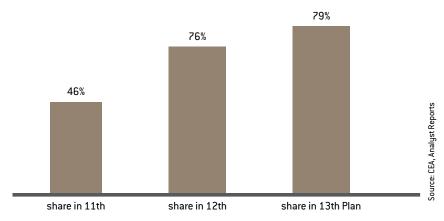
Until recently, transmission of electricity was confined to public sector utilities alone. Transmission capacity addition was driven largely driven by budgetary allocations, public expenditure and external borrowing. With the major thrust on renewable, ultra mega power plants (UMPPs), large hydro projects, creating the much needed transmission infrastructure cannot be met without significant re-animation of private sector interest in the sector.

The power transmission sector can no longer be viewed from the prism of generation but as an independent sector with a two-fold objective—setting up bulk transmission lines and improving the national grid. Thus, fully realising private capital and enterprise are indispensable to establish efficient transmission capacity and network.

The framework for private sector investment in transmission sector has been witnessing increased participation since the issue of the first guideline to encourage private investment in 2006. The main objective of the guidelines is promoting competitive procurement of transmission services and encouraging private investment in transmission lines. The guidelines envisaged two routes for the private sector, viz. Joint Venture (JV) route and Independent Private Transmission Company (IPTC) route. Since 2006, nine transmission projects worth Rs. 107 Billion have been awarded to the private sector. The government has identified another 13 projects for the private sector under various stages of bidding - seven to be awarded by Rural Electrification Corporation (REC) and the rest by Power Finance Corporation Ltd. (PFC).

While, Not-In-My-Backyard (NIMBY) is gaining ground, Right-of- Way (RoW) is also identified as the most notable challenge for the transmission sector by the Central Electric Authority (CEA). RoW issues result in project delays, cost escalation, large number of clearances and reduction in revenue earning period.

# T&D as % of Generation CAPEX



	Transmission Projects Identified for Competitive Bidding					
S.#	Transmission Schemes/System Associated with:	Status	Bid Process Co-ordinator	Estimated Line Length (in KM)		
1	1,320 MW TPS Owned by NCC Power Project	Response to RFQs	REC			
2	Phase I of the Kudgi TPS (3X800 MW)	Response to RFQs	REC	460		
3	System strengthening in Southern Region Project	Response to RFQs	REC			
4	Torrent Power's 1,200 MW DGEN TPS and the Srinagar-Tehri Interconnection	Response to RFQs	PFC			
5	Units 7 and 8 of Rajasthan Atomic Power Project	Response to RFQs	PFC	260		
6	Eastern region system strengthening scheme VII	Response to RFQs	PFC			
7	400 kV Unchara TPS in UP	Invitation of submitting technical and financial bids	REC	60		
8	220 KvBairaSiul HEP-Sarna Line	Invitation of submitting technical and financial bids	REC	80		
9	IPP Projects in Vemagiri Area - Package B	Selection of consultant	REC	500		
10	IPP Projects in Vemagiri Area - Package C	Selection of consultant	REC	325		
11	IPP Projects in THE Nagapattinam/Cuddalore area - Package C	Projects at the planning stage	PFC	700		
12	Eastern region system strengthening scheme VI	Projects at the planning stage	PFC			
13	400 Kv substation at Patran in Punjab	Projects at the planning stage	PFC			

While cost uncertainties due to volatility in metal prices and Forex are other deterrents, commodity present value as pass through will help in risk sharing, transmission project funding should be made available at lower cost a priority to PFC & REC.

Bulk Power Companies (BPCs) put a strict control on the technical specification as they micro-specify various technical and commercial aspects. This results in long bidding process and restricted uptake of new technologies and practices. Engaging private sector in specification development and policy making will allow new technology adoptions and provide a level playing field for entry of competitive and reliable players.

In order to accelerate the contribution of private players in transmission sector, the degree of involvement of developer in the planning and development process can and should be elevated from just being a Quasi-EPC to a stakeholder.

Renewable energy has been an important component of India's energy planning process. Since the 9th Plan period, the share of renewable capacity has increased from 2% to 12% of the total installed capacity of 223, 870 MW as on today, a 6-fold increase. Electricity generation due to renewable source has also increased to

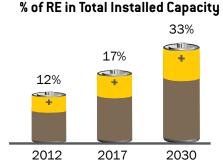
about 6% in overall electricity generation mix as on today. With such multi-fold growth, penetration of renewable power in the Indian grid has increased. Presently, about 28,000 MW grid interactive RE generation capacity is available. Out of this about 70% grid interactive capacity is contributed by the wind alone.

India would take its new and renewable capacities to 55,000 MW by 2017, the terminal year of the 12th five-yearplan. The projected change in the mix of generation by fuel supply by the end of 2030 is tilting in favour of RE. The share of renewable energy in electricity generated is expected to rise from around 6% in 2012 to 9% in 2017 and 16% in 2030.

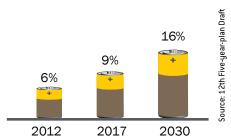
# Green energy corridors: An electrifying example in the transmission sector

While fossil-fuel generation resources have some flexibility in terms of close proximity of the site to existing transmission grid, integration of RE poses a special challenge as the site of renewable resources is largely dictated by nature. Intermittent availability as well as variability of energy and lesser grid support during system disturbance and exigencies stymie growth of power evacuation/grid facilities and transmission planning. Further, the transmission investments needed to meet these challenges have not kept pace with the rapid growth of renewable energy capacity in the past few years.

# Changing Structure in Energy Source of Electricity, 2012-2030







# Phase-wise implementation of ISTS transmission lines

# Phase-I (by 2014-15)

400 kV Bachau (PG)-Solar Park-II (GETCO)-Udaipur-Kankroli double-circuit line

# Phase-II (2015-16)

400 kV Solar Park-II (GETCO)-Chittorgarh double-circuit line

765 kV Jodhpur (new) – Ajmer (new) double-circuit line

765 kV Ajmer (new)-Suratgarh double-circuit line

765 kV Suratgarh-Moga double-circuit line

400 kV Kankroli-Ajmer (new) double-circuit line

400 kV Suratgarh (existing)-Suratgarh (new) double-circuit line

400 kV Ajmer (existing)-Ajmer (new) double-circuit line

400 kV New Pugalur-Udumalpet double-circuit line

400 kV New Pugalur-Vagarai double-circuit line

400 kV New Pugalur-Pugalur double-circuit (Quad) line

LILO of Tuticorin Pool-Salem 765 kV line at New Pugalur (initially to be operated at 400 kV)

Augmentation of transformation capacity at 765/400 kV and 400/220 kV at Moga substation by 1x1,500 MVA and 1x500 MVA respectively

Establishment of 400 kV substations at New Pugalur and Hyderabad

Establishment of a 765/400 kV, 2x1,500 MVA substation each at Suratgarh, Jodhpur and Ajmer

# Phase-III (2016-17)

400 kV Srisailam-Kurnool (new) double-circuit line

+ 500 kV, 2,500 MW New Pugalur-Hyderabad HVDC bipole line

400 kV New Hyderabad-Hyderabad double-circuit (Quad) line

Establishment of 400 kV substation at New Hyderabad

Establishment of +500 kV, HVDC terminal stations (2,500 MW) each at New Pugalur and Hyderabad

Upgrading 400 kV Narendra and Kolhapur substations at 765 kV level to facilitate charging of Narendra–Kolhapur double-circuit line at 765 kV level

While there is a need for huge investments in developing transmission systems associated with renewable energy capacity, the financial implications on state utilities due to uncertainty in investment recovery impedes investment in such systems. Further, state utilities face both capacity and resource constraints in providing connectivity for sites in remote regions.

In this regard, policy makers and regulators have been making rigorous efforts to ensure that the transmission bottleneck does not impede renewable energy growth. Power Grid's take on Green Energy Corridor comes as a major boost to the ambitious goal of doubling the installed RE capacity by the end of 2017. Through a study, PGCIL has identified transmission system strengthening and augmentation requirements at the interstate and

intra-state level in Tamil Nadu, Karnataka, Andhra Pradesh, Gujarat, Himachal Pradesh and Rajasthan. Estimation of CAPEX requirement and strategy framework for funding and speedy renewable power development has also been established.

MNRE is currently formulating a scheme to provide financial assistance to the state governments for setting up transmission infrastructure for the evacuation of renewable energy generated in their respective states. The ministry has asked the government to allocate funds from the National Clean Energy Fund to augment the transmission system so it is better equipped to handle the growing share of renewable energy. Such support from the ministry is expected to accelerate the speed of setting up transmission infrastructure.

In order to accommodate large-scale renewable capacity, there is also a need to strengthen the interstate transmission system. Developing high capacity corridors required at the interstate level has been spread across three phases depending on capacity addition as well as time required for implementation of the transmission system.

urce: Keport on Green Energy Corridors

# **Proposed Ultra-high Capacity Transmission Highways**

### SR-W R/ER-NRT Transmission Corridors

- 1. 765 kV Tamil Nadu (SR) renewable energy complex-Maharashtra/Gujarat (WR) Rajasthan/Haryana/Delhi (NR) double-circuit line
- 2. +800 kV, 6,000 MW (multi terminal) Tamil Nadu/Karnataka renewable energy complex-Uttar Pradesh load centres HVDC bipole line
- 3. 765 kV Karnataka (SR) renewable energy complex—Maharashtra/Madhya Pradesh Punjab (NR) load centres double-circuit line

(WR)-Uttar Pradesh/Uttarakhand-

4. +500 kV, 2,500 MW Tamil Nadu-Andhra Pradesh HVDC bipole line and 765 kV Andhra Pradesh (SR)—Maharashtra (WR) load centres double-circuit line 5.765 kV Tamil Nadu/Andhra Pradesh (SR) renewable energy complex—Odisha (ER)—Jharkhand (ER)—Bihar (ER)—Uttar Pradesh/Punjab (NR) load centres double-circuit line

### WR-NR and NR Transmission Corridors

- 5. 765 kV Gujarat renewable energy complex-Rajasthan-Haryana/Delhi (NR) double-circuit line
- 6. +800 kV, 6,000 MW (multi terminal) Gujarat-Rajasthan renewable energy complex-Punjab load centres HVDC bipole line
- 7. 765 kV Rajasthan renewable energy complex (Jaisalmer/Barmer) Central Rajasthan Punjab load centres double-circuit line

### **ER-NR Transmission Corridors**

8. +800 kV, 6,000 MW (multi terminal) Northeastern Region (NER)/Sikkim/Bhutan–Delhi/Haryana load centres HVDC bipole line

In order to facilitate the development of transmission system as well as other infrastructure facilities as a part of the renewable capacity addition programme in the 12th Plan, the estimated investment for the transmission development plan for integration of renewable energy by Central Transmission Utility (CTU) and the identified State Transmission Utility (STU) under PGCIL's study is Rs. 42,557 Crore.

# Road to the Future: Transmission for 2030

Considering the huge thrust on realising wind and solar potential as well as the impetus given on development of other RE technologies, a perspective transmission plan for renewable energy, that serves as a road map, has been chalked out for the year 2030 in PGCIL study. In line with this, broad contours of transmission plan for 2030 has been prepared with the following approach:

- i. Development of Hybrid EHV AC/HVDC Transmission system for flexibility of controls
- ii. Interconnection of RE rich regions as well as with major load centers as touch points

iii. Establishment of transmission corridors passing through conventional generation complexes including Andhra Pradesh (gas), Odisha (coal) and Jharkhand (coal) as well as new transmission corridors from hydro-rich areas to achieve supply balance

Nine new ultra-high capacity transmission corridors have been proposed. These corridors will not only dispatch the energy generated from proposed renewable energy capacity to high-demand centres across the country, but will also complement the parallel transmission system of conventional generation projects/grid strengthening schemes, for transfer of power as well as help maintain the grid parameters.

# Need to Spring in Newer Technology Paradigms

Transmission system build out was historically planned to link large stationary power plants to nearby demand centers. However, traditional approach to transmission planning is rendered ineffective, if not completely obsolete, in the context of changing energy mix, RoW issues,

open access in transmission and need to add certain degree of redundancies in the case of eventualities and future proofing contingencies. Technology will be crucial in bringing about this transformation.

The technological strides which India seeks to take in the near future includes high capacity transmission corridors comprising 765 kV AC lines, expansion of 1200 kV AC system, Gas Insulated Substations (GIS) and high temperature low sag conductor line. Going forward, it is imperative for the company to expand energy supplies and transmission capacity in a way that is sustainable. Moreover, sustainable development mandates emphasis on new policies and planning approaches, investment mechanism and new technologies. Thus, transmission sector is poised for high growth and renders unique opportunities for private players.

Sterlite Technologies is the leading provider for power conductors in India today, and with an extensive portfolio of high performance conductors, enabling the utilities in the country and abroad to build efficient and sustainable power transmission lines.

Source: Sterlite

# Numbers that matter

### Financials at a Glance

	2012-13	2011-12	Growth
Net Revenue (₹ Crores)	3,354	2,727	23%
EBITDA (₹ Crores)	260	223	17%
Adjusted EBIDTA (₹ Crores)	286	223	28%
Net Profit (₹ Crores)	47	44	7%
EBITDA Margin (%)	7.8%	8.2%	-
Adjusted EBIDTA Margin (%)	8.5%	8.2%	-
Net Profit Margin (%)	1.4%	1.6%	-
EPS (₹)	1.2	1.1	8%
ROCE (%)	7.6%	8.0%	-

### **Net Revenues**

Revenue for the year was ₹ 3,354 Crores, showing a strong growth of 23% compared to ₹ 2,727 Crores in 2011-12. The revenue growth is mainly driven by an increase in volumes in the Products Business coupled with higher realisations in the Power Transmission Business.

The revenue of Power Transmission
Business grew in FY 2012-13 to ₹ 2,252
Crores as compared to ₹ 1,923 Crores in
FY 2011-12, reflecting an increase of 17%.
This is primarily on account of increased
metal prices and also the changing mix
of products. Volume for the year was
137,750 MT as against last year's volume
of 135,658 MT.

Sales volume of optical fiber in 2012-13 increased by 7% to 12.49 Million-fkm from 11.66 Million-fkm in 2011-12. Sales volume of fiber optic cables in 2012-13 have shown a good jump of 31% from 3.6 Million-fkm in the previous fiscal to 4.6 Million-fkm this year. The realisations for optical fiber and fiber optic cables have broadly remained consistent, hence the revenue growth in the combined business segments is volume driven. There has been a good increase in the business revenues of SI/Copper cable as compared to the previous fiscal. The overall Telecom

Business showed a growth of 37% from ₹804 Crores in 2011-12 to ₹1,102 Crores in 2012-13.

Exports for the year grew from ₹813 Crores in FY 2011-12 to ₹953 Crores in the year gone by, showing a healthy growth of 17% year-on-year. Exports as a percentage of the overall revenue were 28% in FY 2012-13 as compared to 30% in FY 2011-12. Exports in the Power Transmission Segment for FY 2012-13 is ₹274 Crores which is similar to exports made in FY 2011-12 (₹271 Crores). Telecom showed a growth of 28% in exports from ₹531 Crores in FY 2011-12 to ₹678 Crores in FY 2012-13.

Growth in exports has been mainly due to expansion of the client footprint in Africa, Europe, Middle East and the Americas.

The Company reported a consolidated revenue of ₹ 3,092 Crores in FY 2012-13. This shows a growth of 18% when compared with FY 2011-12. When compared with standalone performance, it is lower by ₹ 261 Crore mainly on account of inter company elimination of conductor supplies to the Grid subsidiaries.

### **Profitability**

The earnings before interest, depreciation, tax and amortisation (EBITDA) of the

company improved by 17% from ₹223
Crores in FY 2011-12 to ₹260 Crores in
FY 2012-13. In terms of percentage, this
translated into an EBITDA margin of 7.8% in
FY 2012-13 as against 8.2% in FY 2011-12.
There has been an exceptional growth of
₹26 Crores towards receivables from a
customer, who had disputed the payment
on various grounds. Adjusted EBIDTA for
the year is ₹286 Crore which translates
into EBIDTA margin of 8.5% showing growth
of 0.3% year-on-year.

EBITDA of the Power Transmission Business grew to ₹ 94 Crores in FY 2012-13 from ₹ 84 Crores in FY 2011-12 showing growth of 12%. Though the EBITDA margins have remained flat, the profitability per MT of conductor volumes is higher in the current year mainly because of cost reduction initiatives and improvement in realisation.

The EBITDA of Telecom Business also improved by 19% from ₹ 139 Crores in FY 2011-12 to ₹ 166 Crores in FY 2012-13. In this segment, the impact of higher volume in optical fiber and fiber optic cable was largely compensated by higher revenues being generated from the SI/Copper cable business which typically is a low margin business. Because of this, the margins for this segment have decreased compared to last year.

In terms of profitability, Telecom's EBITDA % for the year 2012-13 is at 15.7% as compared to 18.1% in the previous year.

The interest costs saw an increase from ₹ 95 Crores for the year 2011-12 to ₹ 106 Crores for the year 2012-13. This is mainly due to increase in equity contribution towards the Grid projects this year.

The depreciation for the year was ₹86 Crores versus ₹71 Crores in the previous year, mainly due to capitalisation of some plant and machinery for capacity expansion executed during the year.

Tax expenses for the year at ₹21 Crores were higher than the previous year's tax expenses of ₹13 Crores on account of slightly higher profit before tax, creation of additional deferred tax liability due to increase in surcharge by 5% in Finance Act, 2013 and lower location based tax incentive due to completion of first five years at one of the locations. This resulted into an increase in effective tax rate for the year at an approximate 31% against 23% in the previous year.

The net profit after tax for the year, thus, is ₹ 47 Crores compared to ₹ 44 Crores last year.

The net profit after tax at the consolidated level stands at ₹ 25 Crores in FY 2012-13 as against ₹ 40 Crores in FY 2011-12. Inspite of 8% growth on standalone performance, consolidated performance shows a degrowth of 36%, largely due to elimination of profit on supplies made to subsidiaries, losses reported at the US operations and start up losses of China & Grid subsidiaries.

### **Dividend**

In continuation of the progressive dividend policy, the Board of Directors has recommended an equity dividend of 15% subject to the approval of shareholders.

### **Balance Sheet**

Gross block and capital work-in-progress
The company has been expanding
its facilities to meet the increase in
demand in both the Telecom and Power
Businesses. For the year, gross block
increased from ₹ 1458 Crores as on
March 31, 2012 to ₹ 1,580 Crores as
on March 31, 2013.

The capital work-in-progress stood at ₹29 Crores at the end of FY 2012-13 as against ₹41 Crores at the end of FY 2011-12. This is on account of the ongoing expansion at its power conductors, optical fiber and optical fiber cable facilities. Majority of our capacity expansions are complete and we can see the benefits of these expanded capacities coming in 2013-14.

The Gross Block at the consolidated level increased from ₹ 1,473 Crores as on March 31, 2012 to ₹ 1,700 Crores as on March 31, 2013. The capital work-in-progress stood at ₹ 2,181 Crores at the end of FY 2012-13 as against ₹ 713 Crores at the end of FY 2011-12.

# Borrowings, Cash & Bank Balance

The gross debt of the company increased from ₹ 664 Crores as on March 31, 2012 to ₹ 1,039 Crores as on March 31, 2013. The total Cash and Bank Balance at the end of the year was ₹ 196 Crores in FY 2012-13 as against ₹ 185 Crores at the end of FY 2011-12. The total investments for the year 2012-13 stood at ₹ 189 Crores which was towards investments in various subsidiaries. In the previous year the investments were ₹ 176 Crores.

The net borrowing (net of Cash and Bank Balances and equivalents) was ₹843 Crores as on March 31, 2013 against ₹480 Crores, showing an increase of ₹363 Crores in the borrowing during the year mainly due to funding of subsidiaries in the form of loans & advances and equity. From operations, business generated ₹100 Crores in FY 2012-13.

Net borrowing at the consolidated level stands at ₹ 2,199 Crores on March 31, 2013 against ₹ 820, which shows the incremental debt taken on Grid projects.

The Company has a long-term debt on its standalone balance sheet of ₹ 207 Crores.

The Debt-Equity ratio of the company stood at 0.88 at the end of FY 2012-13 on a standalone basis and 2.39 on consolidated basis. The net working capital has increased primarily on account of the loans & advances given to subsidiaries. The working capital days after reducing advances given to subsidiaries worth ₹ 585 Crores stood at 34 days in 2012-13 as against 51 days in 2011-12. During the year, the working capital has reduced as

Working capital	(₹ in Crores)		
	Mar '13	Mar '12	
Inventories	292	273	
Sundry Debtors	709	784	
Cash and Bank Balances	196	185	
Loans and Advances	870	371	
(A) Total Current Assets (B) Total Current	2,067	1,613	
Liabilities	977	910	
Working Capital (A)-(B)	1,090	703	

compared to the previous year, mainly due to improvement in collection cycle, at the year end.

Current ratio of the Company stood at 2.1 times in FY 2012-13 as compared to 1.8 times in FY 2011-12.

# Return on Capital Employed & Net Worth

There has been a marginal improvement in the profitability, but due to greater increase in the Capital Employed, the ROCE % has not shown any improvement. The ROCE % for 2012-13 is 7.6% compared to 8.0% last year.

The net worth of the Company as on March 31, 2013 is at ₹ 1,183 Crores

# Sterlite Pulse Enlivening the Power of Right Connect

What high-performing companies should be striving to create: "A great place for great people to do great work." - Marilyn Carlson

A great place to work is built when there is a positive work environment, where an individual's heart and mind is engaged and there is a high degree of collaboration and cohesiveness. Organisations today, believe that employee engagement is a force that drives the business performance. In line with this, Sterlite's People Engagement Programs have been designed to connect employees to the business vision: "Connecting every home on the planet". Here, the connect goes beyond interpersonal relationships and is more about respect and trust going towards building a positive work environment.

# The engagement model

At Sterlite, we constantly strive to develop a two-way relationship between the employer and the employee to build the right connect, which is quintessential to an engaged workforce. Hence, our engagement model is based on the philosophy: STAY, SAY AND STRIVE.



**Stay:** An intense desire to be a part of the organisation.

**Say:** Passionate advocacy of the organisation.

**Strive:** Emphasises on commitment and exerts additional efforts to business success.

Vimal Malhotra, Head-HR

All our people engagement programmes are based on this philosophy and strive to make employees passionate about their work and continue their association with the company.

# Reinstating the connect: Sterlite Pulse

Embodying Sterlite's philosophy of 'People First', Sterlite Pulse - a tool to gauge the engagement levels of employees - was introduced in 2012. The objective of this initiative has been to gather detailed information about the culture and attitudes of employees in the organisation. This measures the pulse of workplace dynamics, contemporary issues as well as challenges. The subsequent outcome of this survey would then help Sterlite take corrective actions, if any, or continue some of the existing initiatives, while picking up cues from the survey result to turn it into an organisation capable of energising and empowering every employee.

### Methodology

Sterlite identified specific factors that are critical and directly correlate with individual and organisational performance. These include clarity of role, relationship with managers & colleagues, and focus on career and development, among others. Using a questionnaire-based modality that could best predict the levels of engagement, employees were asked to give their responses on a four point rating scale. Frequent mailers are then sent to employees to encourage them to participate in the survey. This approach ensured that employees can give their comments and suggestions as well as voice their concerns. The survey also ensures complete confidentiality of respondents.

Further, the statistical analysis of the survey results help identify those factors that contribute positively towards



enhancing employee engagement as well as those which have a scope of improvement. The mean score gives an overview of engagement levels in the organisation.

Subsequently, detailed analysis and reports are made for every business unit and function. Individual managers are also provided with reports for their respective teams. Those units which scored high on all aspects of employee engagement are much appreciated and their success stories are publicised throughout the organisation, making it a highly motivational tool. This also set an example for other business units, functions and managers to take actions for improving their engagement scores.

Specific action plans are designed with the involvement of senior management for the units and managers where the engagement levels are identified to below.

### **Results**

The HR team worked closely with employees to generate actionable recommendations from the data. Suggestions were provided to:

- (1) create more team-building activities to foster a better working community;
- (2) organise more group meetings to provide a venue for supervisors to listen to and address workflow issues and suggestions.



Based on the 2012 findings, some of the specific initiatives in employee engagement included the following:

Samwaad: This employee engagement initiative, which long existed in the organisation, leverages cross-level communication and 'connect building' in the organisation has been tailor-made to engage employees, teams and the organisation as a whole. The various initiatives under this programme include one-on-one and team meetings with the manager and manager's manager where both employees and managers share their needs, preferences and goals; gaining a better understanding of each other's values, aspirations and expectations.

**All Hands Meet** is another forum where all team members, across levels, share their current achievements, which are publicly celebrated by Business Heads.

Further, based on the outcome of the Pulse survey, a special initiative — **HR4U** was devised and deployed for the Optical Fiber Business unit with an objective of providing employees a transparent communication medium and increase their sense of involvement in the organisation.

**Building versatility:** One of the positive influences of Pulse survey were the

employee ratings on role clarity and development opportunities, which scored high. This reinforced our belief on the importance of creating opportunities and nurturing talent from within the organisation through initiatives like internal job postings, job rotations, transfers and secondments. These initiatives provide flexibility and versatility, which enable individuals to acquire new skills.

Fun at work: The survey results also highlighted the heightened need for a more effective work-life balance at the manufacturing locations. Subsequently, social and cultural events were introduced for employees at various locations to demonstrate their camaraderie and participate in making the organisation a fun place to work. In addition, the concept of Fun Saturdays has been launched, whereby employees can engage themselves in several activities like Business Quiz, Business Games, Suduko Competitions, watching theme-based movies among others. This helps us build an environment of fun and wade out any work related stress in the system.

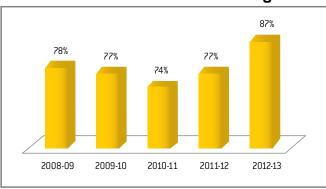
APRAJITA: In 2012, an all women council
- APRAJITA was formed at our Optical
Fiber Business Unit to drive various fun
& engagement activities like festival
celebrations, quizzes, contribution towards
CSR and other related activities.

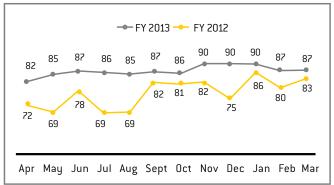
In addition, Pulse survey highlighted the need to address some of the quality and hygiene issues at our manufacturing facilities in Haridwar and Rakholi as well. Accordingly, the Quality Lab at the Conductor Unit in Rakholi is now



well-equipped with all the modern and latest instruments. Likewise, the employee canteens at both Haridwar and Rakholi are now equipped with all modern facilities in terms of dining and seating arrangements, thus improving the overall ambience.

# Change in Retention Trends (%)





# Measuring the impact

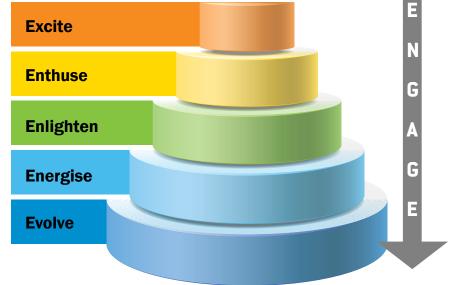
At Sterlite, we believe in constantly reviewing and measuring all our processes in order to improve people and processes. And, the impact of revamped processes has distinctively been observed across business functions. The most significant of these has been the retention rate of employees.

For the period of April 2011 to March 2012, the average annualised attrition was 23%. Subsequently, several engagement initiatives having a positive impact were implemented, with an aim to increase the retention rate. In fact, the average annualised retention rate from April 2012 to March 2013 has increased by 10%. Also, it has been brought forth that the retention rate of our talent pool is as high as 97%.

The impact of the various engagement initiatives taken can also be adjudged from the verbatim comments given by the employees during the survey.

Sterlite treats
me as a friend and gives me new
opportunities for growth & career
development. I will definitely
continue here.

I am proud to be a member of Sterlite Grid family!



# The way forward

At Sterlite, it is widely acknowledged that the key to accelerated business performance and sustained competitive advantage is an engaged workforce.

This survey is a very good initiative to get closer to my reporting manager.

I have the freedom to do anything to achieve the desired results.

We also believe that there exists a strong link between engagement and productivity. For this reason, Sterlite's employee engagement initiatives will continue to focus on the basic philosophy of engagement, which in turn will lead to a highly motivated and evolved workforce. For it is said, "Engaged employees stay for what they give to the organisation; disengaged employees stay for what they get from it."

### About the Author

# Vimal Malhotra heads Human Resources

at Sterlite. He has over 15 years of experience in HR domain with organisations like Denso, Apollo Tyres, Mahindra & Mahindra and General Motors. He has completed B.Com.(H) from Delhi University & MBA in HRM from Sardar Patel, New Delhi.

One IT

Investments: IT management solutions and new capability development Synergised IT teams across all Sterlite locations Dedicated Shared IT services team to serve all offices

People-centric

Regular Hardware refresh cycles keeping infrastructure up-to-date Application
upgrades
for security
enhancements
& enhanced user
experience

experience

Minimise risk | Mitigation of

Minimise risk | Mitigation of any unexpected service outages

Security & Policy

Information
Security Program:
Self assessment
tools and
standards

Self-help tool suite providing control to local IT managers

Online Information Security Awareness: Educating all employees

Single login account per user for multi-application access (FY14)

External penetration testing enabling SSL security and firewall patching (FY14)

# STERLITE'S IT FRAMEWORK:

# CHANGING

**WITH TIMES** 

**Awards & Certifications** 

Sterlite Partner
Portal to integrate
end-to-end with
partners on a tech.
landscape (FY14)

Initiated BPM approach on SCM, HR & Security

Reduce customer touch points by innovative modules

Fuel enterprise growth, Reduce enterprise costs, Attract & retain customers

Support
Businesses
& Strengthen
processes

(Business Process Transformation)

EMC<sup>2</sup> 2012

ISO 27001:2005 Certification (all units)

CIO Watch Award, CIO Master 2013-CNBC Network 18 ML-100 Award, Frost & Sullivan

Model | Automate

Manage | Monitor | Optimise

Business
Process
Management

BPM implementation across functions

Application mapping with systems to enhance user experience (FY14) Operations | IT Systems

Consolidate
Infrastructure
on a more
sustainable IT
platform (FY14)

Enable anytime anywhere access to technology & green impact

Delivery of servers & desktops transformed using Virtualization & cloud computing

Connect

# Google Apps for Business Sterlite sharply reduces support costs

**Intent:** Increased collaboration across locations, empowering employees with an effective communication tool while optimising the cost.

collaborative messaging system that

#### Genesis

Sterlite Technologies Ltd. (Sterlite), erstwhile known as Sterlite Optical Technologies Ltd. (SOTL) had its prime focus on the Telecom sector, till it acquired the

power-transmission business of Sterlite Industries Ltd. (SIL) in 2006. The acquired business was running on an open-source solution, while the parent company relied on Lotus Notes for e-mails and messaging. As the process of integration started, this disparity started becoming a hindrance leading to increased complaints from the employees.

rlite), would ensure future business growth ptical along with significant savings in cost and e focus time overheads.



The costs of maintenance, operations, and storage were mounting. Keeping up-to-date with the existing system required significant time and effort by the IT team, and was increasingly becoming a costly proposition. Moreover bulk of the time of on-site IT staff was consumed in routine maintenance and handling complaints, besides ensuring uptime and there was no strategic value addition that was happening. Increasing need for stronger collaboration across multiple locations coupled with enhanced internal communication requirements, it became critical for Sterlite to start exploring alternatives.

The company wanted to move to a more

44

Poor messaging infrastructure was slowing down the employee productivity. The biggest challenge was to connect, integrate and manage multiple locations within the company operating on different platforms.

Prasanth Puliakottu, CIO

#### Solution

Sterlite evaluated several solutions, including those from local and global players and eventually chose Google Apps after considering many factors. It was

decided to move to a cloud based solution, as most of the options that were evaluated were expensive, complicated and time-consuming. "Since Google Apps for Business is a hosted solution, we knew that we wouldn't have to worry about availability, upgrading or maintaining hardware infrastructure. We were also convinced about Postini's security and compliance features. To move to the cloud

was a new initiative and a big one for the company," recalls Prasanth Puliakottu, Chief Information Officer, Sterlite.

Apprehensions on security and confidentiality were naturally prime concerns to the senior management. Thus, Google was an obvious choice and offered the desired comfort level.

#### **Implementation**

The complete migration and setup of Google Apps was executed in a single night. Today, all 1,500 employees of the company use Google Apps.

Gmail implementation led to the roll out of a reliable, easy-to-use e-mail service across the organisation, thereby



security features. Google Chat, the instant messaging service which was made available to employees, gained immediate popularity and is now a widely used phenomenon for communication between employees. Employees also have access to Google Video to conduct face-to-face meetings. Digital collaboration using Google Docs was initiated to change the way how employees interact. Google Calendar, which allows team members to view each other's schedules and e-mail agenda, was installed. Google Sites now serves as Sterlite's central database and repository, offering an easy way to create and share web pages.

#### **Results**

"Our main goal was to empower employees with superior messaging and collaboration platform and to allow administrators to focus on more strategic IT initiatives", Puliakottu says. With the growing geographical presence and multi-location establishments, the need for efficient and effective communication had become imperative. The successful implementation of Google Apps for Business has been a significant achievement in this regard and we have successfully addressed our goals and objectives.

With the move to Google Apps, we are able to focus more on our business growth. We have a simple and more intuitive solution that creates a well-connected organisation.

#### Prasanth Puliakottu, CIO

Employee feedback and response has been very positive. The general consensus being that it is a great e-mail solution with a simple, user-friendly and powerful interface. It allows them to access e-mails, documents and spreadsheets, any time, from any mobile phone as well. Today, there is a sea change in how employees interact and work, especially when collaborating across locations and teams. We are seeing a significant increase in productivity.

The company-wide IT team witnessed significant benefits too. The move to Google Apps has dramatically reduced support workload, as earlier we needed

multiple full-time employees to manage our e-mails across all locations. Since we moved to Google Apps, we need only one person for this job, and we have considerably reduced support expenditure.

#### **About the Author**

#### Prasanth Puliakottu is the CIO

at Sterlite Technologies Ltd.
He joined Sterlite in 2009 and is responsible for standardisation, automation and integration of business processes. In a career spanning 19 years, Prasanth has been associated with Merck Ltd., Filtrona PLC and Rotary Engineering for the design, development and implementation of various IT projects. He has completed engineering from Madurai Kamaraj University (REC, Trichy) and M.S. from BITS, Pilani.

# Model Village Development Towards a Sustainable Future

Sterlite Tech Foundation has adopted Pophala village—a drought-prone region—in Aurangabad to provide holistic support in terms of health, education and environment.

The corporate world today has experienced a pronounced increase in focus on organisations' ethical behavior and responsibilities towards their environment. This shift is primarily on account of companies giving greater importance to maximising the stakeholder's value, thereby striving to bring balance between the people, the planet and the profits.

As a responsible corporate, Sterlite Technologies Limited (Sterlite) is engaged in several CSR initiatives through its focused CSR arm - Sterlite Tech Foundation. Sterlite Tech Foundation's activities primarily focus on education, health, empowerment, social infrastructure and environment and are based on the principles of good governance and equity. The approach followed is to identify and formulate projects in response to societal needs

in diverse areas and to implement them with full involvement and commitment in a time-bound manner.

One such unique initiative is the Model Village Development Project by Sterlite for the village of Pophala (Maharashtra).

#### Challenges at root level

More than 70% of India's population resides in rural villages scattered over large geographic areas with very low per capita consumption rates. However, development issues are all tangled up with each other and organisations often feel that they can't gain traction in their particular area of concern because of barriers and problems in other areas. Sterlite believes that goals can be achieved by bundling vital yet straightforward solutions into a comprehensive programme. This coupled with the desire to reach and make

impact at the root level was behind the conceptualisation and launch of the Model Village Development project.

#### **Community Development**

Sterlite Tech Foundation, under the title "Gram Samruddhi" has adopted a small village of Pophala (population ~ 350) to provide holistic support aimed at the upliftment and general welfare of the population. This tiny village, situated on top of a hill, is about 35 km from Aurangabad district, where our major fiber facility resides. This model project, initiated in May 2012, aims to achieve the following in the next three years:

- Education: Achieve 100% literacy in the below-40 age group and zero primary school dropouts in the village. Promote High School Education by providing free tuitions.
- Health: Reduce malnutrition in children of the 0-6 year age group, adolescent girls and pregnant women. Also adopt standard sanitation & hygiene practices.
- Livestock Development: Adopt healthy animal husbandry practices.
- Agri-based livelihoods: Increase income of the farmers with the introduction of agro technology and modern practices for effective management of local resources.
- Reduce Water Scarcity:
   CCTs (Continuous Contour Trenches),
   excavation of silt from ponds, check
   dams, Mati Nala bunds, well deepening
   etc. initiatives are taken to overcome
   severe water scarcity (a tanker-free
   village).
- Ensure women empowerment:
   Self Help Groups (SHGs) with income generation activities.





least 30% increase in the average income of each farmer, plantation of 5,000 trees, making all women part of SHGs with small businesses, making the village water independent (tanker-free village), 0% school dropouts, 100% skilled youth (vocational skills with placements) and provide access to basic health services.

#### The Impact

Sterlite roped in Savitribai Phule Mahila Ekatma Samaj Mandal (SPMESM – an NGO) from Aurangabad, who helped in conceptualising, planning and implementing this project. This year itself, a couple of initiatives have already been taken. These Include:

- Building CCT (Contours for water harvesting)
- Building check dams
- Widening of ponds to increase water storage
- Deepening of public wells for drinking water
- De-silting and using fertile soil in the fields to increase soil fertility
- Installation of solar street lights to overcome load shedding
- Support tribal families by donating flour mill
- Donation of 500 litre water tanks to each family for storage
- Free tuition to school children
- Installation of street lights

- Promotion of smokeless stoves
- Nutrition support to children
- Distribution of chlorine drops to each family for purification of drinking water



We are very pleased and excited to partner with villages like Pophala. With this we aim to play a small but significant role in the inclusive growth story of an emerging India. We extend a warm welcome to the people of Pophala into the Sterlite family.

#### **Shweta Agarwal**

- Income generation activities: Promotion of products made by Women SHGs such as til laddos, chutneys, various papads, natural colours
- Organic farming: Use of this technique to increase soil fertility, productivity and reduce the use of pesticides
- Eye cataract operations and health check-up camps

Training in tailoring for women empowerment

Sterlite is closely monitoring all these initiatives and the comprehensive three-year plan and has also formed an internal audit team to track the progress. Sterlite aims at duplicating the model in other villages in the country. The activities under this project are conducted by SPMESM and the progress is registered in a quarterly report format submitted regularly to Sterlite. If any specific activities need to be added during stages as per the community needs or demands, it is supported by additional allocation done by the project monitoring committee.

#### **Future outlook**

By investing in education, health, empowerment livelihoods, besides essential infrastructure, these community-led interventions enable villages to mitigate extreme poverty. Once these communities get a foothold on the bottom rung of the development ladder, they will propel themselves on a path towards economic, literary and social stability and eventually towards prosperity.

# Fiber Connectivity Evolution Perspectives from the Indian Market

Optical fiber connectivity is the only future proof backhaul technology that will reliably meet the highest traffic expectations of the future.

#### Dr. Badri Gomatam

India's growth story is here to stay. With a clear demographic advantage, increasing disposable income, an expanding middle class and large pools of untapped demand in the rural market, India's domestic consumption will fuel the nation's economic growth for years. The changing demographics in the country have also contributed in making this an attractive market investment destination for both domestic as well as international players.

The Telecom Industry, in particular, has played a considerable role in the progress made by the country in this regard. While opportunities in wired connectivity will be driven by structural shifts in society and economy, the government's renewed focus on fixed line infrastructure has set a truly stimulating environment for players in this sector. Rural India, for instance, is witnessing a surge in demand for mobile/smart phones, as these devices have proved beneficial to the development of less advanced sections of the society.

#### Indian Telecom Sector: Then and now

The Indian Telecom Sector has witnessed a continuous rising trend in the total number of subscribers. According to FICCI, the total number of urban subscribers today stand at 611.19 Million (66%) and rural subscribers at 315.33 Million (34%). Wireless telephone connections have contributed to this growth as the number of wireless connections rose from about 35 Million in 2004 to 865 Million at the end of December, 2012. On the other hand, the wireline voice subscriber base is forecast to decline due to lower mobile tariffs, cheaper handsets, improved mobile coverage and inadequate infrastructure of the wireline network.

The next wave of Telecom growth will emerge from rural India and operators will increasingly use the voice platform as well as localised content to ensure relevance and widespread adoption in rural zones.

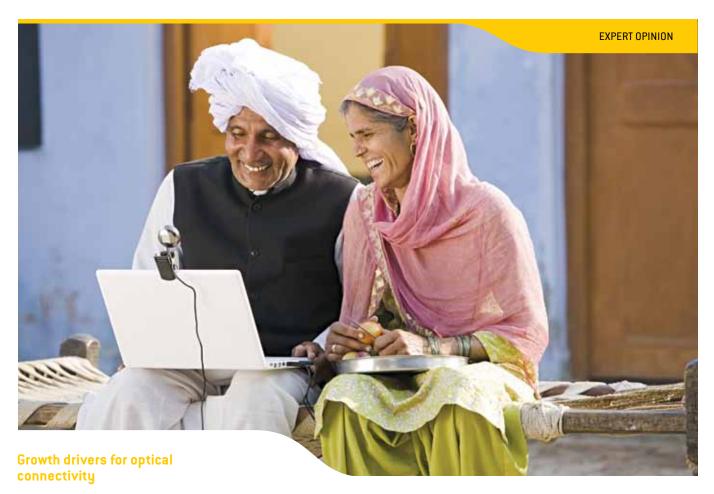
# NTP 2012: Fueling growth with optical fiber connectivity

The National Telecom Policy 2012 (NTP 2012) envisions the leveraging of Telecom infrastructure to enable the participation of all citizens and businesses, rural or urban, in the modern digital economy. NTP 2012 also lays special emphasis on providing reliable and affordable broadband access to rural and remote areas by appropriate combination of optical fiber, wireless, VSAT and other technologies.

Special emphasis is laid on providing affordable and quality Telecommunication services in rural and remote areas. The government aims to achieve 175 Million broadband connections by the year 2017 and 600 Million by 2020 at a minimum download speed of 2 Mbps. This in turn implies an immediate need for network capacity expansion across a large part of the country. This capacity expansion will be enabled principally with a backbone and metropolitan optical fiber network and Sterlite Technologies is in a unique position to serve this phase of India's connectivity growth.

Today, Telecommunications is no longer limited to voice; instead, a vision of a converged network is emerging, facilitating voice, video and data connectivity over a unified platform. The realisation of this vision would help overcome the existing segregation of licensing, registration and regulatory mechanisms in connectivity services, thereby enhancing affordability, increased access and delivery of multiple services at low cost.





The government as well as the private-sector network operators are ramping up efforts to improve fiber-optic infrastructure and drive fiber deployment out to more end-users. Besides the initiatives supporting Rural Connectivity, Wireless Backhaul (also known as Mobile Backhaul) and FTTx (Fiber to the Home/ Business/Node) are driving the demand for optical fiber as illustrated in Figure 1.

While optical fiber access will progressively penetrate deeper into the network and edge closer to the end user, multiple technologies such as xDSL, microwave and broadband wireless technologies such as LTE will continue to coexist in the first mile (that is, physically nearest to the end-user).

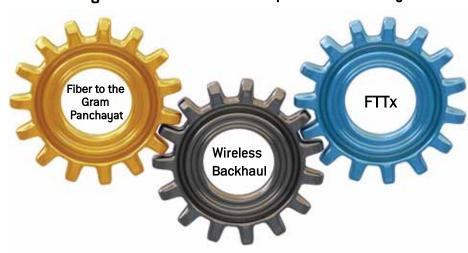
The Government of India, over the next two years, plans to create a National Optical Fiber Network (NOFN) with an initialphase cost of about Rs. 20,000 Crores. The private sector will contribute an equal amount to complement the infrastructure by providing access services to individual users.

The objective of NOFN is to:

- Bridge the gap in the Aggregation Layer at the Block level
- Extend the existing optical fiber network to about 250,000 **Panchayats**
- Ensure at least 100 Mbps at Village Council

The significant growth in wireless traffic and in connectivity speeds is also fueling a demand for fiber capacity in what is called Wireless backhaul. In this application, typically a service provider must transport aggregated user and control data from the wireless subscriber base, back to the central office. With a rapidly proliferating set of radio access technologies (e.g. 2G, 3G, 4G/LTE) and increased speeds, service providers must maintain a high level of reliability and quality of service across

Figure 1: Growth drivers for optical connectivity



multiple radio generations, sustain this across the entire network and obtain the highest return on deployed capital for the longest period of time.

Optical fiber connectivity is the only future-proof backhaul technology that satisfies the demand patterns for the present and reliably meets the highest traffic expectations of the future. With only about 18% of deployed towers under fiber optic backhaul, wireless backhaul is forecast to drive fiber connectivity demand for the foreseeable future.

In metropolitan and urban markets, direct connectivity via Fiber to the Home/Business/Node (FTTx) technologies have recently taken root. Standardisation (via the International Telecommunication Union or ITU) of the GPON protocol has led to a significant cost reduction and increased affordability in fiber optic access.

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Presently serving medium to large businesses and high-end retail customers, it is expected FTTx will gain a significant foothold in the years to come, continuing to stimulate fiber connectivity demand.

## Megatrends: Fixed/wired IP traffic in India 2011-2016

A broad scientific and business consensus has emerged globally regarding the insatiable demand for bandwidth, fuelled by the shift from voice to data and video, supported by low-cost broadband access. As witnessed elsewhere in the world, Internet traffic continues to grow, with one estimate (the Cisco Visual Networking Index) suggesting a 29% compounded annual growth rate for global IP traffic. The same index when applied to the case in India (Figure 2), offers an extremely interesting perspective: a 9-fold increase in fixed/wired IP traffic exceeding 2 Exabytes monthly by 2016.

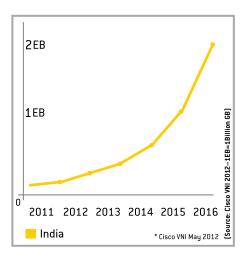


Figure 2: Projected monthly wireline trafic in India

The demand for quality cabling and capabilities in India are at an all time high. Speed and bandwidth along with high density solutions continue to be the key demands of the industry. The continued demand for bandwidth has also led to increased opportunities for fiber and the development of pre-terminated fiber solutions. The demand for optical fiber in India is still at nascent levels and there exits a huge untapped market in Tier II and Tier III cities.

Further, the penetration of optical communication technologies is growing rapidly as enterprise and data center users require a combination of speed, distance, security and future-readiness offered by fiber-based networks. The wireless data theme will be further bolstered by the recent deployment of 4G technology, thereby evolving into a long-term investment opportunity in both developed and emerging markets. An ease of competitive pricing pressures could further brighten the Telecom outlook.

#### In conclusion

With the world's third largest Internet subscriber base in India, the Indian Telecom carriers have kept pace with the technology advances found in the rest of the world. Major carriers in India have recently started deployment of state-of-the-art 100 Gb/s systems to meet

growing traffic demand needs. Fiber optic communications will enable broadband access for the masses, with various complementary technologies such as wireless broadband, Fiber to the Home as well as traditional copper wireline. This in turn, will create a foundation for multiple opportunities to benefit from consumers' insatiable appetite for data on-the-go. The time is right for a massive deployment in fiber infrastructure in India's context and regulatory policy support would help sustain faith in this growth opportunity.

#### **About the Author**

Dr. Badri Gomatam is the CTO, Telecom at Sterlite Technologies Ltd. He received his Ph.D. in 1993 from the University of Massachusetts, Amherst in Electrical Engineering. He has about 20 years of R & D and business experience in Optical Communications, Integrated Circuits and Optoelectronic components. Prior to Sterlite he was based in the United States, most recently with ClariPhy Communications, a manufacturer of IC solutions for coherent optical transmission. Dr. Gomatam is a graduate of the Birla Institute of Technology, Ranchi.



# Transmission Line Route Optimisation Using LiDAR Survey and PLS CADD

Light detection and ranging technology is deployed to conduct topographic mapping and functions well in cloudy conditions and can penetrate through dense vegetation.

Conventionally transmission line route optimisation, in India, is performed by land surveyors and transmission line engineers manually. An initial route is chosen on the manual wisdom (which is subjective) based on the land use map of the area. For this initial route, the land surveyor performs a detailed survey incorporating current information/ details corresponding to land use, water bodies, line crossings etc. Initial route suffers many deviations based on more information collected subsequently in the detailed survey, which in turn increases the cost and time of construction of transmission lines.

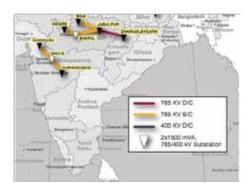
For the first time in India, Sterlite Grid Ltd. used the **LiDAR survey** for transmission line optimisation for two of its BOOM projects i.e.Bhopal —Dhule Transmission Company Ltd. (BDTCL) and Jabalpur Transmission Company Limited (JTCL). The survey was done in addition to a manual detailed survey for the said lines. LiDAR survey clubbed with PLS CADD allowed the transmission line engineers to evaluate several alignment options, including the cost of construction which eventually helped them in finalising an alternative, which was both cost-effective and time efficient.

#### **Project overview**

Bhopal-Dhule Transmission (BDTCL) project involves establishment of four 765 kV Single-Circuit and two 400 kV Double-Circuit transmission lines that would strengthen the transmission system in the Indian states of Madhya Pradesh, Maharashtra and Gujarat. The project has been awarded on a 'Build, Own, Operate and Maintain' (B00M) basis, wherein the transmission lines would be commissioned within 3 years and the Company would operate and maintain the same for a minimum tenure of 35 years thereafter.

#### **Project highlights**

Line Name	Line Length	Line Specification	Location
Jabalpur - Bhopal	~ 285 km	765 kV S/C	Madhya Pradesh
Bhopal - Indore	~ 180 km	765 kV S/C	Madhya Pradesh
Bhopal - Bhopal	~ 2 km	400 kV D/C	Madhya Pradesh
Aurangabad - Dhule	~ 230 km	765 kV S/C	Maharashtra
Dhule - Vadodara	~ 275 km	765 kV S/C	Maharashtra, Gujarat
Dhule - Dhule	~ 20 km	400 kV D/C	Maharashtra



#### Jabalpur Transmission (JTCL) project

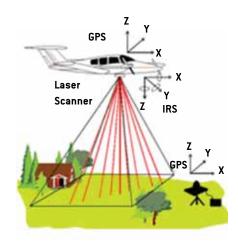
involves establishment of a 765 kV Double-Circuit and a 765 kV Single-Circuit transmission line each, that would strengthen the transmission system in the Indian states of Chhattisgarh and Madhya Pradesh. The project has been awarded on a 'Build, Own, Operate and Maintain' (B00M) basis, wherein the transmission lines would be commissioned within 3 years and the Company would operate and maintain the same for a minimum tenure of 35 years thereafter.

#### LiDAR survey

LiDAR (Light Detection and Ranging) technology uses laser distance measuring technology to conduct topographic mapping. Unlike other technologies, LiDAR beams, which are transmitted from the aircraft, are able to function in overcast and cloudy conditions and can penetrate through dense vegetation. LiDAR provides

high accuracy at much higher speeds. The distances are measured directly from the aircraft to the ground during flight, using laser ranging. When combined with a digital camera, high resolution, full colour imagery is created.

During aerial surveys the laser fires 100,000 laser pulses per second, at 25 degrees, left and right of the direction of the flight of the aircraft. Simultaneously the camera takes photos of the earth below which are then draped in their precise location on the 3D model. The aircraft's trajectory and movements are kept carefully in check by means of a GPS and an Inertial Navigation System (INS).





Vegetation penetration: LiDAR has a very narrow beam, which is emitted from the aircraft. This beam can penetrate dense foliage to reflect off the ground and return to the aircraft.

Accuracy: A terrain model of extremely high accuracy can be delivered, due to the sheer density of the laser points.

Ground control: No ground control is required because of the accurate measuring equipment in the aircraft, i.e. the GPS and IMU. Hence, the entire project can be calculated from airborne sensors. The ground survey equipment of a LiDAR project is far simpler than a conventional survey. It is, therefore, faster than other measuring methods.

Weather conditions: LiDAR is an active sensor and therefore does not require ambient light to function. Many projects have been successfully completed in overcast or partly cloudy conditions.

Digital workflow: The LiDAR and camera both deliver raw observations to a computer disc in the aircraft. Once the sorting is completed, the air operator delivers the removable disc drives to the processor. The processor then immediately works on data processing. Within hours, verification of the day's mission is completed. The entire project is usually processed, verified and delivered to a client within 30 days. This is by far, faster than any other technology.

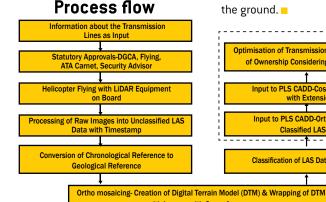
#### Methodology

Initial preparation: This stage includes data collection and gathering of all concerned approvals including the aviation approval. Helicopter flying: Helicopter is flown on a pre-determined route with LiDAR equipment on board. Final outcome on this stage is raw images having a swath of 100 meter around initial path.

Processing: It includes processing of raw images and converting them into LAS data with Timestamp and creation of geological reference with the help of Ground Control points.

Ortho mosaicing: This includes the creation of Digital Terrain model of the area and covering the DTM with geo-referenced images.

Classification of data: All 3D objects are classified and rendered.



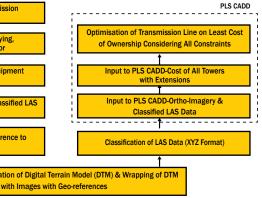
PLS CADD processing: Terrain/image inputs are fed into PLS CADD and alternate routes are evaluated on various parameters like cost of construction, ease of construction, RoW, forests in accessible area, etc. Final optimised route is finalised through various iterations.

#### Result

We could optimise the BOQ both in terms of steel and concrete requirement for both JTCL & BDTCL projects.

#### Key learning

LiDAR is a very effective process. Its early usage (after award) offers more benefits in terms of resource saving (both time and money). One of the key principles of line optimisation is to increase the span by using extensions. It can also provide solutions for real time RoW problems on the ground.



# Creating a collaborative ecosystem Indian Transmission and Distribution sector

The Indian government is encouraging investments in the T&D segment to reduce technical and commercial losses as well as increase access to reliable power supply.

#### Ajay Bhardwaj

Today, the Indian power sector is considered to be a key enabler of infrastructure growth in the country. According to the Planning Commission, the power sector is likely to grow at 8.1% per annum in order to achieve a growth target of 9%. The demand for power is expected to grow at a CAGR of approximately 7.5% during the 12th five-year-plan from 9,68,658 Gwh in FY 2012 to 13,95,065 Gwh in FY 17, whereas peak load requirement is expected to grow at a CAGR of 7.4%.

generation, distribution and transmission by the end of this period.

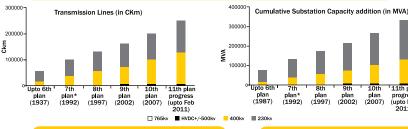
Private sector participation in this segment has increased primarily due to the provision of 100% FDI through the automatic route, the setting up of ultra mega power projects and public sector participation through PPP initiatives or joint venture route.

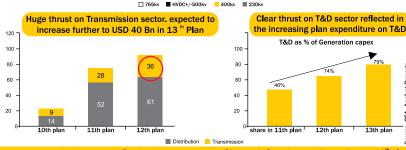
 India has huge power deficits with peak deficits in the range of 10.6%\* in FY 2012

## Government policies point to huge thrust to transmission sector

At the Transmission & Distribution level, it is heartening to see the Indian government encouraging investments to reduce technical and commercial losses in the system and increase access to reliable power supply. Some of the schemes include Revised Accelerated Power Development and Reform Program (R-APDRP) and Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY). The R-APDRP scheme will strive to bring down the Aggregate Technical and Commercial (AT&C) losses in the T&D network. This demands enormous investments in the T&D sector, besides the use of energy efficient transformers, as well as renovation, modernisation, restructuring and upgradation of the T&D infrastructure.

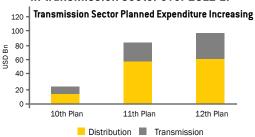
# Xth Plan registered maximum growth in terms of capacity addition through 400 kV lines (backbone of transmission infrastructure in India)





Thrust on transmission sector reflecting in the capacity buildup and planed expenditures for the 12th plan

# Investment of US\$ 36 Billion is expected in transmission sector over 2012-17



# Create collaborative ecosystem among various Stakeholders

In order to achieve faster growth, improved productivity & more efficient usage of resources, it is essential that a more trusting relationship is built and created among different stakeholders. These include those between:

- Developers and Regulators
- Developers and Planning bodies like CEA & CTU
- Developers and EPC Contractor & Suppliers of the Transmission sector
   Further, one needs to aim for a collaborative

#### A high growth industry

The Indian government has initiated several power projects, taking into consideration a projected increase in demand. In line with this, a capacity addition of approximately 100 GW is planned, of which 28 GW will come from projects that started in the 11<sup>th</sup> Plan. Consequently, the sector will offer enormous opportunities due to the fact that the demand for power will increase exponentially to 9,50,000 MW by 2030. Besides, 76% of the total expected investments of US\$ 1,250 Billion in the energy sector will go towards power

 An expenditure of around US\$ 253 Billion has been planned for the Indian power sector in the 12th five-year-plan [2012-17]

CEA, Analyst Reports

- Of this, about US\$ 36 Billion investments were planned for power transmission in the 12th five-year-plan
- Open access and power trading will ensure a need of greater investments
- Significant investment will come from the private sector
- About ~29% of this investment
   ~ US\$10.50 Billion is anticipated
   from the private sector



of creating defenses by buyers and sellers of electricity to a more cooperative model which reduces the total risk being assessed by the buyer and supplier. NGC procurement model is an established example in this regard. One should also aim for a long-term relationship instead of project based tendering in each instance. This will lead to lower cost of procurement for buyers and sellers, which will have assurance of better planning.

Additionally, sellers should offer and organise long-term credit, as private sector developers are on the lookout for cheaper funds and lower involvement of fund & equity. Following the Telecom model, we also need to develop a model where the payment for the goods & services is spread over a longer period involving both construction and operation. The longer the payment during OPEX better it will be for developers. Developers and goods & service providers also need to work closely with planners to bring more innovative solutions on board to make the most optimal use of natural resources.

#### **Green Towers: An innovative** concept

The Indian Power Industry requires installation of greenfield high voltage power transmission lines for transmission of power from point of origin/supply to the point of receipt, which will emit low carbon dioxide emission instead of high

carbon dioxide emission. As per practice, total carbon footprint of fabricated and galvanised sectional steel of 1 MT of steel is 1.1 Ton carbon dioxide, carbon footprints in production of 1 MT of cement are 0.9 Ton carbon dioxide and carbon footprints of diesel vehicle used in transportation for using 1 KL of diesel is 2.69 Ton carbon dioxide. Statistics reveals that majority of the transmission utilities in the country, including central transmission utilities (CTUs) opt for heavy tower design, which results in an increase in the total tonnage and subsequent increase in the carbon dioxide emission as well. Thus, these designs not only result in several trees being cut but also increase the Right-of-Way requirement for transmission line projects.

However, there exists an opportunity for the Indian power sector to earn revenue through the reduction of Greenhouse Gas Emissions (GHG), particularly carbon dioxide (CO2). The Clean Development Mechanism (CDM) under the Kyoto Protocol to United Nations Framework Convention on Climate Change (UNFCCC) allows emission-reduction projects in to earn Certified Emission Reduction (CER) credits, each equivalent to one Tonne of CO2. These CERs can be traded and sold.

And while the revenue through CDM for transmission line projects is not very high, in the near future, this will be implemented for supporting environmental causes as well as to promote the Green Tower Concept.

Besides, CDM registered transmission projects will lead to lesser carbon dioxide emission and contribute towards the Green tower concept.

Sterlite Grid is currently executing mega size transmission line projects that will strengthen the Indian power system for building the nation's infrastructure. Through unique design, Sterlite Grid has offered Tower designs, which are less in weight and easy in execution. Through innovative design we have achieved tower weight, which are lesser by (10-15)% for suspension tower and (15-20)% in tension tower with respect to CTU design. This will result in low carbon dioxide emission. Also through innovative design, we have reduced the Right-of-Way requirement of the transmission project by (5-7)%, which would enable us to transfer more power with less RoW, and is also considered to be eco-friendly.

As one of the leading transmission developer in the private sector space, Sterlite is all set to demonstrate a paradigm shift in the way business is done.

#### **About the Author**

Ajay Bhardwaj is COO - Grid Business,

Sterlite Technologies Ltd. He is responsible for the Power Infrastructure Business. In a career spanning 30 years, he has worked in NTPC/Power Grid, Toshib Mitsubishi, Reliance Energy and Areva T&D, prior to joining Sterlite.

# Next generation access networks An enabler of converged infrastructure

The next generation Telecom network will provide end users with integrated voice, data, security, virtual presence and multiple value-added service.

#### Vijay Jain

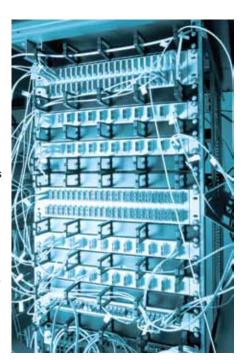
One of the critical elements, particularly when one looks at the need of the Telecom industry, is to focus on building an optimal future-proof Telecom infrastructure that can support a region's needs for now and for the foreseeable future. This is where converged Next-Generation Networks (NGN) offer a reliable means to leverage existing investments and provide the needed flexibility to meet growing bandwidth demands. Additionally, NGNs support the deployment of advanced services to be launched when the market conditions are ready according to the operators' pace and budget. Here, the key is not only building more efficient networks, but also meeting the networks' long-term scalability requirement.

#### The demand surges...

Given the ever increasing bandwidth appetite of the end user, there will be continuous need of enhancing both the coverage and capacity of the wireless network. Imagine a scenario with multiple wireless devices in one home communicating on wireless infrastructure. This is where the need of a fixed wireline infrastructure will be crucial to cater to all these devices by off-loading the traffic to fixed line and hence balancing and optimising the traffic on wireless infrastructure. Therefore, it is imperative that both the wireless and wireline NGNs should be viewed as converged technologies one supporting the other, rather than substituting each other. While wireless increases the penetration faster; wireline serves as the backbone for the same.

In line with the New Telecom Policy (NTP 2011) released by the Government of India, high speed and high quality broadband should be made accessible to all village panchayats through optical fibers by the year 2014 and progressively to all

villages and habitations. A big problem being faced by Internet Service Providers is getting Right-of-Way access for providing wireline connections to users and the policy - taking into account both mobile and broadband, suggest a review and simplification of "sectorial policy for Right of Way/Installation of Tower for facilitating smooth co-ordination between the service providers and the State Governments/local bodies". In addition, the policy suggests engagement with ministries such as "Surface Transport, Ministry of Urban Development, Ministry of Power, Ministry of Rural Development, Ministry of Railways, State Governments and local bodies for facilitating development of guidelines for provision of common service ducts for orderly growth of Telecom Infrastructure". In addition, the policy wants the encouragement of "FTTx by independent Infrastructure Providers (IPs) with enabling guidelines and policies, favoring fast



transformation of cities and towns into Always Connected society." It suggests the creation of an institutional framework to co-ordinate with different government departments for laying of Optical Fiber Cable networks.

Thus, Fiber to the Home/premise/enterprise/ tower (FTTx) or fiber to the node (FTTN) is looking like the must-have technology for any service provider today. Also, there exist several technical reasons for a fiber-based technology to be deployed in a country like India where energy is scarce. For instance, a fiber-based infrastructure requires much lesser power to carry same data. Studies have also shown that an FTTx network requires 20% lesser power to serve the end customer. Besides, this OPEX saving adds directly to the bottom line of service provider profits. The infrastructure provides the much needed higher bandwidth long distance delivery enhancing the network coverage and hence optimising the capital spend.

#### The price factor

FTTx pricing needs to be consistent with established broadband technologies in order to stimulate demand and support take-up. For instance, in Qatar, the pricing scheme of FTTx encourages migration with no premium for fiber compared with high-end DSL. Price per Mbps for highest-speed broadband will need to decline to make these high-end packages more affordable while maintaining a price premium. However, international IP transit costs—a key component of OPEX, because they may represent typically up to 5%-25% of total costs in the region, compared with 1% or less in Western economies—generally restrict operators in the region from lowering their retail prices, in particular for high-speed or low-contention broadband accesses. However, taking full advantage of the FTTx opportunity will require



a sustained effort to give consumers the incentive to take up fiber, which should be driven by rich and available content and services with the right pricing.

#### Challenges in FTTx deployment

Planning for access network fiber deployment demands a careful consideration of several aspects. For instance, the demographics of the area to be served are critical in establishing the service market opportunity. In general, favourable demographics justify deeper fiber deployment. Another set of data which is critical to set the cost points for each approach include the geography and topology of the service area, including the household density (average lot size), the Right-of-Way available, and whether cabling is underground or above ground. Obviously, poor characteristics here will create profit margin challenges if not taken into account. Also, the worst possible outcome in an access fiber deployment can be a new set of requirements that the fiber architecture deployed cannot effectively support.

Thus, designing any access infrastructure is a mix of science and art both. It is absolutely critical that each fiber strand be properly installed and that, in particular, the splicing used in PON installations be carefully done and verified. Fiber should also be tested end-to-end prior to committing it to customers. Unlike copper,

where problems tend to develop over time, operators report that most fiber problems are uncovered shortly after installation and are a result of improper fiber handling practices. Finding skilled work force to deploy FTTx network is another challenge.

Greenfield FTTx deployment involves fewer challenges as compared to industrial or commercial brownfield deployment, in which case, the copper infrastructure cannot be replaced completely. Also, the operator has to work with a mix of existing copper lines and new fiber lines.

Currently, the RoW within housing projects or resident welfare associations is controlled by the builder, which generally gives access to one or two operators. Rolling out FTTx in these areas is viable for an operator, if it gives him guaranteed subscribers.

#### The regulatory environment

The success of any FTTx deployment requires interplay between technology supply, business strategies, consumer demand, and market regulations. The market uncertainty comprises of two aspects: uncertainty on the demand side ('demand uncertainty') and uncertainty on the supply side ('investment uncertainty').

Since technological developments and consumer demands are constantly evolving, Telecom operators are confronted with rising capital expenditures for upgrading existing networks and deploying new network infrastructure. In recent years, incumbents have no other option but to invest substantial amounts of money in the backbone and access networks.

Investments in next-generation access networks by Telecom companies are mainly driven by competition and regulation, and only to a lesser extent by market demand. Rather than investing in fiber broadband, incumbents tend to upgrade existing networks. So, to cope with market uncertainty, operators mainly search for densely populated areas or start deploying networks only when a given percentage of the market intends to subscribe to the network. Given all these uncertainties, incumbents are currently not the driving force behind fiber broadband.

Instead, the FTTX market is driven by alternative Telecom operators and utility companies (electricity, water, housing) that are developing their own network infrastructure to compete in the market.

#### **EXPERT OPINION**

In most instances, these companies engage with local municipalities or governments to establish Public-Private Partnerships (PPP) to be able to accumulate funds and knowledge. The strategy and goals of PPPs are various and range from overcoming market failure, or spurring economic growth to bridging digital divides. Not only goals may differ, also ownership structures can vary largely. The involvement of (local) government ranges from facilitator to developer of a project. This may affect the business model, funding, infrastructure and how demand is handled. One of the risks is that this investment results in an inefficient and patchy network with incompatible standards or documentation.

In order to deal with demand uncertainty, both public authorities and broadband service providers need to step beyond generic strategies and policies but have to consider the specific dynamics and the geographic, social and demographic structure of local markets that can affect the outcome of investments and regulation. In densely populated areas, for example, fixed costs can be divided amongst more consumers. This decreases subscription fees, which may in turn spur consumer adoption. Since critical mass is required to finance broadband projects, this explains why most FTTx deployments are currently limited to cities or specific areas.

#### **Convergence matters**

Continuous need of upgrading the existing infrastructure to meet end-user needs is not a sustainable solution. There should be an infrastructure that is optimised, scalable and reliable. FTTx addresses all of these and is the technology that meets the ever growing bandwidth need. Sterlite will be a significant contributor to this revolution as we continue to design better fibers and cables that meet deployment challenges, design fiber connectivity solutions that are easily accessible while provide the security and deploy a network that is easily scalable, more optimised and reliable.

When providing FTTx networks, it is crucial to understand the challenges for potential network builders and operators. Some of these may present conflicts between functionality and economic demands.

Key functional requirements for a FTTx network will include:

- Provision of high bandwidth services and content to each customer with no restrictions
- Support for the required network architecture design (the fiber infrastructure must remain flexible at all times)
- Connection by fiber to each end subscriber directly from the serving equipment, avoiding intermediate active equipment (e.g. a fully passive optical network)
- Support future network upgrade and expansion

Further, the economic requirements will include (but are not limited to):

 A successful business case, providing the lowest possible capital expenditure (CAPEX) and operating expenditure



(OPEX) solutions for affordable infrastructure deployment

 Minimal deployment disruption were possible in order to gain acceptance from network owners.

Today, the original broadband PON (BPON) and the successor Gigabit PON (GPON) and Gigabit Ethernet PON (GEPON) are now widely deployed technologies. GPON and GEPON have sufficient capacity for

video delivery and high-speed Internet. Some providers like the GPON for its ability to create multiple independent service channels to the user via virtual circuits. Others prefer GEPON because it matches better with Ethernet-based metro architectures.

#### Looking forward...

Customer consumption of data in today's world is increasing exponentially. While expectations of high speed Internet, video streaming and faster downloads are on the rise, the required infrastructure to support these lags behind considerably. This is where we are doing value addition to the operators and society by creating a converged FTTx infrastructure, capable of delivering lightning speeds on a converged DAS/IBS/Wireline fiber infrastructure. Today we have connected over 100,000 homes and enterprises across 5 cities, with 10,000 subscribers taking the benefit of multiple plans and services offered by 6 operators on future-proof high-speed converged infrastructure.

#### **About the Author**

Vijay Jain is the COO - Networks

Business, Sterlite Technologies Ltd. He has a rich and varied experience spanning almost two decades and has 71 research papers and 8 patents to his credit. His prior assignments include those with Nortel, Airtel and Verizon. Vijay holds an M. Tech. degree from IIT-Kharagpur & a post-graduate degree from the Montreal University.





IPTV | Video on Demand | Live Streaming | Online Gaming | Multi-point Video Conferencing

# The future is here

FiON™, powered by Sterlite, brings the incredible new-age technology of FTTH or 'Fiber To The Home' that enables high speed Internet broadband connectivity for you.





#### **Anil Agarwal** Non-Executive Chairman

Anil Agarwal founded the Sterlite Group in 1976 and has been overseeing its operations since its inception. He is the Executive Chairman of Vedanta Resources PLC and also the Chairman of Sterlite Industries (India) Limited. He has over three decades of experience in business strategy, general management and commercial matters.



#### **Arun Todarwal**

Non-Executive & Independent Director

Arun Todarwal, partner of Todarwal & Todarwal, a Mumbai-based firm of Chartered Accountants, is a member of The Institute of Chartered Accountants of India. He has a rich and varied experience spanning over three decades in management consultancy, finance and audit.



### **Pravin Agarwal**

Whole-time Director

Pravin Agarwal has been closely involved with the Sterlite Group's operations in India since its inception and has been instrumental for the growth of Telecom and power businesses. His rich experience in general management and commercial matters spans about three decades.



#### C. V. Krishnan

Non-Executive & Independent Director

C.V.Krishnan is the president of IFMR, Chennai. Previously associated with EID Parry, Essar Power, and Sterlite Industries as President/MD/CEO, he holds expertise in organisational turnaround, transformation management, corporate growth and financial management. C.V.K holds B. Tech from IIT-Madras and MBA from IIM-Ahmedabad.



#### A. R. Narayanaswamy Non-Executive & Independent Director

A. R. Narayanaswamy is a Chartered Accountant and Management Consultant with over 35 years of industry experience. He is a Fellow Member of The Institute of Chartered Accountants of India and provides consulting services in accounting, financial management and information technology across several industry verticals.



### **Haigreve Khaitan**

Non-Executive & Independent Director

Haigreve Khaitan is a Corporate and Commercial Lawyer and a Senior Partner of Khaitan & Co. He heads Khaitan's Mergers & Acquisitions (M&A) practice. Highly recommended by world's leading law chambers/legal accreditation bodies, he is one of the leading lawyers in India and also for project finance in Asia.



#### **Dr. Anand Agarwal** CEO & Whole-time Director

Anand Agarwal joined Sterlite in 1995 and has held various positions, including manufacturing, quality assurance and business development. Prior to joining Sterlite, he worked with Siemens. He completed his B. Tech in metallurgical engineering from IIT-Kanpur and was awarded Masters and Ph.D. from the Rensselaer Polytechnic Institute, USA.



#### **Pratik Agarwal**

Head-Infrastructure Business & Non-Executive Director

Pratik Agarwal joined Sterlite in 2004. He leads Infrastructure business initiatives as well as corporate strategy for Sterlite. Additionally, he is closely involved in major strategic decisions of Vedanta Group. Pratik completed bachelors in economics from Wharton, Pennsylvania and MBA from London Business School.

# Leading to Excellence



#### Pravin Agarwal, Whole-time Director

Pravin Agarwal has been closely involved with the Sterlite Group's operations in India since its inception and has been instrumental for the growth of Telecom and Power Businesses. His rich experience in general management and commercial matters spans about three decades.

#### Dr. Anand Agarwal, CEO

Anand Agarwal joined Sterlite in 1995 and has held various positions, including Manufacturing, Quality
Assurance and Business Development. Prior to joining Sterlite, he worked with Siemens. He completed his
B. Tech. in Metallurgical Engineering from IIT-Kanpur and was awarded Masters and
Ph.D. from the Rensselaer Polytechnic Institute, USA.



#### Anupam Jindal, CFO

Anupam Jindal joined the Sterlite Group in 1998. He has worked with the Group's aluminum foils and copper cables businesses before heading finance for Sterlite's mining operations in Australia. His key focus areas have been Finance, Treasury, Accounts and MIS. Anupam is a Chartered Accountant from the Institute of Chartered Accountants of India.

#### K. S. Rao, COO – Telecom Business & Power Conductors

K. S. Rao joined Sterlite in 1992 and has, since, held various positions in the Company's Telecom business. His key focus areas have been engineering, manufacturing, product development, project management and business development. K. S. Rao holds a Bachelor's degree in Mechanical Engineering.





#### Pratik Agarwal, Head — Infrastructure Business

Pratik Agarwal joined Sterlite in 2004. He leads strategic business initiatives in the infrastructure ownership space as well as corporate strategy for the organisation. Additionally, he is closely involved in major strategic decisions of the Vedanta group. Pratik has completed his Bachelor's in Economics from Wharton, Pennsylvania and MBA from London Business School.

#### Prasanth Puliakottu, CIO

Prasanth Puliakottu joined Sterlite in 2009 and is responsible for standardisation, automation, and integration of business processes. In a career spanning 19 years, Prasanth has led design, development and implementation of various IT projects. He has completed engineering from Madurai Kamaraj University(REC, Trichy) and M.S. from BITS, Pilani.





#### Pankaj Priyadarshi, CCO

Pankaj Priyadarshi joined Sterlite in January 2012. With 25 years of experience, he heads the Supply Chain Management function with key focus on strategic sourcing. Pankaj has completed Mechanical Engineering from BITS Pilani, a certification in leadership from INSEAD, Singapore and a course on Strategic Sourcing Management from IIM-Ahmedabad.

#### Ajay Bhardwaj, COO – Grid Business

Ajay Bhardwaj joined Sterlite in 2011 and is responsible for the Power Infrastructure Business. In a career spanning 30 years, he has worked in senior capacities in various organisations in India on projects in Transmission and Distribution, Telecom and Energy Management Systems.

He has completed Electrical Engineering from IIT-Roorkee.





#### Vijay Jain, COO — Networks Business

Vijay Jain joined Sterlite in April 2011 and is responsible for the Telecom Networks Business. He has rich and varied experience spanning almost two decades and has 71 research papers and 8 patents to his credit. Vijay holds a M. Tech. degree from IIT-Kharagpur & a post-graduate degree from Montreal University.

#### Ankit Agarwal, Global Head-Telecom Products

Ankit Agarwal heads the Telecom Products division at Sterlite Technologies. In addition, he is responsible for identifying and executing strategic opportunities globally for Sterlite, including Mergers and Acquisitions, Joint Ventures and Greenfield projects. Ankit holds a Bachelor's degree from Marshall School of Business and MBA from London Business School.





#### Rajendra Mishra, Head-Power Cables

Rajendra Mishra joined Sterlite in 2008 and is responsible for the Power Cables Business. In a career spanning 18 years, Rajendra holds experience in Marketing, Sales, Operations and Strategic Positions at various organisations. Rajendra holds a Bachelor's degree in Electrical and Electronics Engineering from Regional Engineering College, Suratkal.

#### Kamal Sehgal, Leader – Business Excellence

Kamal Sehgal joined Sterlite in 2012 and spearheads business excellence initiatives enterprise-wide. He holds over 15 years of experience in Lean Six Sigma Deployment, Supply Chain, Quality Assurance & Business Process transformation. He has completed Production Engineering from Punjab University & MBA from FMS, Delhi. He is also a certified Lean Sigma Master Blackbelt.





#### Vimal Malhotra, Head — Human Resources

Vimal Malhotra joined Sterlite in 2008 and heads human resources. He has over 15 years of experience in Organisation Building, Employee Engagement & Development and Compensation Modelling & Structuring. He has completed B.Com.(H) from Delhi University & MBA in HRM from Sardar Patel, New Delhi.

# Directors' Report

To the Members,

Your Directors are pleased to present the Annual Report for the financial year 2012-13 together with the audited accounts of the Company for the year ended March 31, 2013.

#### **FINANCIAL RESULTS**

₹ in Crores

Particulars	2012-13	2011-12
Net Revenue	3354	2,727
Profit/(Loss) before Interest, Depreciation & Tax	260	223
Less: Interest	106	95
Less: Depreciation	86	71
Net Profit/(Loss) before taxation	69	57
Provision for Taxation:		
Current Tax	15	18
Earlier Year Tax / (Written Back)	(6)	5
Minimum Alternative Tax eligible for Set Off	(1)	(18)
Deferred Tax (Credit)	14	8
Net Profit /(Loss) for the year after tax	47	44
Balance carried forward from previous year	740	712
Amount available for appropriation	788	756
APPROPRIATIONS		
Transfer to General Reserve	2	2
Proposed Dividend	12	12
Provision for Tax on Dividend	2	2
Balance carried forward to the next year	772	740

#### **PERFORMANCE**

Fiscal year 2012-13 closed with Revenues of ₹ 3354 Crores, EBITDA of ₹ 260 Crores, PAT of ₹ 47 Crores and EBITDA margins of 8%. The Telecom business had revenues of ₹ 1,056 Crores at an EBITDA margin of 15.74% and the power business had revenues of ₹ 2,230 Crores at an EBITDA margin of 4.22%.

The detailed analysis of Company's operations and segmentwise performance is covered under 'Management Discussion & Analysis Report'.

#### DIVIDEND

The Board of Directors are pleased to recommend a dividend of 15% (₹ 0.30 per share of ₹ 2/- each) for the financial year 2012-13. The distribution of dividend will result in payout of ₹ 11.80 Crores excluding tax on dividend.

#### **EMPLOYEES STOCK OPTION SCHEME**

As the members are aware, the Company had launched Employee Stock Option Schemes for the employees in June 2006 (ESOP 2006) and June 2010 (ESOP 2010) respectively, in line with Company's philosophy of sharing benefits of growth with the growth drivers. The details of the options vested during the year under review are provided in Annexure-II to this report,

as required under Clause 12 of the Securities and Exchange Board of India (Employees Stock Option Scheme and Employees Stock Purchase Scheme) Guidelines, 1999. In July 2012, 26,68,800 options were granted under ESOS 2010; however, all the options lapsed for not meeting the vesting criteria.

#### SUBSIDIARY COMPANIES AND JOINT VENTURES

At the end of the year, the Company has nine Subsidiary Companies and two Joint Ventures, the details of which are given below:

#### a. Sterlite Grid Limited (SGL)

SGL is a wholly owned subsidiary of the Company incorporated to undertake power transmission (IPTC) projects. SGL is currently executing multi-Million dollar power transmission system projects, Pan-India via its wholly-owned subsidiary companies, awarded on a 'Build, Own, Operate and Maintain' (BOOM) basis. In accordance with this, transmission lines would be commissioned and the Company would operate and maintain the same for a minimum tenure of 35 years through project SPVs acquired through competitive bidding process.

East-North Interconnection Company Limited (ENICL)
 ENICL project involves establishment of two 400 kV Double

Circuit transmission lines that would respectively connect the Indian states of Assam with West Bengal and Bihar. This project has 18 identified beneficiaries (mainly SEBs in the states of Rajasthan, Punjab, Haryana, Uttaranchal and the city of Delhi), who would be directly benefitted by this project. Out of the two lines, one line will be operational in the first quarter of the FY 2013-14, while the second line will be operational in the third quarter of the FY 2013-14.

- c. Bhopal Dhule Transmission Company Limited (BDTCL) BDTCL project involves establishment of four 765 kV Single Circuit and two 400 kV Double Circuit transmission lines that would strengthen the transmission system in the Indian states of Madhya Pradesh, Maharashtra and Gujarat. The project is expected to be completed before the end of March 2014.
- d. Jabalpur Transmission Company Limited (JTCL)

  JTCL project involves establishment of a 765 kV Double
  Circuit and a 765 kV Single Circuit transmission line each,
  that would strengthen the transmission system in the
  Indian states of Chhattisgarh and Madhya Pradesh. The
  project is expected to be completed before March 2014.
  The Company achieved financial closure during the year.
- e. Jiangsu Sterlite Tongguang Fiber Co. Ltd. (JSTFCL)
  The Company is a Joint Venture with Tongguang Group of
  China to set up an Optical Fiber Manufacturing Facility in
  China. During the year under review, JSTFCL commenced
  the production of optical fiber at their new facility located at
  Haimen, Jiangsu Province, China.
- f. Sterlite Display Technologies Private Limited (SDTPL) The Company is currently exploring various growth opportunities including liquid crystal displays (LCDs) glass manufacturing and other related products.

#### g. Sterlite Networks Limited (SNL)

SNL is providing shared last mile infrastructure for Broadband connectivity, dark fiber and duct space leasing, tower fiber connectivity, backhaul connectivity, wifi — hot spots, DAS / IBS etc. Under the FiON™ brand, SNL has created FTTX infrastructure in 6 major cities pan-India, connecting over 70,000 homes, serving 6500 subscribers from all major Telecom Service Providers like Airtel, Tata, Spectranet, etc.

SNL, in less than 2 years of its existence, has filed 14 domestic and 5 international applications for patents. Several other Intellectual Property applications are in pipeline.

#### h. Maharashtra Transmission Communication Infrastructure Limited (MTCIL)

MTCIL, incorporated in August 2012, is a Joint Venture (JV) between Maharashtra State Electricity Transmission Company Limited (MSETCL). MTCIL which is held 51% by your Company, was formed with the objective of

- establishing an OPGW-based communication network over MSETCL's EHV transmission infrastructure in the state of Maharashtra.
- i. Sterlite Global Ventures (Mauritius) Limited (SGVML) SGVML holds downstream investment of the Company made in Jiangsu Sterlite Tongguang Fiber Co. Ltd.
- j. Sterlite Technologies Americas, LLC (STA) STA is a limited liability company set up in USA to carry the business operations in USA.

#### k. Sterlite Technologies Europe Ventures Limited -Cyprus (STEVL)

STEVL, incorporated in Cyprus is a wholly owned subsidiary of the Company, with an objective to carry on business operations in the European Union.

#### **CORPORATE SOCIAL RESPONSIBILITY**

The Company decided to have a dedicated set-up in the form of charitable trust, to carry-on the CSR activities and accordingly constituted a trust viz. 'Sterlite Tech Foundation'. The trust principally works in the fields of education for the under privileged, women-empowerment by giving vocational training for those below poverty-line. The Annual report contains a special write-up on the CSR activities of the Company.

#### **ACCOUNTS**

In terms of the directions under Section 212(8) of the Companies Act, 1956, issued by the Ministry of Corporate Affairs vide General Circular No. 2/2011 dated February 8, 2011 granting general exemption from applicability of Section 212 of the Companies Act, 1956 in relation to subsidiaries; copies of the Balance Sheet, Profit & Loss Account, Report of the Board of Directors and the Report of the Auditors of the Subsidiary Companies have not been attached with the Balance Sheet of the Company.

The Company undertakes that the annual accounts of the subsidiary companies and the related detailed information will be made available, upon request, to the members seeking such information at any point of time. The annual accounts of the subsidiary companies will also be kept for inspection by any member at registered office at Sterlite Technologies Limited, Survey No 68/1, Rakholi Village, Madhuban Dam Road, Silvassa-396230, Union Territory of Dadra and Nagar Haveli, India. The Company shall furnish a hard copy of details of accounts of subsidiaries to any shareholder on demand. The annual accounts of the subsidiary companies will also be available on the Website of the Company www. sterlitetechnologies.com.

The consolidated financial statements, in terms of Clause 32 of the Listing Agreement and in terms of Accounting Standard 21 as prescribed by Companies (Accounting Standards) Rules, 2006 issued by Ministry of Corporate Affairs, Disclosure on "related party transaction", duly audited by Statutory Auditors, also forms part of this Annual Report.

#### **DIRECTORS' SPEAK**

Further, physical (hard) copies of the statement containing the salient features of all the documents, as prescribed in sub-clause (iv) of clause (b) of proviso to Section 219 of the Companies Act, 1956, read with Clause 32 of the Listing Agreement, is being sent to all the shareholders of the Company who have not registered their e-mail address(es) for the purpose. Any shareholder interested in obtaining physical copies of full annual report may write to the "Company Secretary" at the Registered Office of the Company.

#### **EXPLANATION ON AUDITOR'S COMMENT**

The remark of Auditors at basis for Qualified Opinion paragraph of the Auditor's Report over Note No. 43 (A) in Notes to Accounts regarding demand of excise duty and penalty amounting to Rs. 188 Crores is self-explanatory and does not require further comment.

In the year 2004-05 CESTAT upheld the demand of ₹ 188 Crores and interest thereon for alleged breach of norms pertaining to Export Oriented Unit (EOU). The Company had filed an appeal before the Hon'ble High Court of Bombay against this order. The Department had also made an appeal against the same CESTAT order before the High Court of Bombay. The Company's appeal against this order was dismissed by the Hon'ble High Court on the grounds that appeal is not maintainable in High Court, however without prejudice to the rights of the Company. Subsequently, the Company had filed a Special Leave Petition (SLP) and appeal before the Supreme Court of India which was admitted by the Court. Hon'ble Supreme Court has also maintained the stay granted by Hon'ble High Court.

The Hon'ble Supreme Court considering that the departmental appeal against the CESTAT order was still pending before the High Court, disposed of the Special Leave Petition of the Company and directed that the records of the departmental appeal be transferred to the Supreme Court and both the Appeals i.e. Departmental Appeal as well as Civil Appeal of the Company be heard together by the Supreme Court.

Based on merits of the case and the legal opinion obtained, the management believes that the Company has a strong case and it has been carrying adequate provisions for contingencies in the Books of Account in this matter and does not require any further provisioning.

#### **FIXED DEPOSITS**

During the year, the Company has not accepted any deposits from the public or otherwise in terms of Section 58A of the Companies Act, 1956 read with Companies (Acceptance of Deposit) Rules, 1975.

#### **DIRECTORS**

During the year, the Company expanded the Board by adding two new Directors viz. Mr. C. V. Krishnan as an Independent Director and Mr. Pratik Agarwal as non executive director, who pertains to Promoter group. By virtue of Section 255 of the Companies Act, 1956 and the Articles of Association of the Company, Mr. Anil Agarwal and Mr. Haigreve Khaitan retire by rotation at the ensuing Annual General Meeting. A brief resume, expertise, shareholding in your Company and details of other directorships of these directors are given in the Corporate Governance Report.

#### MANAGEMENT DISCUSSION AND ANALYSIS

The Report on Management Discussion and Analysis has been attached and forms part of the Annual report.

#### **CORPORATE GOVERNANCE**

The Report on Corporate Governance along with the Certificate from the Statutory Auditors certifying the compliance of Corporate Governance enumerated in Clause 49 of the Listing Agreement with the Stock Exchanges is included in the Annual Report.

#### **DIRECTORS' RESPONSIBILITY STATEMENT**

Your Directors confirm that:

- i) In the preparation of the annual accounts, the applicable accounting standards have been followed;
- ii) They have selected such accounting policies and applied them consistently, and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at March 31, 2013 and of the profit of the Company for the financial year ended March 31, 2013;
- iii) They have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- iv) They have prepared the accounts on a "going concern" basis.

#### **AUDITORS**

M/s. S.R. Batliboi & Co. LLP, Chartered Accountants hold office till the conclusion of the forthcoming Annual General Meeting and being eligible, offer themselves for re-appointment. The Company has received intimation to the effect that, proposed reappointment, if made, would be within the prescribed limit under Section 224(1B) of the Companies Act, 1956.

The Company had appointed M/s. Ashwin Solanki & Associates, Cost Accountants to audit the cost accounts related to the Company's products, Electric Cables & Conductors and compliance report for other products of the Company for FY 2011-12. The due date for filing the above cost audit reports was February 28, 2013 as extended by Ministry of Corporate Affairs vide its circular dated January 31, 2013; the actual date of filing was January 30, 2013. The Company has reappointed M/s. Ashwin Solanki & Associates, Cost Accountants for the FY 2012-13

#### PARTICULARS OF CONSERVATION OF ENERGY, TECHNOLOGY **ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO**

The particulars of conservation of energy, technology absorption and foreign exchange earnings and outgo as prescribed under Section 217(1)(e) of the Companies Act, 1956 read with the Companies (Disclosures of Particulars in the Report of Directors) Rules 1988, is given as Annexure I and forms a part of the Directors' Report.

#### **PARTICULARS OF EMPLOYEES**

The particulars of employees as required under the provisions of Section 217(2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 2011 forms part of the Directors' Report. However, as per the provisions of Section 219 (1)(b)(iv) of the Companies Act, 1956, the report and the accounts are being sent to all shareholders of the Company excluding the aforesaid information. Any shareholder interested in obtaining such particulars may write to the Company Secretary at Registered Office of the Company.

#### **ACKNOWLEDGEMENT**

Your Directors take on record their sincere appreciation to the contributions made by the employees through their hard work, dedication, competence, support and co-operation towards the progress of your Company. Your Directors are also thankful for consistent co-operation and assistance received from its investors, business associates, customers, vendors, bankers, regulatory and government authorities.

For and on behalf of the Board of Directors

**Pravin Agarwal** 

Whole-time Director

Place: Mumbai Date: April 26, 2013 **Anand Agarwal** CEO & Whole-time Director

# Annexure I to the Directors' Report

Particulars of Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo as per Section 217 (1) (a) of the Companies Act, 1956 read with Companies (Disclosure of Particulars in the report of Directors) Rules, 1988 for the year ended March 31, 2013.

#### 1. CONSERVATION OF ENERGY

### A. The Company adopted the following measures on energy conservation:

- Conservation in electricity consumption: Implementation of various energy saving mechanisms such as installation of CFL lamps, additional capacitors, auto timers for airconditioning and street lighting. Additional mechanisms were implemented to effectively curtail energy losses such as the installation of power meters, etc.
- ii) Optimisation of energy consumption: Various power audits were done internally and with external consultants to assess energy consumption during various manufacturing sub-processes and to optimise the same by reengineering. Energy audit and mapping of carbon footprint is also undertaken at the plant level. Improvements in UV curing as well as installation of energy efficient dry scrubber. Machine modifications to conserve energy consumption included redesign of cooling tower water supply systems, replacement of DC motors with AC motors, improved control systems on compressed air reduction on various manufacturing lines, to state a few. There has also been a reduction in Natural Gas consumption.
  - The power conductor facility at Haridwar has obtained ISO 14000/0SHAS 18000 accreditation from SAI GLOBAL Australia in January 2013.
- iii) Conservation of furnace oil: Various engineering and process efficiency improvements were implemented across locations; for example the power conductor's facility at Rakholi started usage of Natural Gas as an alternative fuel to furnace oil. Consumption of furnace oil reduced by 400 Ton per month; improved Grid power utilisation at Dadra plant.

# B. Additional investments and proposals, if any, being implemented for reduction of energy consumption:

- Installation of UPS backup for final goods production machine, resulting in reduction of cable scrap and any rework due to abrupt power failures; installation of on line temperature recorders for ageing furnaces to improve efficiency and reduce power consumption.
- ii) In rolling mill section fixing of polycarbonate sheet on side wall to increase in Lux level
- Detailed review of power distribution system, compressed air system, chilled water system, extruders and heaters, and plant lighting system to identify and implement

improvements to reduce consumption of power, implementation of various energy saving mechanisms.

#### 2. TECHNOLOGY ABSORPTION

#### A. Specific areas in which the Company carried out R&D:

- Development of Dry-Dry i.e. totally gel-free cables, suitable for duct, aerial (LA) and direct buried as well as indoor/outdoor applications UT (UniTube) and MT (Multitube) designs.
- ii) Development of specialised conductor products such as ACCC conductor and GAP Conductor.
- Development of Ribbon cables UT up to 144F and MT up to 864F; Microcables with G655 for special applications (OFC Silvassa); Defence / Tactical cables like "Intrusion proof" (Cable with sensor fiber layer)
- Development of Hybrid drums to eliminate wood consumption in packaging.

#### B. Benefits derived as a result of above R&D

Benefits to customers:

- i) Higher fiber count cables further reduced installation costs with Ribbon and totally Gel-free cables.
- Reduction in chances of damage during transport by hybrid drum
- iii) Shelf of packing material and finished goods increased by hybrid packing
- Higher ampacity conductors offer superior thermal resistance and improve the efficiency in high current transmission
- Microduct fiber optic cables save about 8% of the total capex for the customer, on account of reduced installation costs
- vi) Bend insensitive fibers will help end-customers access the phenomenal capacity of optical fiber for in-home and/or business applications such as high-definition video, high speed Ethernet and a superior Internet experience at affordable rates

#### Benefits to Sterlite

- i) Optical fiber cables product portfolio expanded
- ii) Introduction of specialised products has enabled the Company to gain market access through product differentiation.
- iii) The introduction of a differentiated portfolio of optical fiber products has provided the Company opportunities to access higher revenues as well as margins via different segments of a fast-growing Telecom market.

#### C. Future plan on R&D

- Further reduction in size of microcables for improved installation / blowing performance and duct utilisation.
- Develop micromodule based product lines; flexible and easy access fiber modules.

- iii) Develop OFC Datacom / Premise cables product lines with tight buffers and other fiber units for Indoor/Outdoor applications.
- iv) Develop FTTA / DAS cable solutions, only Fiber or Hybrid Copper and Fiber designs.
- v) Focus on improving efficiency of manufacturing processes of existing product lines.
- vi) Develop products that would serve the needs of customers' product deployment and applications.
- vii) Proactively assess future market applications and initiate development of products to meet customers' future needs.
- viii) The Center of Excellence at Aurangabad is well under way in terms of organization and capability building.
- ix) Applications Engineering capability will be developed to help the Company to understand its customer's unmet needs and gain customer traction.

#### D. Expenditure of R&D

i) Capital: Nil

ii) Recurring: Rs 7.66 Crores

iii) Total: Rs 7.66 Crores

iv) Total R&D expenditure as a percentage of total turnover: 0.23%

#### 3. TECHNOLOGY ABSORPTION, ADOPTION AND INNOVATION

i) Efforts, in brief, made towards technology absorption, adoption and innovation:

The technology used for manufacture of various products of the Company is fully absorbed and new innovations in process control, product development, cost reduction and quality improvements are being made on a continuous basis.

 Benefits derived as a result of the efforts e.g., product improvement, cost reduction, product development:

The Company is engaged in that business where product obsolescence is inherent. Power through open access technology absorbed, adopted and innovative means of power purchase through Bilateral trading incorporated, resulting in savings of Rs 1.6 Crore per month of power cost.

Baghouse Technology for collection of SiO2 adopted, creating green environment and opportunity to generate revenue from waste.

Multistage HCL wet scrubbing system to control very stringent environmental norms, this technology not only support emission controls in PPM but also support to create green environment by utilising minium natural resources like water.

Installation of Flowmeters on Gas delivery system to check excess consumption and leakages, this is leading to saving of Rs. 4.8 Cr/Year.

In-house SiCl4 generation (backward integration) has resulted in savings of Rs. 3.7 Cr/ Month.

iii) Information regarding technology imported during the last5 years: The Company has not imported any technology.

#### 4. FOREIGN EXCHANGE EARNING AND OUTGO

Discussion on activities relating to development of exports is covered in Directors' Report and Management Discussion & Analysis Report.

Foreign Exchange Earned: Rs 952.99 Crores

Foreign Exchange Outgo: Rs 75.81 Crores

The Company does not fall in the list of industries which are required to give details of power and fuel consumption as per "Form A" of Companies (Disclosure of Particulars in the Report of Directors) Rules, 1998.

Annexure II to the Directors' Report
Statement as on March 31, 2013 for Employee Stock Option Scheme, 2006 and 2010 as required under Clause 12 of the Securities and Exchange Board of India (Employees Stock Option Scheme and Employees Stock Purchase Scheme) Guidelines, 1999.

Sr. No.	Particulars	2006 Scheme		2010 Scheme	
1	Options Granted	Total 69,46,750 options were granted as on March 31, 2013 the details of which are as follows		Total 48,92,800 options were granted as on March 31, 2013 details of which are as follows	
		Date of Grant	No. of Options	Date of Grant	No. of Options
		14.06. 2006	23,28,500	29.12.2011	22,24,000
		19.03 2007	6,36,000	27.07.2012	26,68,800
		28.09.2007	13,07,750		
		14.06.2008	2,55,500		
		26.06.2009	24,19,000	<u></u>	
2	Pricing formula	Options ves	st at a nominal value	i.e. ₹ 2 per optior	
3	Options vested	27,59,438			3,67,660
4	Options exercised	27,16,300			N.A.
5	Total number of ordinary shares arising				
	as a result of exercise of Options	27,16,300			N.A.
6	Options Lapsed	39,13,170			41,64,230
7	Variation of terms of option	None			None
8	Money raised by exercise of option	₹ 27,16,300 /-			N.A.
9	Total number of options in force*	3,17,280			7,28,570
10	Employee-wise details of options granted to				
l.	Number of options granted to Senior Managerial Personnel				
١.	Dr. Anand Agarwal	3,79,500			1 00 000
	_	3,7 3,500			1,00,000
	CEO & Whole-time Director				
II.	Any other employee who receives a grant in any one year of option amounting to 5% or more of option granted during that year.	None			None
III.	Identified employees who were Options during any one year, equal to or exceeding 1% of issued capital (excluding outstanding warrants and conversions) of the Company at the time of grant.	None			None
11	Diluted earnings per share pursuant to issue of ordinary shares on exercise of Options calculated in accordance with Accounting Standard (AS) 20 "Earnings Per Share)	₹1.20			₹1.20
12	Method of Calculation of Employee Compensation Cost			l	
	The Company has used fair market value method for calcul Pricing Model.	ation of compensa	ation cost, using the	Black Scholes Op	tion
13	Weighted average exercise price and weighted average fair values of Options granted for options whose exercise price either equals or exceeds or is less than the market price of the stock.  Weighted Average exercise price (per option)  Weighted Average Fair value (per option)	₹2 ₹35.23			₹2 t1-₹25.87 1-₹29.77
14	A description of method and significant assumptions				
	used during the year to estimate the fair values of options.	1			
	The fair value of each option is estimate using the Black Scholes Option Pricing model after applying following weighted average Assumptions.				
		Grant V		Grant I	Grant II
	<ol> <li>Risk Free Interest rate (%)</li> <li>Expected Life (yrs)</li> <li>Expected Volatility (%)</li> <li>Expected Dividend Yield (%)</li> <li>The price of underlying share at the time of grant (₹)</li> </ol>	6.05 1.5 77.57 0.60 35.23		8.33 1.5 48.31 0.73 25.87	8.04 1.5 53.93 0.79 29.77
	5. The price of underlying share at the time of grant (マ)	35.23		25.87	29.

<sup>\*</sup>Includes options vested but not exercised and unvested as on March 31, 2013

# Corporate Governance Report

## I. PHILOSOPHY OF THE COMPANY ON CODE OF GOVERNANCE

Corporate Governance represents the value, ethical and moral framework under which business decisions are taken. The investors want to be sure that not only is their capital handled effectively and adds to the creation of wealth, but the business decisions are also taken in a manner which is not illegal or involving moral hazard. All actions and strategic plans are directed towards delivering value to all stakeholders, as well as conform to the highest standards of corporate behavior. Your Company perceives good corporate governance practices as a key to sustainable corporate growth and long-term shareholder value creation. The primary objective is to develop and adhere to a corporate culture of harmonious and transparent functioning, increasing employee and client satisfaction and enhancing shareholders' wealth by developing capabilities and identifying opportunities that best serve the goal of value creation. All actions and strategic plans are directed towards delivering value to all stakeholders, as well as conform to the highest standards of corporate behavior. Excellence is our only core value.

#### II. BOARD OF DIRECTORS

The Board of Directors consists of two Whole-time Directors and four Non-Executive Directors. Three Non-Executive Directors are also Independent Directors. Mr. Anil Agarwal is non-executive Chairman. In the absence of Mr. Anil Agarwal, the meetings are chaired by Mr. Pravin Agarwal, Whole-time Director. The Board composition is in compliance with the requirements of Clause 49 I (A) of the Listing Agreement, requiring that not less than half the Board of Directors should consist of Independent Directors. All the Independent Directors have confirmed that they meet the 'independence' criteria as mentioned under Clause 49 of the Listing Agreement. None of the Directors on the Company's Board is a Member of more than ten Committees and Chairman of more than five Committees (Audit Committee and Investors' Grievance Committee) across all companies in which he is a Director. All the Directors have made necessary disclosures regarding Committee positions and Directorship held by them in other companies. All Non-Executive Directors are liable to retire by rotation. The appointment of the Whole-time Directors, including the tenure and terms of remuneration are also approved by the members. The required information as enumerated in Annexure IA to Clause 49 of the Listing Agreement is made available to the Board of Directors for discussions and consideration at Board

The Company has a three-tier governance structure:

Strategic supervision	The Board of Directors occupies the topmost tier in the governance structure. It plays a role of strategic supervision that is devoid of involvement in the task of strategic management of the Company. The Board lays down strategic goals and exercises control to ensure that the Company is progressing to fulfill stakeholders' aspirations.
Strategic management	The Executive Committee is composed of the senior management of the Company and operates upon the directions of the Board at the company level.
Executive management	The function of the Management Committee is to execute and realise the goals that are laid down by the Board and the Executive Committee at the business unit level.

Your Company is continuously striving to attain excellence in products, facilities, packaging and transportation, accompanied by excellent documentation and backed by client service. Similar to our personal performance monitoring, wherein our focus is towards being outstanding or excellent, all our products and business processes need to be 'Excellent' - first in our own perception, and then in our customers' perception. So, as we move forward, 'Excellence' will be the unique value for Sterlite - which drives us, and against which we measure ourselves.

Meetings. The Board reviews the declaration made by the Chief Executive Officer regarding compliance with all applicable laws on a quarterly basis as also steps taken to remediate instances of non-compliance. Chief Executive Officer and Chief Financial Officer have certified to the Board in accordance with Clause 49V of the Listing Agreement pertaining to CEO and CFO certification for the Financial Year ended March 31, 2013. During the financial year 2012-13, eight meetings of the Board of Directors were held on April 26, 2012; June 21, 2012; July 27, 2012; October 5, 2012; October 26, 2012, January 28, 2013, March 14, 2013 and March 30, 2013. The maximum time-gap between any two consecutive meetings did not exceed four months. The composition of the Board of Directors, attendance of the Directors in Board Meetings and Annual General Meeting and their shareholding details in the Company are as follows:

Name	Designation	Board Meetings attended	Attendance at the Last AGM	Directorships in other Companies <sup>1</sup>	Committee Memberships (Chairmanships) in other Companies <sup>3</sup>	Number of shares held in the Company
Anil Agarwal	Non-Executive Chairman	00	No	04	Nil	Nil
Arun Todarwal <sup>2</sup>	Non-Executive	08	Yes	08	06	925
Haigreve Khaitan <sup>2</sup>	Non-Executive	00	No	15	09	Nil
A. R. Narayanaswamy <sup>2</sup>	Non-Executive	08	Yes	06	01 (02)	Nil
Pravin Agarwal	Whole-time Director	08	Yes	03	Nil	30,000
Anand Agarwal	CEO & Whole-time Director	07	No	02	Nil	1,73,840

- 1 All public, private, foreign, Section 25 Companies are included.
- 2 Independent Directors.
- 3 Includes only Audit and Investors' Grievance Committees. DIRECTORS WITH MATERIALLY SIGNIFICANT, PECUNIARY OR

#### **BUSINESS RELATIONSHIP WITH THE COMPANY**

As required under Accounting Standard 18, transactions with related parties are furnished under Note 44 of Notes to the Accounts. There are no transactions of material nature with the Promoters, Directors or their relatives, etc that may have potential conflict with the interest of the Company. Disclosures have been received from Directors and Senior Management relating to the financial transactions in which they or their relatives may have personal interest. However, none of these transactions have a potential conflict with the interest of the Company at large.

#### III. COMMITTEES OF THE BOARD

#### **AUDIT COMMITTEE**

The Company has the Audit Committee constituted in accordance with the requirements of Section 292A of the Companies Act, 1956 and Clause 49 (II) of the Listing Agreement entered into with the Stock Exchanges. The primary objective of the Audit Committee of the Board of Directors of a Company is to discharge responsibilities relating to accounting and reporting of financial practices adopted by the Company and its subsidiaries, surveillance of internal control systems as well as accounting and audit activities.

The terms of reference of the Audit Committee include:

- 1. Review of the Company's financial reporting process and the disclosure of its financial information.
- 2. Reviewing the adequacy of internal audit function, the structure of the internal audit department, reporting structure coverage and frequency of internal audit.
- Recommending the appointment and removal of statutory auditor and the fixation of audit fees and other related payments.
- Reviewing, with the management, the annual financial statements before submission to the board for approval, focusing primarily on:
  - Matters required to be included in the Director's Responsibility Statement to be included in the Board's report.

- Compliance with accounting standards and changes in accounting policies and practices and reasons for the same.
- Major accounting entries involving estimates based on exercise of judgment by Management.
- d. Audit Qualifications and significant adjustments arising out of audit.
- e. Compliance with listing and other legal requirements relating to financial statements.
- f. Disclosure of any related party transactions.
- 5. Reviewing, with the management, the statement of uses/ application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilised for purposes other than those stated in the offer document/prospectus/notice and the report submitted by the monitoring agency monitoring the utilisation of proceeds of a public or rights issue, and making appropriate recommendations to the Board to take up steps in this matter.
- Reviewing with management, the periodical financial statements.
- 7. Reviewing with the management, external and internal auditors, the adequacy of internal control systems, frequency of internal audit, significant findings by internal auditors and follow up there on.
- Discussion with external auditors, nature and scope of audit as well as have post-audit discussions.
- Reviewing the Company's financial and risk management policies.
- 10. Reviewing Whistle Blower Mechanism.
- 11. Reviewing Management Discussion and Analysis Report, Statement of significant related party transactions submitted by the management; Management letters/letters of internal control weaknesses issued by the statutory auditors, if any; Internal audit reports relating to internal control weaknesses.

- Reviewing of financial statements and investments made by subsidiary companies.
- Look into the reasons for any substantial defaults in payment to the depositors, debenture holders, shareholders (in case of non-payment of declared dividend) and creditors, if any;
- 14. Reviewing the effectiveness of the system for monitoring compliance with laws and regulations.
- 15. Approving the appointment of CFO after assessing the qualification, experience and background etc of the candidate.

#### **COMPOSITION AND MEETINGS**

The Audit Committee comprises three Non-Executive Directors who are independent and one Executive Director. The representatives of internal and statutory auditors are permanent invitees of the Audit Committee. Mr. Arun Todarwal, Chairman of the Committee (Non-Executive, Independent Director) is a Chartered Accountant and has accounting and financial expertise. The other Committee members are financially literate. The quorum of the Committee is two members or one-third of its members, whichever is higher which should include two independent directors.

The Chairman of the Audit Committee also attended the last Annual General Meeting of the Company. The Audit Committee met four times during the year 2012-13 on April 26, 2012; July 27, 2012; October 26, 2012 and January 28, 2013. The Composition of the Audit Committee and attendance at committee meetings is as follows:

Name	Category	Number of Meetings attended
Arun Todarwal (Chairman)	Non-Executive & Independent	04
Haigreve Khaitan	Non-Executive & Independent	Nil
A. R. Narayanaswamy	Non-Executive & Independent	04
Pravin Agarwal	Whole-time Director	04

The Committee meetings are usually attended by the Executive Directors, the Statutory Auditor, Internal Auditor and CFO. The Business and Operation Heads are also invited to the meetings, as required. The Company Secretary acts as the Secretary to the Audit Committee. The Internal Audit function reports to the Audit Committee to ensure its independence.

#### **REMUNERATION / COMPENSATION COMMITTEE**

The Remuneration/Compensation Committee discharges Board's responsibilities relating to compensation of Company's Executive Directors. The Committee has an overall responsibility for approving and evaluating the compensation plans, policies and programs of the Executive Directors. This Committee has also been empowered to administer Employees Stock Option Scheme, 2006 and 2010 of the Company.

#### **COMPOSITION AND MEETINGS**

The Committee comprises three Non-Executive Directors, who are Independent. Mr. Arun Todarwal is the Chairman of the Committee. The Chairman of the Remuneration Committee was present at the last Annual General Meeting. The Committee met three times during the year 2012-13 on July 27, 2012, October 26, 2012 and January 28, 2013. The Composition of the Remuneration/Compensation Committee and attendance at Committee meetings is as follows:

Name	Category	Number of Meetings attended
Arun Todarwal (Chairman)	Non-Executive & Independent	03
Haigreve Khaitan	Non-Executive & Independent	Nil
A. R. Narayanaswamy	Non-Executive & Independent	03

#### **DETAILS OF REMUNERATION PAID TO THE DIRECTORS**

Mr. Pravin Agarwal and Dr. Anand Agarwal are the two Executive Directors of the Company. Mr. Pravin Agarwal was appointed as Whole-time Director of the Company for a period of 3 years with effect from October 30, 2012. As per the terms of appointment, the agreement can be terminated by giving 90 days notice or equivalent pay by either of the sides. Dr. Anand Agarwal was appointed as Whole-time Director and designated as Chief Executive Officer of the Company for a period of 3 years with effect from July 30, 2012. As per the terms of appointment, the agreement can be terminated by giving 90 days notice or equivalent pay by either of the sides.

A sitting fee of Rs. 20,000/- for attendance at each meeting of the Board and Rs. 10,000/- for Audit Committee, Investors' Grievance Committee and Remuneration/Compensation Committee is paid to its Members (excluding Executive Directors). The remuneration by way of commission to the non-executive directors is decided by the Board of Directors and distributed to them based on their participation and contribution at the Board and certain Committee meetings as well as time spent on operational matters other than at meetings. On September 20, 2011, the Members had approved the payment of remuneration by way of commission to the Non-Executive directors of the Company, of a sum not exceeding 1% per annum of the net profits of the Company, calculated in accordance with the provisions of the Companies Act, 1956, for a period of 5 years commencing from Financial Year 2011-12. The break-up of remuneration actually paid to directors (excluding provisions, if any) during FY 2012-13 is as follows

(₹ In Lacs)

Director	Salary/ Perquisites	Incentives/ Commission	Sitting Fee	Total
Anil Agarwal	-	-	-	-
Arun Todarwal	-	6.00	2.70	8.70
Haigreve Khaitan	-	3.00	-	3.00
A. R. Narayanaswamy	-	6.00	2.70	8.70
Pravin Agarwal	295	60.00	-	355
Anand Agarwal	197	50.00	-	247

#### Notes:

- 1. Under ESOP-2006 Scheme, Dr. Anand Agarwal was granted 1,73,000 Stock options in June 2009, each option convertible in one equity share of Rs.2 each. Out of these, 1,38,400 options are eligible for vesting during a period of five years, as per the scheme. During the year under review, 13,840 options vested, in respect of which equal number of shares were allotted to Dr. Anand Agarwal, upon exercise.
- 2. Under ESOP 2010 Scheme, Dr. Anand Agarwal was granted 1,00,000 Stock Options in December 29, 2011 were each option convertible in one equity share of Rs.2 each. Out of these, 30,000 options are eligible for vesting during the period of five years, as per the scheme.

#### SHAREHOLDERS' /INVESTORS' GRIEVANCES COMMITTEE

The Shareholders'/Investors' Grievances Committee oversees redressal of shareholders' grievances. The Committee comprises Mr. A. R. Narayanaswamy (Chairman), Mr. Arun Todarwal and Mr. Pravin Agarwal as the members. The Company Secretary is the Compliance Officer of the Committee. The Committee met four times during the year 2012-13 on April 26, 2012; July 27, 2012; October 26, 2012 and January 28, 2013. During the year the Company received 340 complaints for various matters like non-receipt of share certificates, non-issue of duplicate certificates, rejection of demat request, etc. All the complaints were resolved by the Company to the satisfaction of investors.

The details of Committee meetings and attendance of Directors are as under:

Name	Category	No of meetings attended
A. R. Narayanaswamy (Chairman)	Non-Executive & Independent	04
Arun Todarwal	Non-Executive & Independent	04
Pravin Agarwal	Whole-time Director	04

#### IV. SUBSIDIARY COMPANIES

The Company does not have any material non-listed subsidiary company and hence, it is not required to have an Independent Director of the Company on the Board of such subsidiary company.

Significant issues pertaining to subsidiary companies are also discussed at Audit Committee meetings. Apart from disclosures made in the Directors' Report there were no strategic investments made by the Company's non-listed subsidiaries during the year under review. The performance of all its subsidiaries is also quarterly reviewed by the Board. The minutes of all the subsidiary companies are placed before the Board of Directors of the Company and the attention of the Directors is drawn to significant transactions and arrangements entered into by the subsidiary companies.

#### V. PROFILE OF DIRECTORS TO BE REAPPOINTED

Director & Profile	Date of Birth	Date of joining the Board of the Company	Shareholding in the Company either in his own name or in the name of others and having beneficial interest, as on March 31, 2013	Directorships including Memberships and Chairmanships of Committees
Mr. Anil Agarwal:  Mr. Anil Agarwal founded Sterlite Group in 1976 and has been overseeing the operations since its inception. He is the Executive Chairman of the Vedanta Resources PLC. He has over 30 years of experience in business strategy, general management and commercial matters.	September 7, 1952	October 30, 2006	Nil	Sterlite Industries (India) Limited (Remuneration Committee - Member)     Vedanta Resources PLC, UK     Anil Agarwal Foundation     Onclave Ptc Limited
Mr. C. V. Krishnan: Mr. C. V. Krishnan is a B.Tech. from IIT- Madras and an MBA from IIM Ahmedabad . Mr. Krishnan has profound experience across various sectors as President/Managing Director/CEO of large organizations like E.I.D Parry (India) Limited, Essar Power Limited , Sterlite Industries (India) Limited and its subsidiaries. His areas of expertise include organisational turnaround, transformation management, corporate growth and financial management.	March 9, 1950	April 26, 2013	Nil	Vedanta Medical Research Foundation
Mr. Pratik Agawal:  Mr. Pratik Agarwal is a graduate in Business Administration from The Wharton School, University of Pennsylvania, and has an MBA from London Business School.  Mr. Pratik Agarwal has founded the group's Infrastructure initiative in 2009 with significant investments in ports, power transmission and broadband networks. Under his leadership, the Group entered the power transmission business and has bagged 3 projects worth over Rs. 4000 Crores. As one of the largest private developers in power transmission sector, and being one of the early entrants, Sterlite Grid is now poised to emerge as a leading developer of Power transmission systems in India, and help the country in creating a robust grid.	December 2, 1982	April 26, 2013	1,81,140	1. Sterlite Infra-ventures Limited 2. Sterlite Ports Limited 3. Sterlite Networks Limited 4. Sterlite Grid Limited 5. Vizag General Cargo Berth Private Limited 6. Paradip Multi Cargo Berth Private Limited

#### THE AGE OF GOVERNANCE

Mr. Haigreve Khaitan:  Mr. Haigreve Khaitan is a Partner of Khaitan & Co., a leading law firm and holds a bachelors degree in Legislative Laws. He has varied experience in commercial and corporate laws, tax laws, mergers and acquisitions, restructuring, foreign coloration, licensing etc.	July 13, 1970	July 30, 2003		1.Ambuja Cements Limited 2. Bajaj Corp Limited - Remuneration Committee (Member) 3. Ceat Limited 4. Firstsource Solutions Limited 5. Harrisons Malayalam Limited - Remuneration Committee (Member), Audit Committee (Member) 6. Inox Leisure Limited - Remuneration Committee (Member), Audit Committee (Member) 7. JSW Ispat Steel Limited - Audit Committee (Member) Share transfer and Investor Grievance Committee (Member) 8. Jindal Steel and Power Limited - Audit Committee (Member) 9. National Engineering Industries Limited - Audit Committee (Member), Investors Grievance Committee (Member), Remuneration Committee (Member), 10. The West Coast Paper Mills Limited 11. Torrent Pharmaceuticals Limited - Audit Committee (Member) 12. Xpro India Limited 13. AVTEC Limited - Audit Committee (Member) 14. Great Eastern Energy Corporation Limited - Remuneration Committee (Member)
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#### **VI. GENERAL BODY MEETINGS**

Details of last three Annual General Meetings Date	Location	Time	Special Resolutions Passed
July 14, 2010	E-1, Waluj MIDC Industrial Area, Aurangabad 431136 Maharashtra, India	11:00 am	Approval of employee stock option scheme 2010
Sept. 20, 2011	Survey No. 68/1, Madhuban Dam Road, Rakholi – 396230, Union of Territory of Dadra & Nagar Haveli, India.	12:30 pm	Payment of Commission to Non — Executive Directors.
Sept 12, 2012	Survey No. 68/1, Madhuban Dam Road, Rakholi – 396230, Union Territory of Dadra & Nagar Haveli, India.	12:30 pm	<ul> <li>Appointment of Mr. Pravin Agarwal as Whole-Time Director.</li> <li>Appointment of Dr. Anand Agarwal as Whole-Time Director</li> </ul>

All resolutions moved at the last Annual General Meeting were passed by a show of hands by the requisite majority of members attending the meeting. None of the items to be transacted at the ensuing meeting is required to be passed by postal ballot.

Details of resolutions passed by Postal Ballot - None of the transactions during the Financial Year 2012-13 were required to be passed through Postal Ballot.

#### VII. DISCLOSURES

### i) Disclosures on materially significant related party transactions

There were no transactions with the Promoters, Directors and management during the period, which would have potential conflict with the interests of the Company at large.

- ii) Details of non-compliance by the Company, Penalties and Strictures imposed on the Company by Stock Exchange, SEBI or any Statutory Authorities or any matter related to capital market in the last three years.
- The Company has adopted a 'Whistleblower Policy', which has been communicated to all employees along with Code of Business Conduct & Ethics. The Whistleblower policy is the mechanism to help the employees to raise their concerns about any malpractice, impropriety, abuse or wrongdoing at an early stage and in the right way, without fear of victimization, subsequent discrimination or disadvantage. The policy encourages the employees to raise concerns within the Company rather than overlooking a problem. All Complaints under this policy are reported to the Director -Management Assurance, who is independent of operating management and businesses. 'Complaints' can also be sent to the designated E-Mail ID: stl.whistleblower@vedanta. co.in. The Director - Management Assurance reviews the 'Complaint', and may investigate it himself or may assign another person to investigate, or assist in investigating the 'Complaint'. At least once in every six months and whenever else as deemed necessary, Director - Management Assurance submits a report to the Audit Committee and any other member of Company management that the Audit Committee directs to receive such report, that summarises each 'Complaint' made within the last 12 months. The Whistleblower Policy also contains mechanism of redressal available for an employee, if he/she feels that he/she has been retaliated against due to disclosure of concern. No person has been denied access to the Audit Committee. The Whistleblower policy has also been extended to external stakeholders like vendors, customers, etc.
- iv) The Company has complied with all the mandatory requirements of Clause 49 of the Listing Agreements executed with the Stock Exchanges. Comments on adoption of non-mandatory requirements are given at the end of this report.

#### **VIII. IMPLEMENTATION OF CODE OF CONDUCT**

The Company has amended its 'Code of Business Conduct & Ethics' to meet the changing internal and external environment for its employees at all levels including Senior Management and Directors. The Code has also been posted on the Company's website www.sterlitetechnologies.com. The Code serves as a guide to the employees of the Company to make informed and prudent decisions and act on them. As required under Clause 49 of the Listing Agreement, the affirmation of compliance with the Code from Directors and Senior Management personnel has been obtained for this financial year. Further, the Company is committed to maintaining a productive environment for all its employees at various levels in the organization, free of sexual

harassment & discrimination on the basis of gender. Towards this, the Company has framed the 'Policy on prevention and prohibition of sexual harassment'

## IX. COMPLIANCE WITH SEBI (PROHIBITION OF INSIDER TRADING) REGULATIONS, 2002

Considering the amendments to these Regulations in 2008, the Board of Directors in their meeting held on October 20, 2009 had approved amended code of conduct namely 'Code of Conduct for Prevention of Insider Trading and the Code of Corporate Disclosure Practices' for Directors, Officers and Designated Employees for dealing in shares of the Company. The amended Code is being implemented with effect from October 20, 2009. Various forms have been designed to receive periodical information from the Directors, Officers and Designated Employees of the Company, as required in terms of these Regulations. Further, the Trading Window for dealing in shares of the Company has been closed for the Directors and employees of the Company as per the Insider Trading Code in force in the Company.

#### X. SECRETARIAL AUDIT

- Pursuant to Clause 47(c) of the Listing Agreement with the Stock Exchanges, certificates, on half yearly basis, have been issued by a Company Secretary-in-Practice for due compliance of share transfer formalities by the Company.
- A qualified Practicing Company Secretary carried out a Secretarial Audit to reconcile the total admitted capital with NSDL and CDSL and the total issued and listed capital. The audit confirms that the total issued/paid up capital is in agreement with the aggregate of the total number of shares in physical form and the total number of shares in dematerialised form (held with NSDL and CDSL).

#### XI. MEANS OF COMMUNICATION

- Quarterly Financial Results are published in English in the All-India Edition of *The Business Standard* or *The Economic Times* and are also published in Gujarati or English, in the Surat Edition of *Divya Bhaskar*.
- Results are also posted on the Company's website: www.sterlitetechnologies.com
- The Company also displays official news releases and the presentations made to institutional investors or to analysts on the website.
- Management Discussion & Analysis is a part of the Annual Report.

#### XII. GENERAL SHAREHOLDER INFORMATION

Annual General Meeting

Day, Date: Tuesday Aug 6, 2013

Time: 12.30 pm

Survey No. 68/1, Rakholi Village,
Madhuban Dam Road, Silvassa —
396230 Union Territory of Dadra
& Nagar Haveli, INDIA

#### THE AGE OF GOVERNANCE

Book Closure Dates:	Wednesday, July 31, 2013 to Tuesday, August 6, 2013	
	(both days inclusive)	
Dividend Payment Date:	Dividend, if declared in the Annual General Meeting will be paid within the statutory time limits.	

# Financial Calendar for financial year 2013-14 (Financial Year – Ending March 31)

First Quarter Results	End of July 2013
Half Yearly Results	End of October 2013
Third Quarter Results	End of January 2013
Fourth Quarter/Annual Results	End of April 2013

#### Listing of shares on Stock Exchanges

The equity shares of the Company are listed on Bombay Stock Exchange Limited and National Stock Exchange of India Limited. Annual listing fees for the financial year ended March 31, 2013 have been paid to Bombay Stock Exchange Limited and National Stock Exchange of India Limited. The Stock Codes of the Exchanges are as under:

Exchange	Code	
BSE	532374	
NSE	STRTECH	

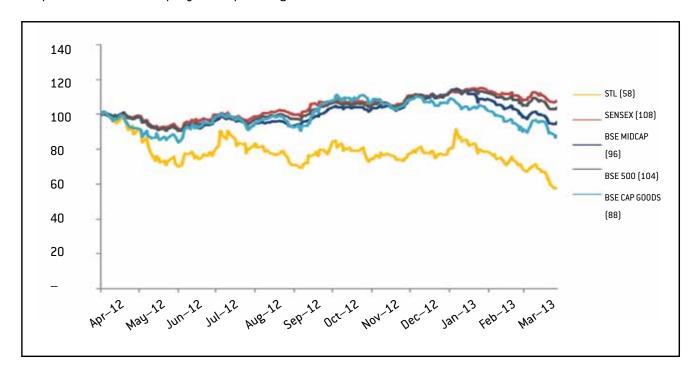
#### **Stock Price Data**

Stock Price data for the period April 1, 2012 to March 31, 2013 is as detailed below:

MONTH	Monthly High (₹) NSE	Monthly Low (₹) NSE	Monthly High (₹) BSE	Monthly Low (₹) BSE	
Apr-12	41.45	34.95	41.40	34.70	
May-12	37.10	27.60	37.15	27.75	
Jun-12	32.40	27.70	33.00	27.70	sites
Jul- 12	37.60	30.65	37.60	30.75	al wel
Aug-12	33.90	28.10	33.90	28.25	& NSE official websites.
Sep-12	32.80	27.80	32.90	27.80	& NSE
0ct-12	35.50	29.05	35.45	29.00	BSE
Nov-12	32.85	29.35	32.80	29.35	d from
Dec-12	33.65	30.00	33.70	30.10	moile
Jan-13	37.80	31.10	37.70	31.00	ata Co
Feb-13	32.15	27.05	32.15	27.10	Sources: Data Compiled from BSE
Mar-13	28.80	22.15	28.80	22.60	Sourc

#### STOCK PERFORMANCE

The performance of the Company's stock prices is given in the charts below:



#### Distribution of Share holding as on March 31, 2013

Range of Shares	Number of Shareholders	% of Shareholders	Number of Shares	% of Equity
1 to 5,000	1,31,747	95.29	5,47,55,049	13.92
5,001 to 10,000	3751	2.71	1,37,39,342	3.49
10,001 to 20,000	1504	1.09	1,08,27,494	2.75
20,001 to 30,000	439	0.32	54,75,899	1.39
30,001 to 40,000	231	0.17	41,10,217	1.04
40,001 to 50,000	152	0.11	35,00,290	0.89
50,001 to 100,000	227	0.16	79,24,651	2.01
100,001 & Above	203	0.15	29,31,06,193	74.50
TOTAL	1,38,254	100.00	39,34,39,135	100.00

#### Share holding pattern as on March 31, 2013

Catalania	As on March 31, 2013		
Category	Number of Shares	% of Equity	
Promoter Group	21,52,18,656	54.70	
Banks, Directors, Mutual Funds, Trusts, UTI, LIC, Govt. & Insurance Companies,			
Overseas Corporate Bodies and Company Secretary	3,38,59,498	8.60	
Foreign Bodies Corporates, FIIs and NRIs	1,15,11,045	2.93	
Indian Financial Institutions and Foreign Nationals	2,31,978	0.06	
Bodies Corporates	1,96,95,613	5.01	
Individuals (Public) & HUFs	10,97,10,582	27.89	
Clearing Members	32,11,763	0.81	
TOTAL	39,34,39,135	100.00	

#### **DEMATERIALISATION OF SHARES AND LIQUIDITY**

The Company's equity shares are compulsorily traded in the electronic form. As on March 31, 2013, 38,61,57,886 shares representing 98.15% of total equity capital was held in electronic form. The Shareholders can hold the shares in demat form either through NSDL or CDSL. The ISIN number allotted to the Company is INE089C01029.

#### **UNPAID / UNCLAIMED DIVIDEND**

In terms of section 205A and 205C of the Companies Act, 1956, the Company is required to transfer the amount of dividend remaining unclaimed for a period of seven years from the date of transfer to the unpaid dividend account to the Investor Education and protection Fund (IEPF). Unclaimed dividend(s) will be transferred to IEPF, within a period as stipulated under the Companies Act, 1956, as under

- Dividend for the year 2005-06: Due for transfer on September 23, 2013
- Dividend for the year 2006-07: Due for transfer on August 17, 2014
- Dividend for the year 2007-08: Due for transfer on September 13, 2015
- Dividend for the year 2008-09: Due for transfer on August 29, 2016
- Dividend for the year 2009-10: Due for transfer on August 19, 2017
- Dividend for the year 2010-11: Due for transfer on October 25, 2018
- Dividend for the year 2011-12: Due for transfer on October 17, 2019

# Outstanding GDRs/ADRs/Warrants or any Convertible instruments, conversion date & likely impact on equity -

The Company has not issued any GDRs and ADRs and hence there are no outstanding GDRs/ADRs.

### Details of outstanding shares in the Unclaimed Suspense Account

Particulars	Total No. of Shareholders	No. of Outstanding Shares lying in Unclaimed Suspense Account
As on April 1, 2012 Shareholders	5561	22,19,770
Approached for transfer/ delivery during FY 2012-13	8	2680
Shares transferred/delivered during FY 2012-13	8	2680
Balance as on March 31, 2013	5553	22,17,090

#### SHARE TRANSFER SYSTEM

Two Directors and some Executives of the Company have been given powers to deal with all the matters related to transfers, transmission, issuance of duplicate share/debenture certificates, split and/or consolidation requests. In addition, the Company Secretary and authorised officials of the Registrar and Transfer Agents of the Company have been given powers to endorse registration of transfers on share certificates. The Company's shares being in compulsory demat list are also transferred through the depository system. The Company has entered into agreements with both the depositories NSDL & CDSL. Karvy Computershare Private Limited, Hyderabad is the Registrar and Transfer Agent for both physical and electronic mode of transfer of shares. Transfers for shares held in the physical mode are approved on a 10 days cycle. Physical Shares sent for transfer are duly transferred within 10-15 days' of receipt of documents, if found in order. Shares under objection are returned within 7-10 days.

#### **REGISTRAR & TRANSFER AGENTS**

Karvy Computershare Private Limited, Hyderabad is the Registrar and Transfer Agent of the Company: Shareholders, beneficial owners and Depository Participants, (DPs) can send/deliver the documents/correspondence relating to the Company's share transfer activity, etc to Karvy Computershare Private Limited at the following address:

#### Karvy Computershare Private Limited

(Unit – Sterlite Technologies Limited)

Plot No.17 to 24, Vittalrao Nagar,

Madhapur, Hyderabad - 500 081, India

Tel: +91-40-44655000 to 16

Fax: +91-40-23420814

E-mail: einward.ris@karvy.com

Shareholders' correspondence should be addressed to the Company's Registrar and Transfer Agents at the above-mentioned address. In case of unresolved complaints, the members may also write to the Company Secretary at the office of the Company as detailed below:

#### **Sterlite Technologies Limited**

4th Floor, Godrej Millennium

9 Koregaon Road, Pune  $-411\,001$ 

Maharashtra, India

Phone: +91-20-30514000

Fax: +91 20 30514113 E-mail: communications@sterlite.com

#### **Registered Office:**

Survey No. 68/1, Rakholi Village, Madhuban Dam Road, Silvassa — 396230, Union Territory of Dadra & Nagar Haveli, India

#### PLANT LOCATIONS

Optical Fiber	– E2, E3, MIDC, Waluj, Aurangabad – 431136, India
	<ul> <li>AL-23, Shendra MIDC SEZ, Aurangabad –</li> <li>431 201, Maharashtra, India</li> </ul>
Fiber Optic Cables & OPGW Cables	<ul> <li>Survey No. 68/1, Rakholi Village,</li> <li>Madhuban Dam Road, Silvassa –</li> <li>396230, Union Territory of Dadra &amp;</li> <li>Nagar Haveli, India</li> </ul>
Copper Telecom Cables & Structured Data Cables	<ul> <li>Survey No. 33/1/1, Waghdara Road,</li> <li>Dadra — 396191, Union Territory of</li> <li>Dadra &amp; Nagar Haveli, India</li> </ul>
Power Conductors	<ul> <li>Survey No. 99, Rakholi Village, Madhuban Dam Road, Silvassa – 396230, Union Territory of Dadra &amp; Nagar Haveli, India</li> <li>Plot 2D, Sector 10, IIE SIDCUL, Haridwar – 249403, India</li> <li>Burkhamunda, Jharsuguda, Orissa – 768202, India</li> </ul>
Power Cables Business	<ul> <li>No 5, Vardhaman Industrial Estate</li> <li>Haridwar – 249402 Uttaranchal, India</li> </ul>

# The status of compliance in respect of non-mandatory requirements of Clause 49 of Listing Agreement is as follows:

#### 1. The Board

Mr. Anil Agarwal is the non-Executive Chairman of the Board. As the Chairman has a separate office, the Company does not reimburse expenses incurred by him for maintenance of a separate Chairman's office. The independent directors have the requisite qualifications and experience, which would be of use to the Company and which, in its opinion, would enable such directors to contribute effectively to the Company's business.

#### 2. Remuneration Committee

Details are given under the heading 'Remuneration/ Compensation Committee'.

#### 3. Shareholder Rights

The Company publishes its results in the newspapers having nationwide circulation. Also, results are uploaded on Company's website. The copy of results is furnished to all the shareholders who request for the same. Therefore Company does not circulate the half-yearly results to its shareholders.

#### 4. Audit Qualifications

Please refer to the explanation by the Board of Directors in the Directors' Report, on the qualification of auditors on the accounts for the financial year 2012-13.

#### 5. Training of Board Members

The Directors interact with the management on any and every information that may be required by them in a very free and open manner. The Independent Directors are encouraged to attend training programs that may be of relevance and interest to the Directors in discharging their responsibilities to the Company's stakeholders.

#### 6. Mechanism for evaluating non-executive Board members

The performance evaluation of non-executive Board members is done by the Board annually based on criteria of attendance and contributions at Board/Committee Meetings as also for the role played other than at Meetings. However, no formal recording of evaluation is done.

#### 7. Whistleblower Mechanism

The Company has a Whistleblower Policy and the appropriate mechanism is in place, which has been discussed in this report.

#### **DECLARATION**

In accordance with Clause 49 of the Listing Agreement with the Stock Exchanges, I hereby confirm that, all Board Members and the Senior Management Personnel have affirmed compliance with the Code of Conduct and Business Ethics of the Company for the Financial Year ended March 31, 2013.

For Sterlite Technologies Limited

Place: Mumbai **Dr. Anand Agarwal**Date: April 26, 2013 CEO & Whole-time Director

#### **AUDITORS' CERTIFICATE ON CORPORATE GOVERNANCE**

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The Members of Sterlite Technologies Limited

We have examined the compliance of conditions of corporate governance by Sterlite Technologies Limited, for the year ended on March 31, 2013, as stipulated in clause 49 of the Listing Agreement of the said Company with stock exchanges. The compliance of conditions of corporate governance is the responsibility of the management. Our examination was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of the Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in the above-mentioned Listing Agreement.

We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the Management has conducted the affairs of the Company.

For S.R. Batliboi & Co. LLP

Firm Registration No.: 301003E Chartered Accountants

per **Arvind Sethi** 

Partner Membership Number: 89802

# Risk Management

Sterlite is subject to a variety of risks and uncertainties which are no different than any other company in general and our competitors in particular. Such risks are the result of not only the business environment within which we operate but also of other factors over which we have little or no control. Sterlite is committed to effective management of risks across the organisation by aligning its risk management strategy to its business objectives. Sterlite does this through instituting a risk management structure for timely identification, assessment, mitigating, monitoring and reporting of risks early on for achievement of its business objectives and enhanced stakeholder's value.

The risks are identified through a formal risk management programme with the active involvement of business managers and senior management. The risk management framework acts as an effective tool in mitigating the various risks that the Company's businesses are exposed to in the course of their operations as well as in strategic actions. Further, Sterlite's risk management practices also seek to enhance the long-term competitive advantage to the Company on a sustainable basis.

#### Internal Control Systems and their Adequacy

The Company has strong internal control systems for business processes, with regards to efficiency of operations, financial reporting and controls, compliance with applicable laws and regulations, etc. Clearly defined roles and responsibilities for all managerial positions have also been institutionalised. All operating parameters are monitored and controlled. Regular internal audits and checks ensure that responsibilities are executed effectively. The Audit Committee of the Board of Directors periodically reviews the adequacy and effectiveness of internal control systems and suggests improvement for strengthening these.

#### **Market and Competition Risks**

The market is highly competitive with very few barriers to capacity expansion by existing players or entry of large MNCs with inorganic growth strategies. Globally, most of the contracts are finalised through the competitive bidding process. Whilst Company dominates in this segment, it does not have much pricing power on account of price undercuts as increased through increased competition and entry of new players. To overcome this, Company is expanding its capacity and continues to focus on increasing its market share through access to new markets and enhancing its client footprint.

Being a part of capital goods industry, the growth of the Company primarily depends on capital expenditure plans in the power and Telecom segments. Any slowdown or delay in capital expenditure plans by these utilities and service providers could adversely impact the Company's growth.

Sterlite manages this by taking various initiatives in technology and product development, taking into consideration the needs of customers. Some of these initiatives include product design, that help the customer reducing their cost of their project, customising a basket of products that suit customer's needs

and by introducing enhanced features in products or services to improve value proposition to the customers.

Additionally, the Company undertakes product approvals from new Tier 1 customers to increase its market share commensurate with its increased manufacturing capacity. As these initiatives require investment of significant time and resources, any delay or failure in this poses risks to the Company.

#### **Product Obsolescence Risks**

In the fast changing world a new technically improved variant of product could put the Company's prospects at risk. In order to mitigate, Sterlite maintains a very strong focus on continuous innovation processes and hence has been introducing technologically improved products in the market in which it operates. This strategy has helped limiting the risk involved with obsolescence of products. The company strives to introduce future-proof products and solutions to exceed stringent global standards and specifications.

The Company has a technically qualified team that constantly interacts with customers to understand their future needs and analyzes application trends. Their inputs are an important initiator for research and product development. Sterlite also interacts with research institutions to understanding the latest advances in technology.

#### **Commodity Risks**

The Company is exposed to the risk of price fluctuation on raw materials & energy resources. Aluminium & alloys make up significant part of the Company's raw material purchases. As a market leader in the industry, the Company has strong policies and systems in place to minimise the price risk of its main raw material aluminium to a large extent. The Company effectively manages the price variation risk in the aluminium by fully passing on the movement in prices to the customers or hedging the risk on LME or primary suppliers. In addition furnace oil prices are also linked to the crude oil prices, which are influenced by the global demand & supply and outlook of the economy and could vary significantly. These price variations, if not managed adequately, could affect the profitability of the Company significantly. The Company has limited control over passing on the adverse variations in the price of some of the raw materials and energy costs to the customers and in turn this may have a negative impact on the Company's profitability.

The Company's policy of backward integration into critical manufacturing materials (e.g.: Hydrogen, Oxygen, Silicon Tetrachloride for optical fiber and optical fiber for Fiber optic cables) helps in minimising the effect of increase in prices of raw material.

#### **Financial Risks**

#### Liquidity Risks

The Company requires funds both for short-term operational needs as well as for long-term investment programs mainly in growth projects. The continued global financial uncertainty has significantly restricted the supply of credit in the market. Banks and financial institutions have also tightened lending norms.

Sterlite aims to minimise these risks by generating sufficient cash flows from its current operations, which in addition to the available cash and cash equivalents, liquid investments and sufficient committed fund facilities, will provide liquidity both in the short-term as well as in the long-term.

The balance sheet is strong and gives us sufficient headroom for raising further debt, should the need arise. Sterlite maintains a healthy debt-equity ratio as well as maintains the flexibility in its financial structure to alter this ratio if the need arise. Currently the Company does not have any long-term debt as at the end of the year at standalone level however the Company has secured long-term finance in its subsidiary for the project being executed. The Company through its subsidiary also has a few more projects, for which it is in the process of securing long-term finance. Any adverse market condition in the banking or financial segment may affect the financial closure adversely. The Company is in the advanced stage of securing the long-term funds on the strength of the project itself and hopeful of achieving the same within the current year.

#### Interest Risk

The Company is exposed to the interest rate fluctuations in both domestic and foreign currency borrowings. It uses a judicious mix of fixed and floating rate debts and rupee and foreign currency borrowing within the stipulated parameters, to mitigate the interest rate risk. This also helps to have a lower blended rate of interest. The rate of interest for rupee borrowing is largely linked to MIBOR and the rate is linked to prevailing US Dollar LIBOR for foreign currency borrowings.

#### • Foreign Currency Risk

The Company's policy is to hedge all long-term foreign exchange risks as well as short-term exposures within the defined parameters. The long-term foreign exchange liability is fully hedged and hedges are on held to maturity basis. Within foreign currency, there are two major risk categories - risk associated with the operations of the Company such as purchase or sale in foreign currency and risk associated with the borrowing of the Company denominated in the foreign currency. The Company has a defined & proven policy to manage both kinds of risk and this is reviewed frequently in the light of major developments in economic and global scenarios.

#### **Economic and Political Risks**

Company has multiple manufacturing facilities in India. A significant portion (72%) of the Company's revenue is earned from sales to customers within India including Tier-1 public and private sector clients. The balance revenue is earned through sales in international markets. Performance and growth of the Company's business is dependent on the health and stability of the Indian and global economies. The risks arising out of any downturn in the economic conditions of the global markets could have adverse impact on the performance of the company. Government utilities are major customers of the Company and any delay in capex allocation by the government and utility incumbents, could adversely impact the Company's growth.

The presence of the Company in the two verticals "Power" and "Telecom" provides some insulation by division of the risks. To reduce the risk of customer concentration, Sterlite has been increasing its customer base to non-government utilities within

India and in overseas market. Further, the Company has added various good Tier-1 clients for all businesses across geographies, has made a strong entry into Indian private sector and maintains a strong focus on emerging countries. This significantly reduces the risk of dependence on one particular geography or customers.

#### Legal and Regulatory Risks

Sterlite has multiple manufacturing facilities in India and has a diversified customer base across the world. As a result, the Company is subject to federal, regional, state and local laws and regulations in each country in which it operates. These legal, fiscal and other regulatory regimes of the country play a crucial role in the performance of the Company. Any changes in government policies with respect to import tariffs or export incentives can pose risks to the Company and can also affect the competitiveness of our product in those countries and in turn affect the performance of the Company.

There are a few legal cases against the Company at various stages related to custom duty, excise duty, taxation, commercial or legal disputes. Any adverse result in such cases may also affect the profitability of the Company.

Some of the above risks are beyond the control of the Company. The Company continues to actively review and monitor these risks which may have a bearing on our business.

#### **Project Execution Risk**

As expansions continue to remain a priority for the Company, execution success for large capex projects is exposed to risks of time and cost overrun. Project execution is largely dependent upon the project management skills, timely delivery by the equipment suppliers and adherence to schedule by civil contractors. Any delay in project implementation will erode revenues and profits for that period. Your Company has set up a dedicated project implementation team to continuously review the project execution to ensure that the implementation schedules and budgets are adhered to.

#### **Human Resource Risk**

The Company's ability to deliver value is shaped by its ability to attract, train, motivate, empower and retain the best professional talents. These abilities have to be developed across the Company's rapidly expanding operations. The Company continuously benchmarks HR policies and practices with the best in the industry and carries out necessary improvements to attract and retain the best talent.

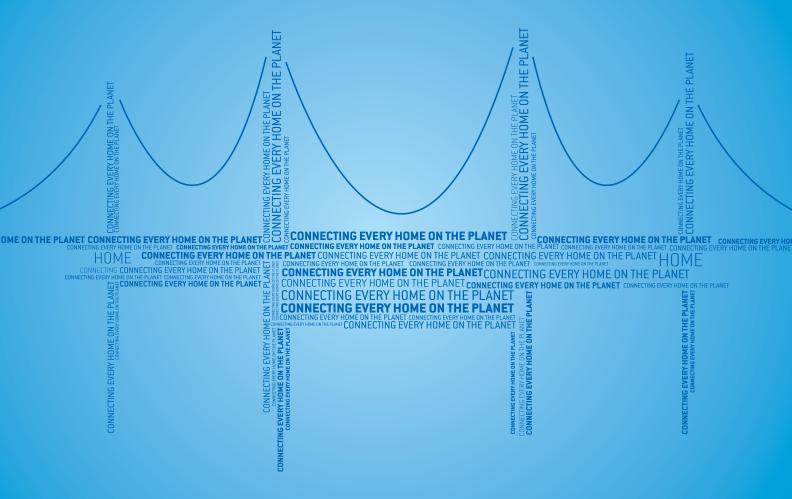
#### **Counter-party Risks**

We are exposed to counterpart risks on our receivables and investments.

We have clearly defined policies to mitigate these risks. Limits are defined for exposure to individual customers and the exposure is strictly monitored on ongoing basis. Moreover, given the diverse nature of our businesses, trade receivables are spread over a number of customers with no significant concentration of the credit risk.

Cash and liquid investments are held primarily in debt mutual funds and banks with high credit ratings, approved by CRISIL. Emphasis is given to the security of investments.





# We make it **EASIER, FASTER AND MORE COST-EFFECTIVE**

for service providers to build Telecom and Power infrastructure.

# **Independent Auditor's Report**

Τo

#### The Members of Sterlite Technologies Limited

We have audited the accompanying financial statements of Sterlite Technologies Limited ("the Company"), which comprise the Balance Sheet as at March 31, 2013 and the Statement of Profit and Loss and Cash Flow Statement for the year then ended and a summary of significant accounting policies and other explanatory information.

# Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with accounting principles generally accepted in India, including the Accounting Standards referred to in sub-section (3C) of section 211 of the Companies Act, 1956 ("the Act"). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Basis for Qualified Opinion**

As stated in Note no. 43(A) in the accompanying financial statements, the Company had in an earlier year received an order of CESTAT upholding a demand of Rs.188 Crores (including penalties and excluding interest) (Rs.188 Crores as at March 31 2012) in a pending excise/customs matter. The Company's appeal against this order with the Honourable Supreme Court has been admitted. Based on the current status and legal advice received, provision for liability as recorded and disclosed in Note no. 8 of the accompanying financial statements is considered adequate by Management. In the event the decision of the Honourable Supreme Court goes against the Company on any of the grounds of appeal, additional provision against the said demand may be required. Pending disposal of the matter by the Honourable

Supreme Court, we are unable to comment on the adequacy of the provisions made towards the amount of excise / customs duty payable. Our audit opinion on the financial statements for the year ended March 31, 2012 was also qualified in respect of this matter.

#### Qualified opinion

In our opinion and to the best of our information and according to the explanations given to us, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraph, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2013;
- (b) in the case of the Statement of Profit and Loss, of the profit for the year ended on that date; and
- (c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

#### Report on Other Legal and Regulatory Requirements

- (1) As required by the Companies (Auditor's Report) Order,
  2003 ("the Order") issued by the Central Government of
  India in terms of sub-section (4A) of section 227 of the
  Act, we give in the Annexure a statement on the matters
  specified in paragraphs 4 and 5 of the Order.
- (2) As required by section 227(3) of the Act, we report that:
  - (a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
  - In our opinion proper books of account as required by law have been kept by the Company so far as appears from our examination of those books;
  - (c) The Balance Sheet, Statement of Profit and Loss and Cash Flow Statement dealt with by this Report are in agreement with the books of account;
  - [d] In our opinion, the Balance Sheet, Statement of Profit and Loss and Cash Flow Statement comply with the Accounting Standards referred to in subsection (3C) of section 211 of the Companies Act, 1956;
  - (e) On the basis of written representations received from the directors as on March 31, 2013, andtaken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2013, from beingappointed as a director in terms of clause (g) of sub-section (1) of section 274 of the Companies Act, 1956.

#### For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration No.: 301003E

#### per Arvind Sethi

Partner

Membership No.: 89802

Place: Mumbai Date: April 26, 2013

# Annexure referred to in paragraph 1 under the heading "Report on Other Legal and Regulatory Requirements" of our report of even date Re: Sterlite Technologies Limited ('the Company')

- (i) (a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.
  - (b) All fixed assets have been physically verified by management during the year in accordance with a planned programme of verification which in our opinion is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were identified on such verification.
  - (c) There was no disposal of a substantial part of fixed assets during the year.
- (ii) (a) The management has conducted physical verification of inventory at reasonable intervals during the year.
  - (b) The procedures of physical verification of inventory followed by Management are reasonable and adequate in relation to the size of the Company and the nature of its business.
  - (c) The Company is maintaining proper records of inventory and no material discrepancies were noticed on physical verification.
- (iii) (a) According to the information and explanations given to us, the Company has not granted or taken any loans, secured or unsecured to or from companies, firms or other parties covered in the register maintained under section 301 of the Companies Act, 1956. Accordingly, the provisions of clauses 4(iii) (b), (c), (d), (f) and (g) of the Order are not applicable to the Company and hence not commented upon.
- (iv) In our opinion and according to the information and explanations given to us, there is an adequate internal control system commensurate with the size of the Company and the nature of its business, for the purchase of inventory and fixed assets and for the sale of goods and services. During the course of our audit, we have not observed any major weakness or continuing failure to correct any major weakness in the internal control system of the company in respect of these areas.

- (v) In our opinion, there are no contracts or arrangements that need to be entered in the register maintained under Section 301 of the Companies Act, 1956. Accordingly, the provisions of clauses 4(v) (a) and (b) of the Order are not applicable to the Company and hence not commented upon.
- (vi) The Company has not accepted any deposits from the public. Accordingly, the provisions of clause 4 (vi) of the Order are not applicable to the Company and hence not commented upon.
- (vii) In our opinion, the Company has an internal audit system commensurate with the size of the Company and nature of its business.
- [viii] We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 209(1) (d) of the Companies Act, 1956 and are of the opinion that prima facie, the prescribed accounts and records have been made and maintained.
- (ix) (a) The Company is regular in depositing with appropriate authorities undisputed statutory dues including provident fund, investor education and protection fund, employees' state insurance, income-tax, sales-tax, wealth-tax, service tax, customs duty, excise duty, cess and other material statutory dues applicable to it.
  - (b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, investor education and protection fund, employees' state insurance, income-tax, wealth-tax, service tax, sales-tax, customs duty, excise duty, cess and other material statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.
  - (c) According to the records of the Company, the dues outstanding of income-tax, sales-tax, wealth-tax, service tax, customs duty, excise duty and cess on account of any dispute, are as follows:

Name of the statute	Nature of dues	Amount (₹ in Crores)	Period to which the amount relates	Forum where dispute is pending
Central Excise Act, 1944	Excise Duty	188.00	2001-2003	Supreme Court
		28.22	2001-2003	CESTAT
		3.06	2001-2003	Commissioner (Appeals)
		3.39	2001-2003	Commissioner (Appeals)
		13.00	2001-2002	Bombay High Court
		0.15	2005-2006	CESTAT
		0.29	2006-2007	CESTAT
Customs Act, 1962	Custom Duty	5.24	2001-2003	CESTAT
		62.00	2001-2004	CESTAT
		1.42	2001-2003	Bombay High Court

- (x) The Company has no accumulated losses at the end of the financial year and it has not incurred cash losses in the current and immediately preceding financial year.
- (xi) Based on our audit procedures and as per the information and explanations given by Management, we are of the opinion that the Company has not defaulted in repayment of dues to a financial institution or bank. As stated in Note 32 in the financial statements, the Company continues to dispute amounts aggregating to Rs.18.87 Crores debited by one of the banks in the earlier year, towards import consignments under Letters of Credit not accepted by the Company, owing to discrepancies in documents. Since the matter is in dispute, we are unable to determine whether there is a default in repayment of dues to the said bank. The Company did not have any outstanding dues in respect of debentures during the year.
- (xii) According to the information and explanations given to us and based on the documents and records produced to us, the Company has not granted loans and advances on the basis of security by way of pledge of shares, debentures and other securities. Accordingly, the provisions of clause 4 (xii) of the Order are not applicable to the Company and hence not commented upon.
- (xiii) In our opinion, the Company is not a chit fund or a nidhi/mutual benefit fund / society. Accordingly, the provisions of clause 4(xiii) of the Order are not applicable to the Company.
- (xiv) In respect of dealing/trading in shares, securities, debentures and other investments, in our opinion and according to the information and explanations given to us, proper records have been maintained of the transactions and contracts and timely entries have been made therein. The shares, securities, debentures and other investments have been held by the Company, in its own name.
- (xv) According to the information and explanations given to us, the Company has given guarantee for loans taken by others from banks, the terms and conditions whereof, in our opinion are not prima-facie prejudicial to the interest of the Company.
- (xvi) Based on the information and explanations given to us by the management, term loans were applied for the purpose for which the loans were obtained.
- (xvii) According to the information and explanations given to us and on an overall examination of the balance sheet of the Company, we report that funds amounting to Rs. 441.27 Crores raised on short-term basis in the form of working capital facilities and buyers credit arrangements have been used for long-term investments representing acquisition of tangible assets, investments in subsidiaries and long-term loans to subsidiaries.

- (xviii) The Company has not made any preferential allotment of shares to parties or companies covered in the register maintained under section 301 of the Companies Act, 1956. Accordingly, the provisions of clause 4 (xviii) of the Companies (Auditor's Report) Order, 2003 (as amended) are not applicable to the Company.
- (xix) The Company did not have any outstanding debentures during the year. Accordingly, the provisions of clause 4 (xix) of the Order are not applicable to the Company and hence not commented upon.
- (xx) The Company has not raised any money through public issue during the year. Accordingly, the provisions of clause 4 (xx) of the Order are not applicable to the Company and hence not commented upon.
- (xxi) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the financial statements and as per the information and explanations given by management, we report that no fraud on or by the Company has been noticed or reported during the course of our audit.

# For S.R. Batliboi & Co. LLP Chartered Accountants

ICAI Firm Registration No. 301003E

#### per Arvind Sethi

Partner

Membership No.: 89802

Place: Mumbai Date: April 26, 2013

# Balance Sheet as at 31 March, 2013

(All amounts in ₹ Crores unless otherwise stated)

Particulars	Note	31 March, 2013	31 March, 2012
1 di Mediai 3	Note	₹ in Crores	₹ in Crores
EQUITY AND LIABILITIES			
Shareholders' funds			
Share capital	3	78.69	78.65
Reserves and surplus	4	1,104.30	1,070.23
		1,182.99	1,148.88
Share application money pending allotment	41	0.00	0.00
Non-current liabilities			
Long-term borrowings	5	206.68	_
Deferred tax liabilities (net)	6	87.21	73.52
Trade payables	7	1.59	19.42
Long-term provisions	8	15.31	39.71
		310.79	132.65
Current liabilities		5205	101.00
Short-term borrowings	9	832.35	664.37
Trade payables	10	619.25	521.17
Other current liabilities	10	323.84	314.27
Short-term provisions	8	17.23	15.17
1		1,792.67	1,514.98
TOTAL			
TOTAL		3,286.45	2,796.51
ASSETS			
Non-current assets			
Fixed assets	11		
Tangible assets		993.49	953.01
Intangible assets		7.76	5.95
Capital work-in-progress		28.97	41.08
Fixed assets held for sale			8.05
		1,030.22	1,008.09
Non-current investments	12	189.10	176.34
Long-term loans and advances	13	676.45	225.15
Trade receivables	14	69.12	117.22
		1,964.89	1,526.80
Current assets			
Inventories	16	291.54	272.70
Trade receivables	14	640.37	666.75
Cash and bank balances	17	195.75	184.77
Short-term loans and advances	13	193.09	137.14
Other current assets	15	0.81	8.35
		1,321.56	1,269.71
TOTAL		3,286.45	2,796.51
Summary of significant accounting policies	2.1		
· -			

The accompanying notes are an integral part of the financial statements.

As per our report of even date

For S.R. Batliboi & Co. LLP

For and on behalf of the board of directors of Sterlite Technologies Limited

Firm Registration No.: 301003E

Chartered Accountants
per Arvind Sethi

Membership No.: 89802

Place: Mumbai Date: April 26, 2013

Partner

Pravin Agarwal
Whole-time Director

Anupam Jindal

Anand Agarwal CEO & Whole-time Director

Anupam Jindal Sandeep Deshmukh
Chief Financial Officer Company Secretary

# Statement of Profit and Loss for the Year Ended 31 March, 2013

(All amounts in ₹ Crores unless otherwise stated)

Particulars	Note	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
INCOME		( III CI OI C3	( III CIOICS
Revenue from operations (gross)	18	3,467.51	2,804.62
Less: Excise duty	18	113.80	77.15
Revenue from operations (net)		3,353.71	2,727.47
Other income	19	14.54	23.67
Total Income (I)		3,368.25	2,751.14
EXPENSES			
Cost of raw material and components consumed	20	2,273.74	1,905.00
Purchase of traded goods		70.83	54.57
(Increase) / decrease in inventories of finished goods			
work-in-progress and traded goods	21	6.03	(56.02)
Employee benefits expense	22	117.70	98.70
Other expenses	23	639.62	525.66
Total Expenses (II)		3,107.92	2,527.91
Earnings before interest, tax, depreciation and			
amortisation (EBITDA) (I) - (II)		260.33	223.23
Depreciation and amortisation expense	24	85.95	71.36
Finance costs	25	105.57	95.10
Profit before tax		68.81	56.77
Tax expenses:			
Current tax		14.95	18.30
Less: MAT credit entitlement		(0.92)	(18.30)
Net current tax expense		14.03	-
Deferred tax		13.69	7.50
Income tax for earlier years		(6.37)	5.43
Total tax expenses		21.35	12.93
Profit for the year		47.46	43.84
Earnings per equity share [nominal value			
per share ₹ 2 (31 March, 2012: ₹ 2)	26		
Basic			
Computed on the basis of profit for the year (₹)  Diluted		1.21	1.12
Computed on the basis of profit for the year (₹)		1.20	1.11
Summary of significant accounting policies	2.1		

The accompanying notes are an integral part of the financial statements.

As per our report of even date

For S.R. Batliboi & Co. LLP For and on behalf of the board of directors of Sterlite Technologies Limited

Firm Registration No.: 301003E Chartered Accountants

 per Arvind Sethi
 Pravin Agarwal
 Anand Agarwal

 Partner
 Whole-time Director
 CEO & Whole-time Director

Membership No.: 89802

Place: Mumbai Anupam Jindal Sandeep Deshmukh
Date: April 26, 2013 Chief Financial Officer Company Secretary

# Cash Flow Statement for the Year Ended 31 March, 2013

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
A. Cash flow from operating activities	( III CIOICS	( III CIOICS
Net profit as per statement of profit and loss	47.46	43.84
Adjustment for taxation	21.35	12.93
Profit before tax	68.81	56.77
Non-cash adjustment to reconcile profit before tax to net cash flows		
Depreciation and amortisation expenses	85.95	71.36
Provision for doubtful debts and advances	17.22	9.98
Bad debts / advances written off	16.71	1.06
Provision for litigation / contingencies	_	20.46
Provision for diminution in value of investment in subsidiary company	2.54	4.26
Loss on sale of fixed assets	4.22	2.43
Employees stock option expenses	0.44	1.00
Income from investments Finance costs	(0.05) 105.57	(9.11) 95.10
Interest income	(13.96)	(14.34)
Unrealised exchange differences	(12.23)	8.36
omediaca exchange amerences	206.41	190.56
Operating profit before working capital changes	275.22	247.33
operating profit before working capital changes	Er 3.EE	241.55
Movements in working capital:		
Increase in trade payables	74.99	55.52
Increase/(decrease) in long-term provisions	(20.78)	2.28
Increase/(decrease) in short-term provisions	2.95	(0.22)
Increase/(decrease) in other current liabilities	(17.79)	2.46
Decrease in trade receivable	58.60	89.47
Increase in inventories	(18.84)	(79.84)
Increase in long-term loans and advances	(9.56)	(2.93)
Decrease/(increase) in short-term loans and advances Decrease in other current assets	(55.95) 7.54	40.07
Change in working capital	21.16	106.81
Cash generated from operations	296.38	354.14
-		
Direct taxes paid (net of refunds)  Net cash flow from operating activities	<u>(17.59)</u> 278.79	(16.05) 338.09
Net cash now from operating activities		
B. Cash flow from investing activities		
Purchase of fixed assets, including capital work-in-progress and capital advances	(116.51)	(150.13)
Proceed from sale of fixed assets	2.16	2.01
Purchase of non-current investments	(15.31)	(105.19)
Proceeds of non-current investments	-	109.11
Proceeds of current investments (net)	0.05	_
Share application money pending allotment in subsidiaries	(0.03)	_
Investment in bank deposits (having original maturity of more than three months)	(124.81)	_
Redemption of bank deposits (having original maturity of more than	102.62	35.53
three months) Advances given to subsidiaries	(421.93)	(136.57)
Repayment of advance from subsidiaries	(721.33)	6.80
Advance received from subsidiaries	0.57	
Interest received	0.57 21.76	1.23 6.01
	(551.43)	
Net cash flow used in investing activities	(331.43)	(231.20)

# Cash Flow Statement for the Year Ended 31 March, 2013

Particulars	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
C. Cash flow from financing activities		04.20
Proceeds of issue of shares against share warrants Proceeds of long-term borrowings	236.38	81.30
Repayment of long-term borrowings	_	(0.05)
Proceeds/(repayment) of short-term borrowings (net)	167.98	(9.72)
Proceeds of share application money	0.00**	0.00
Proceeds of issue of shares against employee stock options	0.01	0.03
Interest paid	[129.33]	(66.30)
Dividend paid on equity shares	(11.71)	(18.73)
Tax on equity dividend paid	(1.90)	(3.20)
Net cash flow from/(used in) financing activities	261.43	(16.67)
, , , , , , , , , , , , , , , , , , , ,		( ,
Net increase/(decrease) in cash and cash equivalents	[11.21]	90.22
Cash and cash equivalents as at beginning of year	104.32	14.08
Cash and cash equivalents taken over on amalgamation of subsidiary (refer note 42)	_	0.02
·	93.11	104.32
Cash and cash equivalents as at year end *	95.11	104.32
* The Cash and cash equivalents include balance of ₹ 1.11 Crores (31 March,		
2012: 1.02 Crores) which is not available for use by the company.  ** Amount is below ₹ 0.01 Crore		
** Amount is below ₹ 0.01 Crore.		
	31 , March, 2013	31 March, 2012
Components of cash and cash equivalents	₹ in Crores	₹ in Crores
Balances with banks:		
		2.25
On current accounts	16.95	8.25
Deposit with original maturity of less than 3 months	75.00	95.00
On unpaid dividend account  Cash in hand	1.11 0.05	1.02 0.05
Total cash and cash equivalents (note 17)	93.11	104.32

As per our report of even date

For S.R. Batliboi & Co. LLP

Firm Registration No.: 301003E

Chartered Accountants

**per Arvind Sethi** Partner

Membership No.: 89802

Place: Mumbai Date: April 26, 2013 For and on behalf of the board of directors of Sterlite Technologies Limited

Pravin Agarwal
Whole-time Director

**Anupam Jindal**Chief Financial Officer

**Anand Agarwal** CEO & Whole-time Director

Sandeep Deshmukh Company Secretary

# Notes to financial statements for the year ended 31 March, 2013

#### **NOTE 1. CORPORATE INFORMATION**

Sterlite Technologies Limited (the company) is a public company domiciled in India and incorporated under the provisions of the Companies Act, 1956. Its shares are listed on two stock exchanges in India. The company is primarily engaged in the manufacture and sale of Power and Telecom products and solutions. Telecom products and solutions mainly include integrated optical fiber, other Telecom products such as fiber optical cables, copper Telecom cables, structured data cables, access equipments, fiber connectivity and system integration solution offerings for Telecom networks and other service providers. Power products and solutions mainly includes power transmission conductors and cables.

#### **NOTE 2. BASIS OF PREPARATION**

The financial statements of the company have been prepared in accordance with generally accepted accounting principles in India (Indian GAAP). The company has prepared these financial statements to comply in all material respects with the accounting standards notified under the Companies (Accounting Standards) Rules, 2006, (as amended) and the relevant provisions of the Companies Act, 1956. The financial statements have been prepared on an accrual basis and under the historical cost convention, except in case of assets which have been impaired and derivative financial instruments which have been measured at fair value.

The accounting policies adopted in the preparation of financial statements are consistent with those of previous year.

#### NOTE 2.1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### (a) Use of estimates

The preparation of financial statements in conformity with the Indian GAAP requires the management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities, at the end of the reporting period. Difference between the actual result and estimates are recognised in the year in which the results are known / materialised. Although these estimates are based upon management's best knowledge of current events and actions, actual results could differ from these estimates.

#### (b) Tangible fixed assets

Fixed assets, are stated at cost (net of cenvat), net of accumulated depreciation and accumulated impairment losses, if any. The cost comprises purchase price, borrowing costs if capitalisation criteria are met and directly attributable cost of bringing the asset to its working condition for the intended use. Any trade discounts and rebates are deducted in arriving at the purchase price. Subsequent expenditure related to an item of fixed asset is added to its book value only if it increases the future benefits from the existing asset beyond its previously assessed standard of performance. All other expenses on existing fixed assets, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the statement of profit and loss for the period during which such expenses are incurred.

Expenditure directly relating to construction activity is capitalised. Indirect expenditure incurred during construction period is capitalised as part of the construction costs to the extent the expenditure can be attributable to construction activity or is incidental there to. Income earned during the construction period is deducted from the total of the indirect expenditure.

Gains or losses arising from derecognition of fixed assets are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit and loss when the asset is derecognised.

#### (c) Depreciation on tangible fixed assets

- (i) Depreciation on tangible fixed assets is provided on straight line method, unless otherwise stated, pro-rata to the period of use of assets at the rates specified in Schedule XIV of the Companies Act, 1956 which represents the useful life of these assets.
- (ii) Cost of leasehold land is amortised over the period of lease on a straight line basis.
- (iii) Cost of capital and insurance spares is amortised over a period of four years.

#### (d) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less accumulated amortisation and accumulated impairment losses, if any. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is reflected in the statement of profit and loss in the year in which the expenditure is incurred.

Customer acquisition costs consist of payments made to obtain consents/permissions for laying of fiber cables and other Telecom infrastructure in residential and commercial complexes/townships. Such cost is amortised over the period of the consent/permission on a straight line basis.

Other intangible assets are amortised on a straight line basis over a period of five years. Intangible assets not yet available for use and intangible assets amortised over a period exceeding 10 years from the date they are available for use are tested

for impairment annually, either individually or at the cash-generating unit level. All other intangible assets are assessed for impairment whenever there is an indication that the intangible asset may be impaired.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit and loss when the asset is derecognised.

Research and development costs

Revenue expenditure on research activity is expensed as incurred.

#### (e) Leases

Where the company is lessee

Leases, where the lessor effectively retains substantially all the risks and benefits of ownership of the leased item, are classified as operating leases. Operating lease payments are recognised as an expense in the statement of profit and loss on a straight-line basis over the lease term.

#### (f) Borrowing costs

Borrowing cost includes interest, amortisation of ancillary costs incurred in connection with the arrangement of borrowings and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost. Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective asset.

All other borrowing costs are expensed in the period they occur.

#### (g) Impairment of tangible and intangible assets

The company assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) net selling price and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining net selling price, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

Impairment losses are recognised in the statement of profit and loss.

After impairment, depreciation is provided on the revised carrying amount of the asset over its remaining useful life. An assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the company estimates the asset's or cash-generating unit's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit and loss.

#### (h) Government grants and subsidies

Grants and subsidies from the government are recognized when there is reasonable assurance that (i) the Company will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognized as income on a systematic basis in the consolidated statement of profit and loss over the periods necessary to match them with the related costs, which they are intended to compensate.

#### (i) Investments

Investments, which are readily realisable and intended to be held for not more than one year from the date on which such investments are made, are classified as current investments. All other investments are classified as long-term investments.

On initial recognition, all investments are measured at cost. The cost comprises purchase price and directly attributable acquisition charges such as brokerage, fees and duties.

Current investments are carried in the financial statements at lower of cost and fair value determined on an individual investment basis. Long-term investments are carried at cost. However, provision for diminution in value is made to recognise a decline other than temporary in the value of the investments.

On disposal of an investment, the difference between its carrying amount and net disposal proceeds is charged or credited to the statement of profit and loss.

#### (j) Inventories

Raw materials, components, stores and spares and traded goods are valued at lower of cost and net realisable value. However, materials and other items held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. Cost of raw materials, components and stores and spares, packing material, work in progress and finished goods is determined on a weighted average basis except in case of inventory for aluminium conductors in the power product and solutions business, wherein the cost is determined on specific identification method based on costing details of each project.

Work-in-progress and finished goods are valued at lower of cost and net realisable value. Cost includes direct materials and labour and a proportion of manufacturing overheads based on normal operating capacity. Cost of finished goods includes excise duty.

Traded goods are valued at lower of cost and net realisable value. Cost is determined on weighted average basis and includes all cost of purchase and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale.

#### (k) Revenue recognition

Revenue is recognised to the extent it is probable that the economic benefits will flow to the company and that the revenue can be reliably measured. The following specific recognition criteria must also be met before revenue is recognised:

#### Sale of goods

Revenue from sale of goods is recognised when all the significant risks and rewards of ownership of the goods have been passed to the buyer. The company collects sales taxes and value added taxes (VAT) on behalf of the government and, therefore, these are not economic benefits flowing to the company. Hence, they are excluded from revenue. Excise duty deducted from revenue (gross) is the amount that is included in the revenue (gross) and not the entire amount of liability arising during the year. Sales are net of quantity discount. Freight charged on sales and recovered is included as a part of revenue.

#### Income from services

Revenues from services are recognised pro-rata over the period of the contract as and when services are rendered. The company collects service tax on behalf of the government and, therefore, it is not an economic benefit flowing to the company. Hence, it is excluded from revenue.

#### Interest

Interest income is recognised on a time proportion basis taking into account the amount outstanding and the applicable interest rate *Dividends* 

Dividend income is recognised when the company's right to receive dividend is established by the reporting date.

#### Export incentives

Export incentive benefits consist of duty drawback, high value added licenses and DEPB entitlements. These are recognised on the basis of receipt of proof of export.

#### (I) Foreign currency translation

Foreign currency transactions and balances

#### (i) Initial recognition

Foreign currency transactions are recorded in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction.

#### (ii) Conversion

Foreign currency monetary items are retranslated using the exchange rate prevailing at the reporting date. Non-monetary items, which are measured in terms of historical cost denominated in a foreign currency, are reported using the exchange rate at the date of the transaction.

#### (iii) Forward exchange contracts entered into to hedge foreign currency risk of an existing asset/liability

The premium or discount arising at the inception of forward exchange contract is amortised and recognised as an expense/income over the life of the contract. Exchange differences on such contracts, are recognised in the statement of profit and loss in the period in which the exchange rates change. Any profit or loss arising on cancellation or renewal of such forward exchange contract is also recognised as income or as expense for the period. None of the foreign exchange contracts are taken for trading or speculation purpose.

Translation of integral and non-integral foreign operation

The company classifies all its foreign operations as either "integral foreign operations" or "non-integral foreign operations."

The financial statements of an integral foreign operation are translated as if the transactions of the foreign operation have been those of the company itself.

The assets and liabilities of a non-integral foreign operation are translated into the reporting currency at the exchange rate prevailing at the reporting date. Their statement of profit and loss are translated at exchange rates prevailing at the dates of transactions or weighted average monthly rates, where such rates approximate the exchange rate at the date of transaction. The exchange differences arising on translation are accumulated in the foreign currency translation reserve. On disposal of a non-integral foreign operation, the accumulated foreign currency translation reserve relating to that foreign operation is recognised in the statement of profit and loss.

When there is a change in the classification of a foreign operation, the translation procedures applicable to the revised classification are applied from the date of the change in the classification.

#### (m) Retirement and other employee benefits

Retirement benefit in the form of provident fund and superannuation fund are defined contribution schemes. The contributions to the provident fund and superannuation fund are charged to the statement of profit and loss for the year when the contributions are due. The company has no obligation, other than the contribution payable to the provident Fund and superannuation fund.

The company operates a defined benefit plan in the form of gratuity for its employees. The cost of providing benefits under the plan is determined on the basis of actuarial valuation at each year-end. Actuarial valuation is carried out using the projected unit credit method. Actuarial gains and losses for the defined benefit plan are recognised in full in the period in which they occur in the statement of profit and loss.

Accumulated leave, which is expected to be utilised within the next 12 months, is treated as short-term employee benefit. The company measures the expected cost of such absences as the additional amount that it expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The company treats accumulated leave expected to be carried forward beyond twelve months, as long-term employee benefit for measurement purposes. Such long-term compensated absences are provided for based on the actuarial valuation using the projected unit credit method as at the year-end. Actuarial gains/losses are immediately taken to the statement of profit and loss and are not deferred.

#### (n) Income Tax

Tax expense comprises current and deferred tax. Current income-tax is measured at the amount expected to be paid to the tax authorities in accordance with the Income-tax Act, 1961 enacted in India. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Deferred income taxes reflect the impact of timing differences between taxable income and accounting income originating during the current year and reversal of timing differences for the earlier years. Deferred tax is measured using the tax rates and the tax laws enacted or substantively enacted at the reporting date.

Deferred tax liabilities are recognised for all taxable timing differences. Deferred tax assets are recognised for deductible timing differences only to the extent that there is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. In situations where the company has unabsorbed depreciation or carry forward tax losses, all deferred tax assets are recognised only if there is virtual certainty supported by convincing evidence that they can be realised against future taxable profits.

In the situations where the company is entitled to a tax holiday no deferred tax (asset or liability) is recognised in respect of timing differences which reverse during the tax holiday period, to the extent the company's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of timing differences which reverse after the tax holiday period is recognised in the year in which the timing differences originate. However, the company restricts recognition of deferred tax assets to the extent that it has become reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which such deferred tax assets can be realised. For recognition of deferred taxes, the timing differences which originate first are considered to reverse first.

At each reporting date, the company re-assesses unrecognised deferred tax assets. It recognises unrecognised deferred tax asset to the extent that it has become reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which such deferred tax assets can be realised.

The carrying amount of deferred tax assets are reviewed at each reporting date. The company writes-down the carrying amount of deferred tax asset to the extent that it is no longer reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which deferred tax asset can be realised. Any such write-down is reversed to the extent that it becomes reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set-off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to the same taxable entity and the same taxation authority.

Minimum alternate tax (MAT) paid in a year is charged to the statement of profit and loss as current tax. The company recognises MAT credit available as an asset only to the extent that there is convincing evidence that the company will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the company recognizes MAT credit as an asset in accordance with the Guidance Note on Accounting for Credit Available in respect of MAT under the Income-tax Act, 1961, the said asset is created by way of credit to the statement of profit and loss and shown as "MAT Credit Entitlement." The company reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent the company does not have convincing evidence that it will pay normal tax during the specified period.

#### (o) Employee stock compensation cost

Measurement and disclosure of the employee share-based payment plans is done in accordance with SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999 and the Guidance Note on Accounting for Employee Share-based Payments, issued by the Institute of Chartered Accountants of India ('ICAI'). The company measures compensation cost relating to employee stock options using the fair value method. Compensation expense is amortised over the vesting period of the option on a straight line basis.

#### (p) Earning Per Share

Basic earnings per share are calculated by dividing the net profit or loss for the period attributable to equity shareholders by the weighted average number of equity shares outstanding during the period. The weighted average number of equity shares outstanding during the period is adjusted for events such as bonus issue, bonus element in a rights issue, share split, and reverse share split (consolidation of shares) that have changed the number of equity shares outstanding, without a corresponding change in resources.

For the purpose of calculating diluted earnings per share, the net profit or loss for the period attributable to equity shareholders and the weighted average number of shares outstanding during the period are adjusted for the effects of all dilutive potential equity shares.

#### (q) Provisions

A provision is recognised when the company has a present obligation as a result of past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions are not discounted to their present value and are determined based on the best estimate required to settle the obligation at the reporting date. These estimates are reviewed at each reporting date and adjusted to reflect the current best estimates. Where the company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of profit and loss, net of any reimbursement.

#### (r) Contingent liabilities

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the company or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The company does not recognize a contingent liability but discloses its existence in the financial statements.

#### (s) Cash and cash equivalents

Cash and cash equivalents for the purposes of cash flow statement comprise of cash at bank and in hand and short-term investments with an original maturity of three months or less.

#### (t) Derivative instruments

In accordance with the ICAI announcement, derivative contracts, other than foreign currency forward contracts covered under AS 11 "The Effects of Changes in Foreign Exchange Rates", are marked to market on a portfolio basis, and the net loss, if any, after considering the offsetting effect of gain on the underlying hedged item, is charged to the statement of profit and loss. Net gain, if any, after considering the offsetting effect of loss on the underlying hedged item, is ignored.

Gains and losses from designated and effective hedging instruments are included in the same line as the gains and losses from the hedged items such as sales revenue or cost of goods sold as the case may be. Gains and losses on other derivatives are included in other income or other expenditure as the case may be.

The company enters into commodity futures contracts (aluminum contracts) against future sales transactions. These commodity futures contracts are rolled over in case the period of the contracts is less than the period of future sales transactions. On roll over, the company has to pay/receive the differential amount, in case aluminum prices have gone down/up (loss/profit). The company carries the loss/profit in the balance sheet till the future sales transactions take place. This loss/profit is transferred to the Statement of profit and loss on conclusion of the future sales transactions except in case where such loss/profit relates to the acquisition or construction of fixed assets, in which case, it is adjusted to the carrying cost of such fixed assets.

#### (u) Amalgamation accounting

The company treats an amalgamation in the nature of merger if it satisfies all the following criteria:

- (i) All the assets and liabilities of the transferor company become, after amalgamation, the assets and liabilities of the transferee company.
- (ii) Shareholders holding not less than 90% of the face value of the equity shares of the transferor company (other than the equity shares already held therein, immediately before the amalgamation, by the transferee company or its subsidiaries or their nominees) become equity shareholders of the transferee company.
- (iii) The consideration for amalgamation receivable by those equity shareholders of the transferor company who agree to become shareholders of the transferee company is discharged by the transferee company wholly by the issue of equity shares, except that cash may be paid in respect of any fractional shares.
- (iv) The business of the transferor company is intended to be carried on, after the amalgamation, by the transferee company.
- (v) The transferee company does not intend to make any adjustment to the book values of the assets and liabilities of the transferor company, except to ensure uniformity of accounting policies.

All other amalgamations are in the nature of purchase.

The company accounts for all amalgamations in the nature of merger using the pooling of interest method. The application of this method requires the company to recognize any non-cash element of the consideration at fair value. The company recognizes assets, liabilities and reserves, whether capital or revenue, of the transferor company at their existing carrying amounts and in the same form as at the date of the amalgamation. The balance in the statement of profit and loss of the transferor company is transferred to the general reserve. The difference between the amount recorded as share capital issued, plus any additional consideration in the form of cash or other assets, and the amount of share capital of the transferor company is adjusted in reserves.

#### (v) Segment Reporting Policies

The Company's operating businesses are organised and managed separately according to the nature of products and services provided, with each segment representing a strategic business unit that offers different products and serves different markets. The analysis of geographical segment is based on the areas in which major operating divisions of the company operate.

Inter segment transfers

The company accounts for intersegment sales and transfers as if the sales or transfers were to third parties at current market prices.

Allocation of common costs

Common allocable costs are allocated to each segment according to the relative contribution of each segment to the total common costs.

Unallocated items

The corporate and other segment includes general corporate income and expense items which are not allocated to any business segment.

Segment policies

The company prepares its segment information in conformity with the accounting policies adopted for preparing and presenting the financials statements of the company as a whole.

#### (w) Measurement of EBITDA

As permitted by the Guidance Note on the Revised Schedule VI to the Companies Act, 1956, the company has elected to present earnings before interest, tax, depreciation and amortisation (EBITDA) as a separate line item on the face of the statement of profit and loss. The company measures EBITDA on the basis of profit/ (loss) from continuing operations. In its measurement, the company does not include depreciation and amortisation expense, finance costs and tax expense.

# **Note 3: Share Capital**

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Authorised shares (No. Crores)		
75.00 (31 March, 2012: 75.00) equity shares of ₹ 2 each	150.00	150.00
Issued, subscribed and fully paid-up shares (No. Crores)		
39.34 (31 March, 2012: 39.33) equity shares of ₹ 2 each fully paid-up	78.69	78.65
Total issued, subscribed and fully paid-up share capital	78.69	78.65

#### a. Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

	31 March, 2013		31 March, 2012	
	Nos. in Crores	₹ in Crores	Nos. in Crores	₹ in Crores
At the beginning of the year	39.33	78.65	35.64	71.28
Issue during the year - exercise of share warrants	_	-	1.83	3.65
Issued during the year - ESOP	0.01	0.02	0.02	0.04
Issued during the year - bonus on share warrants and ESOP	0.01	0.02	1.84	3.68
Outstanding at the end of the year *	39.34	78.69	39.33	78.65

<sup>\*</sup> The difference in reconciliation of the number of shares is due to rounding off.

#### b. Terms/rights attached to equity shares

The company has only one class of equity shares having a par value of ₹2 per share. Each holder of equity shares is entitled to one vote per share. The company declares and pays dividends in Indian rupees.

The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting. During the year ended 31 March, 2013, the amount of per share dividend recognised as distributions to equity shareholders was ₹ 0.30 (31 March, 2012: ₹ 0.30).

In the event of liquidation of the company, the holders of equity shares will be entitled to receive remaining assets of the company, after distribution of all preferential amounts. The distribution will be in proportion to the number of equity shares held by the shareholders.

#### c. Shares held by holding company and their subsidiaries/associates:

	31 March, 2013		31 March, 2012	
	Nos. in Crores	% holding	Nos. in Crores	% holding
Holding company				
Twin Star Overseas Limited, Mauritius	20.94	53.22%	20.94	53.25%
Subsidiary of Volcan Investments Limited, Bahamas				
(Ultimate Holding Company)				
Sterlite Industries (I) Limited	0.43	1.08%	0.43	1.08%
Madras Aluminium Company Limited	0.05	0.13%	0.05	0.13%

#### Aggregate number of bonus shares issued, share issued for consideration other than cash during the period of five years immediately preceding the reporting date:

	31 March, 2013 Nos. in Crores	31 March, 2012 Nos. in Crores
Equity shares allotted as fully paid bonus shares by capitalisation of securities premium	19.67	19.66

In addition, the company has issued total 1,173,950 shares (31 March, 2012: 1,270,994 shares) during the period of five years immediately preceding the reporting date on exercise of options granted under the employee stock option plan (ESOP) wherein part consideration was received in the form of employee services.

#### Detail of shareholders holding more than 5% of shares in the company

	31 March, 2013		31 March, 2013 31 March, 2012	
	Nos. in Crores	% holding	Nos. in Crores	% holding
1. Twin Star Overseas Limited (Holding Company)	20.94	53.22%	20.94	53.25%
2. Life Insurance Corporation of India	2.13	5.41%	2.13	5.41%

#### f. Shares reserved for issue under options:

For details of shares reserved for issue under the employee stock option (ESOP) plan of the company, refer note 28.

# **Note 4: Reserves and Surplus**

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Capital reserve	0.04	0.04
Securities premium account		
Balance as per last financial statements	196.37	93.96
Add: Premium on issue of shares on exercise of share warrants	-	104.75
Add: Additions on ESOPs exercised	0.61	1.35
Less: Utilised for issue of bonus shares	0.02	3.69
Closing balance	196.96	196.37
Employee stock option outstanding		
Balance as per last financial statements	2.63	2.98
Add: Employees stock option expenses for the year	0.44	1.00
Less: Transferred to securities premium account	0.61	1.35
Closing balance	2.46	2.63
General reserve		
Balance as per last financial statements	130.97	128.78
Add: Amount transferred from surplus in the statement of profit and loss	2.37	2.19
Closing balance	133.34	130.97
Surplus in the statement of profit and loss		
Balance as per last financial statements	740.22	711.74
Transfer on amalgamation of subsidiary (refer note 42)	-	0.55
Profit for the year	47.46	43.84
Less: Appropriations		
Proposed final equity dividend (amount per share ₹ 0.30	11.80	11.81
(31 March, 2012:₹ 0.30))	11.00	11.01
Tax on proposed equity dividend	2.01	1.91
Transfer to general reserve	2.37	2.19
_	16.18	15.91
Total appropriations		
Net surplus in the statement of profit and loss	771.50	740.22
Total reserves and surplus	1,104.30	1,070.23

# **Note 5: Long-Term Borrowings**

	Non-curre	nt portion	Current m	naturities
	31 March, 2013	31 March, 2012	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores	₹ in Crores	₹ in Crores
Term loans				
Indian rupee term loans from bank (secured)	206.63	-	28.37	_
Deferred payment liabilities				
Sales tax loan (interest free) (unsecured)	0.05		1.47	0.14
	206.68	_	29.84	0.14
The above amount includes				
Secured borrowings	206.63	_	28.37	_
Unsecured borrowings				
Amount disclosed under the head other current	0.05	_	1.47	0.14
liabilities" (note 10)	_	_	29.84	0.14
Net amount	206.68			

- a) Indian rupee term loan from bank amounting to Rs. 85.00 Crores carries interest @ BPLR + 1.35% p.a. loan amount is repayable in 20 quarterly equated installments of Rs. 4.25 Crores (excluding interest) from the end of moratorium period. The term loan is secured by first charge on the movable fixed assets (both present and future).
- b) Indian rupee term loan from bank amounting to Rs. 150.00 Crores carries interest @ BPLR + 1% p.a. loan amount is repayable in 16 quarterly equated installments of Rs. 9.38 Crores (excluding interest) from the end of moratorium period. The term loan is secured by first charge on the movable fixed assets (both present and future).

# Note 6: Deferred Tax Liabilities (Net)

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Deferred tax liability		
Fixed assets: Impact of difference between tax depreciation and depreciation/amortisation		
for the financial reporting	107.48	95.40
Others	10.70	2.12
Gross deferred tax liability	118.18	97.52
Deferred tax assets		
Provision for doubtful debts and advances	22.34	14.86
Impact of expenditure charged to the statement of profit and loss in the current year	3.14	2.14
but allowed for tax purposes on payment basis	2.90	_
Provision for inventory	2.46	7.00
Provision for litigation / contingencies	0.13	_
Others		24.00
Gross deferred tax assets	30.97	
Net deferred tax liability	87.21	73.52

# Note 7: Other Long-Term Liabilities

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Trade payables	1.59	19.42
Total	1.59	19.42

### **Note 8: Provisions**

	Long-	term	Short-	term
	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Provision for employee benefits				
Provision for gratuity (refer note 27)	5.81	3.81	_	_
Provision for leave benefits	<u></u>	2.33	3.42	0.47
Other previous	5.81	6.14	3.42	0.47
Other provisions		2.04		1.00
Provision for income tax (net of advance income tax) Provision for litigations/contingencies	9.50	3.61 29.96	_	1.00
Proposed equity dividend	5.30	25.50	11.80	11.80
Provision for tax on proposed equity dividend	<u> </u>		2.01	1.90
	9.50	33.57	13.81	14.70
Total	15.31	39.71	17.23	15.17

Provision for litigations/contingencies

The provision of Rs. 9.50 Crores as on March 31, 2013 is towards contingencies in respect of disputed claims against the company as described in note 32 and note 43 (A), the timing of outflow and quantum of which is presently unascertainable. Provision of Rs. 20.46 Crores was utilized during the year.

# **Note 9: Short-Term Borrowings**

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Cash credit from banks (secured)	52.89	16.14
Working capital demand loan from banks (secured)	79.70	65.00
Other loan from banks (unsecured)	699.76	583.23
TOTAL	832.35	664.37
The above amount includes		
Secured borrowings	132.59	81.14
Unsecured borrowings	699.76	583.23
Net Amount	832.35	664.37

#### Note:

Cash credit and working capital demand loans from banks are secured by hypothecation of raw materials, work in progress, finished goods and trade receivables.

The cash credit is repayable on demand and carries interest @ 9.5-10%

Working capital demand loans from banks are secured by first charge on current assets (both present and future) and second charge on movable fixed assets (both present and future) & carry interest @9.5-11%.

Other loans from banks include buyer's credit arrangements and export bill discounting. They are repaid / rolled over after a period of six months and carry interest @0.95-2% (excluding hedging premium).

# **Note 10: Other Current Liabilities**

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Trade payables (including acceptances)		
(i) Micro, medium and small enterprises (refer note 35)	0.57	0.01
(ii) Others	618.68	521.16
Other liabilities		
Current maturities of long-term borrowings (refer note 5)	29.84	0.14
Interest accrued but not due on borrowing	9.84	6.65
Unclaimed dividend	1.11	1.02
Advance from customers	125.51	202.16
Interest free deposit from customers	0.28	0.16
Interest free deposit from vendors	6.81	0.30
Payables for purchase of fixed assets	25.83	32.03
Service tax payable	0.53	0.94
TDS payable	0.85	2.17
Value added tax payable	25.19	15.44
Central sales tax payable	5.58	4.17
Others	92.47	49.09
	323.84	314.27
Total	943.09	835.43

Note 11: Tangible and Intangible Assets

₹ in Crores

			GROSS BI OCK				DEPRECI	DEPRECIATION/AMORTISATION	ISATION			IMPAIRMENT	MFNT		NFT BLOCK	) UCK
Nature of assets			Transfer from Assets	Deletions/			F E	Tranfer from Assets	Deletions/				Deletions/			
	As on	Additions* held for		Adjustment	As on 7	As on 7012	Additions he	held for	Adjustment	As on 7012	As on 7012	Additions	Reversals	As on 712	As on 2012	As on 2012
Tangible assets	7.50		200			03:40	7				21.00.100					200.10
Freehold land	32.86	0.20	5.50	0.05	38.54	I	1	I	I	I	I	I	I	I	38.54	32.86
Leasehold land	36.19	0.45	I	ı	36.64	26.0	0.32	ı	I	1.29	I	ı	I	I	35.35	35.22
Buildings#	171.27	31.84	3.07	0.11	206.07	29.56	6.67	0.72	I	36.95	I	I	I	I	169.12	141.71
Plant and machinery	1,121.60	83.69	I	11.27	1,194.02	403.45	70.77	ı	6.03	468.16	26.70	I	0.16	26.54	699.32	691.48
Furniture and fixtures	8.95	0.44	0.02	0.21	9.25	2.37	29.0	0.04	0.12	2.96	I	ı	I	I	6.29	6.58
Data processing equipment	16.73	1.23	I	0.10	17.86	11.67	1.50	I	0.02	13.10	I	I	I	I	4.76	5.06
Office equipment	5.58	1.57	0.28	0.10	7.33	1.91	0.50	0.11	0.02	2.50	0.05	I	I	0.05	4.78	3.62
Electric fittings	48.09	1.07	I	0.43	48.73	15.43	2.38	I	0.16	17.65	0.45	I	I	0.45	30.63	32.21
Vehicles	5.22	1.75	I	1.07	5.90	0.95	0.62	I	0.37	1.20	ı	ı	ı	I	4.70	4.27
Sub - total	1,446.49	122.24	8.92	13.31	1,564.34	466.28	83.43	0.87	6.77	543.81	27.20	ı	0.16	27.04	993.49	953.01
Intangible assets																
Software/ licences	2.37	1.99	I	I	4.36	1.36	0.55	I	I	1.91	I	I	I	ı	2.45	1.01
Patents	9.31	ı	I	ı	9.31	4.37	1.86	ı	ı	6.23	I	ı	ı	I	3.08	4.94
Customer acquisition	1	2.34	I	ı	2.34	I	0.11	I	I	0.11	I	ı	I	I	2.23	ı
Sub - total	11.68	4.33	I	I	16.01	5.73	2.52	I	I	8.25	I	ı	I	I	2.76	5.95
Total	1,458.17	126.57	8.92	13.31	1,580.35	472.01	85.95	0.87	6.77	552.06	27.20	ı	0.16	27.04	1,001.25	928.96
Capital work in progress															28.92	41.08
Total	1,458.17	126.57	8.92	13.31	1,580.35	472.01	85.95	0.87	6.77	552.06	27.20	1	0.16	27.04	1,030.22	1,000.04
Previous year	1,180.52	337.79	[8.92]	51.22	1,458.17	420.43	71.36	[0.87]	18.91	472.01	53.92	I	26.72	27.20	1,000.04	

 $<sup>^{\</sup>ast}\,$  Refer note 30 for amount of expenses capitalised during the year.

Gross block Rs. 97.53 Crores (31 March 2012 Rs. 71.20 Crores) # Buildings include those constructed on leasehold land:

Accumulated depreciation Rs. 19.72 Crores (31 March 2012 Rs. 4.95 Crores) Depreciation for the year Rs. 3.21 Crores (31 March 2012 Rs. 2.12 Crores) Net block Rs. 77.81 Crores (31 March 2012 Rs. 66.25 Crores)

# **Note 12: Non-Current Investments**

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Trade investment (valued at cost unless stated otherwise)		
Investment in subsidiaries		
Equity instruments (unquoted)		
8,730,000 (31 March 2012: 8,730,000) Equity shares of Sterlite Display Technologies Private Limited of Rs.10 each fully paid up. (At cost less provision for other than temporary diminution in value Rs. 6.80 Crores (31 March 2012: Rs. 4.26 Crores))	1.93	4.47
50,000 (31 March 2012: 50,000) Equity shares of East North Interconnection Company Limited of Rs. 10 each fully paid up	0.05	0.05
100,000 (31 March 2012: 100,000) Equity shares of Sterlite Grid Limited of Rs. 10 each fully paid up	15.10	15.10
7,506,447 (31 March 2012: 5,625,001) Equity shares of Sterlite Global Ventures (Mauritius) Limited of USD 1 each fully paid up	36.76	26.66
10,000 (31 March 2012: 10,000) Equity shares of Sterlite Technologies Americas LLC of USD 1 each fully paid-up	0.05	0.05
50,000 (31 March 2012: 50,000) Equity shares of Sterlite Networks Limited of Rs. 10 each fully paid-up	0.05	0.05
2,000 (31 March 2012: Nil) Equity shares of Sterlite Europe Ventures Limited of Euro 1 each fully paid-up	0.10	-
Maharashtra Transmission Communication Infrastructure Limited #	5.10	-
Debentures (unquoted)		
950,000 (31 March 2012: 950,000) 0.01% Compulsory Convertible Debentures of East North Interconnection Company Limited of Rs. 10 each	129.96	129.96
(Aggregate amount of unquoted investments)	189.10	176.34
Aggregate provision for diminution in value of investments	6.80	4.26

<sup>#</sup> The Company has paid an amount of Rs. 5.10 Crores towards Right of Way granted to Maharashtra Transmission Communication Infrastructure Limited formed as a joint venture between the Company and Maharashtra State Electricity Transmission Company Limited which is engaged in establishing communication network in the state of Maharashtra. This amount has been considered as cost of investment in the subsidiary.

The amount of Rs. 0.03 Crores paid towards contribution to share capital of Maharashtra Transmission Communication Infrastructure Limited has been disclosed as a share application money under loans and advances pending formal board approval and issuance of certificate by the subsidiary which is kept on hold pending receipt of FIPB approval.

# Note 13: Loans and Advances

	Non-cu	urrent	Curre	ent
Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Capital advances (unsecured, considered good) (A)	9.88	14.03	-	_
Security deposits (unsecured, considered good) (B)	1.34	0.63	3.66	3.34
Loans and advances to related parties (note 34) (Unsecured considered good) (C)	585.24	136.35	-	0.00
Advances recoverable in cash or kind (unsecured)				
Considered good	_	_	137.14	95.89
Considered doubtful	0.67	0.12	_	_
	0.67	0.12	137.14	95.89
Provision for doubtful advances	0.67	0.12	_	
(D)			137.14	95.89

	Non-c	urrent	Curr	ent
Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Other loans and advances (unsecured, considered good)				
Share application money pending allotment in subsidiaries	24.82	24.79	_	_
Advance income taxes, including TDS [net of provision]	4.40	-	-	0.00
Minimum alternate tax credit entitlement	46.22	45.30	-	_
Balances with central excise authorities	-	_	20.47	17.21
Other advances	4.55	4.05	31.82	20.70
(E)	79.99	74.14	52.29	37.91
Total (A + B + C + D + E)	676.45	225.15	193.09	137.14

The provision for tax has been made in accordance with provisions of Section 115 JB (Minimum Alternate Tax, 'MAT') of the Income Tax Act, 1961. The company is entitled to avail credit under Section 115JAA (1A) and accordingly it has considered MAT credit entitlement as an asset.

# **Note 14: Trade Receivables**

(Unsecured)

	Non-c	urrent	Curre	ent
Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Outstanding for a period exceeding six months from the date they are due for payment				
– Considered good	32.32	87.05	87.52	36.43
<ul> <li>Considered doubtful</li> </ul>	65.91	49.24	-	_
	98.23	136.29	87.52	36.43
Less: provision for doubtful receivables	65.91	49.24	-	_
(A)	32.32	87.05	87.52	36.43
Other receivables				
– Considered good	36.80	30.17	552.85	630.32
(B)	36.80	30.17	552.85	630.32
Total (A+B)	69.12	117.22	640.37	666.75

### **Note 15: Other Assets**

Particulars	31 March, 2013 ₹ in Crores	31 March, 20112 ₹ in Crores
Interest accrued on fixed deposits	0.55	8.35
Unbilled Revenue	0.26	
Total	0.81	8.35

### **Note 16: Inventories**

(Valued at lower of cost and net realisable value)

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Raw materials and components	114.03	93.77
(Include stock in transit ₹ 48.81 Crores (31 March, 2012: ₹ 12.53 Crores)) (refer note 20)		
Work-in-progress (refer note 21)	54.65	46.19
Finished goods (Includes stock in transit Rs.10.77 Crores (31 March 2012: Rs. 26.50)		
(refer note 21)	84.37	99.87
Traded goods (refer note 21)	5.69	4.68
Stores, spares, packing materials and others	32.80	28.19
Total	291.54	272.70

# Note 17: Cash and Bank Balances

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Cash and cash equivalents		
Balance with banks:		
On current accounts	16.95	8.25
Deposit with original maturity of less than 3 months	75.00	95.00
On unpaid dividend account	1.11	1.02
Cash in hand	0.05	0.05
	93.11	104.32
Other bank balances		
Deposit with original maturity for more than 12 months	100.42	80.45
Deposit with original maturity for more than		
3 months but less than 12 months	2.22	
	102.64	80.45
Total	195.75	184.77

# Note 18: Revenue from Operations

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Sale of products		
Finished goods	3,315.54	2,683.74
Traded goods	76.69	63.04
Sale of services	7.03	3.04
Other operating revenue		
Scrap sales	24.92	15.32
Export incentive	43.33	39.48
Revenue from operations (gross)	3,467.51	2,804.62
Less: Excise duty #	113.80	77.15
Revenue from operations (net)	3,353.71	2,727.47

# Excise duty on sales amounting to Rs.113.80 Crore (31 March 2012: Rs. 77.15 Crore) has been reduced from sales in statement of profit and loss and excise duty on increase / (decrease) in stock amounting to Rs. 4.19 Crore (31 March 2012: Rs. (2.87 Crore)) has been considered as expense / (income) in note 23 of financial statements

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Details of products sold		
Finished goods sold		
Power transmission conductors	2,239.89	1,940.80
Optical fiber	355.19	296.31
Fiber optic cables	474.81	310.60
Copper Telecom cables	187.33	124.07
Others	58.32	11.96
	3315.54	2,683.74
Traded goods sold		
Broadband access network equipment - DSLAM	22.16	43.03
Set top boxes	12.21	_
Local access network equipment	8.25	_
Power transmission conductors and OPGW accessories	8.42	4.40
Fiber connectivity accessories	17.98	0.51
Others	7.67	15.10
	76.69	63.04
Details of services rendered		
Installation and commissioning services for broadband network setup	3.94	1.76
Provisioning of network services	1.79	0.00
Others	1.30	1.28
	7.03	3.04

# Note 19: Other Income

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Interest income on		
Bank deposits	9.33	8.63
Long-term investments	-	9.11
Current investments	0.05	_
Others	4.63	5.71
Miscellaneous income	0.53	0.22
Total	14.54	23.67

# Note 20: Cost of Raw Material and Components Consumed

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Inventory at the beginning of the year	93.77	75.39
Addition due to amalgamation (refer note 42)	-	1.11
Add: Purchases	2,294.00	1,922.27
	2,387.77	1,998.77
Less: Inventory at the end of the year	114.03	93.77
Cost of raw material and components consumed	2,273.74	1,905.00

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Details of raw material and components consumed		
Aluminum/alloy	1,566.96	1,436.79
Galvanised steel wire/steel tape Copper rods	168.16 124.72	145.72 75.22
Polyethylene compounds	75.01	28.63
Resin Silicon tetrachloride	39.91 29.63	28.29 32.00
Others	269.35	158.35
Total	2,273.74	1,905.00

Note 21: (Increase)/ Decrease in Inventories

	31 March, 2013	31 March, 2012
Particulars	₹ in Crores	₹ in Crores
Opening inventories:		
Traded goods	4.68	0.20
Work-in-progress	46.19	32.06
Finished goods	99.87	62.46
	150.74	94.72
Closing inventories:		
Traded goods	5.69	4.68
Work-in-progress	54.65	46.19
Finished goods	84.37	99.87
	144.71	150.74
Increase / (decrease) in inventories	6.03	(56.02)
	31 March, 2013	31 March, 2012
Particulars	₹ in Crores	₹ in Crores
Details of purchase of traded goods		
Broadband access network equipment	16.89	35.20
Fiber connectivity accessories	16.51	0.89
Power transmission conductors and OPGW accessories	13.52	5.90
Set top boxes	6.55	-
Local access network equipment	7.29	12.50
Others	10.07 70.83	12.58 54.57

Note 22: Employee Benefits Expense

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Salaries, wages and bonus	101.68	86.10
Contribution to provident fund and superannuation fund	4.75	3.33
Employees stock option expenses (refer note 28)	0.44	1.00
Gratuity expenses (refer note 27)	2.05	1.77
Staff welfare expenses	8.78	6.50
	117.70	98.70

Note 23: Other Expenses

Troto Lo. Other Expenses	31 March, 2013	31 March, 2012
Particulars	₹ in Crores	₹ in Crores
Increase/(decrease) of excise duty on inventory	4.19	(2.87)
Consumption of stores and spares	55.11	42.95
Power, fuel and water	132.23	127.29
Repairs and maintenance		
– Building	2.06	1.35
- Machinery	13.32	10.90
- Others	1.50	10.30
Carriage inwards	1.99	1.90
Consumption of packing materials	109.44	85.60
Sales commission (other than sole selling agent)	19.50	17.49
Sales promotion	5.43	5.42
Carriage outwards	73.97	72.27
Rent	5.46	4.31
Insurance	6.61	5.95
Rates and taxes	6.43	1.68
Travelling and conveyance	22.83	18.31
Loss on sale of fixed assets, net	4.22	2.43
Bad debts/advances written off	16.71	1.06
Provision for doubtful debts and advances	17.22	9.98
Provision for contingencies		20.46
Provision for diminution in value of investment in subsidiary company	2.54	4.26
Compensation to customers	27.21	_
Directors sitting fee and commission	0.20	0.17
Payment to auditor (refer details below)	0.81	0.79
Miscellaneous expenses	102.98	86.79
Research and development expenses		
<ul> <li>Salaries, wages and bonus</li> </ul>	3.10	0.73
- Raw materials consumed	1.80	3.95
<ul> <li>General expenses</li> </ul>	2.76	2.49
	639.62	525.66
Payment to auditor		
As auditor:		
Audit fee	0.68	0.60
Tax audit fee	0.08	0.08
In other capacity:		
Other services (certification fees)	0.05	0.01
Reimbursement of expenses	_	0.10
·	0.81	0.79

Note 24: Depreciation and Amortisation Expense

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Depreciation of tangible assets	83.43	69.04
Amortisation of intangible assets	2.52	2.32
	85.95	71.36

# **Note 25: Finance Costs**

Particulars	31 March, 2013 ₹in Crores	31 March, 2012 ₹ in Crores
Interest		
<ul> <li>On fixed loans</li> </ul>	2.91	_
- Others*	55.81	59.54
Bank charges	9.20	8.76
Exchange difference to the extent considered as an adjustment to borrowing costs	37.65	26.80
	105.57	95.10
* Finance cost as above is net of ₹ 26.96 Crores (31 March 2012: ₹ 4.84 Crores) charged during the year to subsidiaries towards loans and advances provided to them.		

# Note 26: Earnings per Share

The following reflects the profit and share data used in the basic and diluted EPS computation.

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Profit for the year	47.46	43.84
Weighted average number of equity shares in calculating basic EPS	39.34	39.25
Effect of dilution:		
Employee stock options outstanding during the year	0.34	0.13
Share warrants outstanding during the year	-	0.07
Weighted average number of equity shares in calculating diluted EPS	39.68	39.45
Earnings per share		
Basic (on nominal value of ₹ 2 Per Share) ₹ /share	1.21	1.12
Diluted (on nominal value of ₹ 2 Per Share) ₹ /share	1.20	1.11

# Note 27: Gratuity

The Company has a defined benefit gratuity plan. Every employee who has completed five years or more of service gets a gratuity on departure at 15 days' salary (last drawn salary) for each completed year of service. The scheme is funded with Life Insurance Corporation of India in the form of a qualifying insurance policy.

Changes in the present value of the defined benefit obligation are as follows:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Defined benefit obligation at the beginning of the year	4.68	3.69
Current service cost	0.71	0.71
Interest cost	0.40	0.31
Actuarial (gain)/loss	1.14	0.84
Benefits paid	(0.59)	(0.87)
Defined benefit obligation, at the end of the year	6.34	4.68
Changes in the fair value of plan assets are as follows:		
Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Fair value of plan assets at the beginning of the year	0.92	1.78
Expected return on plan assets	0.08	0.14
Contribution by employer	-	-
Benefits paid	(0.59)	(0.87)
Actuarial gain/(loss)	0.12	(0.13)
Fair value of plan assets at the end of the year	0.53	0.92

<sup>\*</sup> The Company expects to contribute ₹ Nil (31st March 2012: Rs. Nil) to its defined benefit gratuity plan in 2013-14.

#### The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

Particulars	31 March, 2013 %	31 March, 2012 %
Investment with insurer (Life Insurance Corporation of India)	100	100

#### Details of defined benefit obligation

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Present value of defined benefit obligation	6.34	4.68
Fair value of plan assets	0.53	0.92
Plan liability	5.81	3.76

#### Net employee benefit expense recognised in the statement of profit and loss:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Current service cost	0.71	0.71
Interest cost on benefit obligation	0.40	0.31
Net actuarial (gain)/loss recognised	1.02	0.97
Expected return on plan assets	(0.08)	(0.14)
Contribution by employer		
Net benefit expense	2.05	1.85

#### Amounts for the current and previous periods are as follows:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2011 ₹ in Crores	31 March, 2010 ₹ in Crores	31 March, 2009 ₹ in Crores
Defined benefit obligation	6.34	4.68	3.69	3.23	2.34
Plan assets	0.53	0.92	1.78	1.62	1.73
Surplus/(deficit)	5.81	3.76	1.91	1.61	0.61
Experience adjustments on plan liabilities	(0.12)	0.13	(0.06)	0.70	_
Experience adjustments on plan assets	(80.0)	(0.14)	(0.14)	1.31	_

#### The principal assumptions used in determining defined benefit obligation are shown below:

Particulars	31 March, 2013	31 March, 2012
Discount rate	8.00%	8.50%
Expected rate of return on plan asset	8.70%	8.60%
Employee turnover	2.00%	2.00%
Actual rate of return on plan assets	9.40%	9.30%

The estimated future salary increase, considered in actuarial valuation, takes into account the effect of inflation, seniority, promotion and other relevant factors such as supply and demand in the employment market. The overall expected rate of return on plan assets is determined based on the market prices prevailing as on balance sheet date, applicable to the period over which the obligation is to be settled.

# Note 28: Employee Stock Option Scheme

The Company has granted employees stock options plan, 2006 (ESOP Scheme 2006) and employees stock options plan, 2010 (ESOP Scheme 2010) to its employees pursuant to the resolution passed by the shareholders at the extraordinary general meeting held on March 13, 2006 and annual general meeting held on July 14, 2010 respectively. The Company has followed the fair value method (Black Scholes Options Pricing Model) for the valuation of these options. The compensation committee of the Company has approved six grants vide their meeting held on June 14, 2006; March 19, 2007; September 28, 2007; June 14, 2008; June 26, 2009 and December 29, 2011 As per the plan, Options granted under ESOP would vest in not less than one year and not more than five years from the date of grant of such options. Vesting of options is subject to continued employment with the company. The plan is an equity settled plan.

The Company has charged Rs. 0.44 Crores [31 March, 2012: Rs.1.00 Crores] to the statement of profit and loss in respect of options granted under ESOP scheme 2006 and options granted under ESOP scheme 2010.

Other details of the options granted under ESOP scheme 2006 are as follows:

Particulars	Grant 1	Grant 2	Grant 3	Grant 4	Grant 5
Date of grant	14-Jun-06	19-Mar-07	28-Sep-07	14-Jun-08	26-Jun-09
Number of options granted	11,64,250	3,18,000	6,53,875	1,27,750	12,09,500
Method of settlement	Equity	Equity	Equity	Equity	Equity
Vesting period (years)	3	2.25	1.71	1	5
Exercise period (years)	1	1	1	1	1
Vesting conditions	Business	Business	Business	Business	Business
	performance	performance	performance	performance	performance

Other details of the options granted under ESOP scheme 2010 are as follows:

Particulars	Grant 1
Date of grant	29-Dec-11
Number of options granted	22,24,000
Method of settlement	Equity
Vesting period (years)	5
Exercise period (years)	1
Vesting conditions	Business
	performance

The details of the activity under ESOP scheme 2006 have been summarised below:

	31 March, 2013		31 March, 2012	
Particulars		Weighted average		Weighted average
	Number of options	exercise price (₹)	Number of options	exercise price (₹)
Outstanding at the beginning of the year	275,613	2.00	519,654	2.00
Granted during the year	Nil	-	Nil	_
Forfeited during the year	Nil	-	Nil	_
Exercised during the year	87,156	2.00	191,347	2.00
Expired during the year	29,817	2.00	52,694	2.00
Outstanding at the end of the year	158,640	2.00	275,613	2.00
Exercisable at the end of the year	34,682	2.00	61,367	2.00
Weighted average remaining contractual life (in years)	0.75	-	1.24	_
Weighted average fair value of options granted	35.23	-	35.23	_

The outstanding ESOPs as above are entitled to bonus in the ratio of 1:1.

The weighted average share price in the year ended March 31, 2013 was ₹ 31.58 (31 March, 2012 ₹ 46.18).

The fair value as per the Black Scholes Options Pricing Model was measured based on the following input:

Date of grant: June 14, 2006	Vest 1	Vest 2	Vest 3
Variables	June 14, 2007	June 14, 2008	June 14, 2009
Weighted average stock price	17.85	17.85	17.85
Expected volatility (*)	59.78%	58.90%	60.52%
Risk free rate	7.07%	7.16%	7.26%
Exercise price (₹ Per Option)	1	1	1
Time to maturity (years)	1.50	2.50	3.50
Dividend yield	0.57%	0.57%	0.57%
Outputs			
Option fair value	16.80	16.76	16.72
Vesting percentage	20.00%	40.00%	40.00%
Option fair value		16.76	

Date of grant: March 19, 2007	Vest 1	Vest 2
Variables	June 19, 2008	June 19, 2009
Weighted average stock price	35.80	35.80
Expected volatility (*)	62.90%	57.75%
Risk free rate	8.07%	8.06%
Exercise price (₹ Per Option)	1	1
Time to maturity (years)	1.50	2.50
Dividend yield	0.57%	0.57%
Outputs		
Option fair value	34.61	34.47
Vesting percentage	60.00%	40.00%
Option fair value	34.55	

Date of grant: September 28, 2007	Vest 1	Vest 2
Variables	September 28, 2008	September 28, 2009
Weighted average stock price	47.46	47.46
Expected volatility (*)	56.69%	60.98%
Risk free rate	7.20%	7.29%
Exercise price (₹ Per Option)	1	1
Time to maturity (years)	1.50	2.21
Dividend yield	0.51%	0.51%
Outputs		
Option fair value	46.20	46.08
Vesting percentage	50.00%	50.00%
Option fair value	46.14	

Date of grant: June 14, 2008	Vest 1
Variables	June 14, 2009
Weighted average stock price	39.70
Expected volatility (*)	72.11%
Risk free rate	8.34%
Exercise price (₹ Per Option)	1
Time to maturity (years)	1.50
Dividend yield	0.49%
Outputs	
Option fair value	38.53
Vesting percentage	100.00%
Option fair value	38.53

Date of grant: June 26, 2009	Vest 1	Vest 2	Vest 3	Vest 4	Vest 5
Variables	June 26, 2010	June 26, 2011	June 26, 2012	June 26, 2013	June 26, 2014
Weighted average stock price	36.65	36.65	36.65	36.65	36.65
Expected volatility (*)	97.30%	81.93%	77.57%	72.68%	70.10%
Risk free rate	5.61%	5.83%	6.05%	6.27%	6.47%
Exercise price (₹ Per Option)	1	1	1	1	1
Time to maturity (years)	1.50	2.50	3.50	4.50	5.50
Dividend yield	0.60%	0.60%	0.60%	0.60%	0.60%
Outputs					
Option fair value	35.40	35.24	35.08	34.93	34.77
Vesting percentage	50.00%	20.00%	10.00%	10.00%	10.00%
Option fair value			35.23		

As approved by the Extra-Ordinary General Meeting of the company held on February 25, 2010, the company has made sub-division of the face value of its equity share capital from ₹ 5 per share to ₹ 2 per share. Further, the company in the same meeting has approved bonus shares in the ratio of 1:1. Thus, ESOP data as above has been recalculated and presented after considering the impact of the sub-division of face value of the equity share and bonus thereon.

The details of the activity under ESOP scheme 2010 have been summarised below:

	31 March, 2013		31 March, 2012	
Particulars	Number of options	Weighted average exercise price (₹)	Number of options	Weighted average exercise price (₹)
Outstanding at the beginning of the year	2,056,000	2	_	_
Granted during the year	2,668,800	2	2,224,000	2
Forfeited during the year	2,668,800#	2	_	_
Exercised during the year	-	-	_	_
Expired during the year	1,327,430	2	168,000	2
Outstanding at the end of the year	728,570	2	2,056,000	2
Exercisable at the end of the year	367,660	2	_	_
Weighted average remaining contractual life (in years)	0.98	-	1.85	_
Weighted average fair value of options granted	25.87	_	25.87	_

# The Company had granted 2,668,800 options in ESOP scheme 2010 on July 27, 2012, the vesting for which was linked to business performance which could not be meet. Hence the option were forfeited during the year.

The fair value as per the Black Scholes Options Pricing Model was measured based on the following input:

Date of grant: December 29, 2011 Variables	Vest 1 December 29, 2012	Vest 2 December 29, 2013	Vest 3 December 29, 2014	Vest 4 December 29, 2015	Vest 5 December 29, 2016
Weighted average stock price	28.00	28.00	28.00	28.00	28.00
Expected volatility (*)	48.31%	47.36%	64.15%	68.63%	65.78%
Risk free rate	8.33%	8.34%	8.35%	8.37%	8.39%
Exercise price (₹ Per Option)	2	2	2	2	2
Time to maturity (years)	1.50	2.50	3.50	4.50	5.51
Dividend yield	0.73%	0.73%	0.73%	0.73%	0.73%
Outputs					
Option fair value	25.93	25.87	25.82	25.78	25.70
Vesting percentage	50.00%	20.00%	10.00%	10.00%	10.00%
Options fair value			25.87		

<sup>(\*)</sup> The measure of volatility used in the above model is the annualised standard deviation of the continuously compounded rates of return on the stock over a period of time. The volatility periods considered above, corresponding to the respective expected lives of the different vests are prior to the grant date. The daily volatility of stock prices is considered as per the National Stock Exchange (NSE) prices over these years.

# Note 29: Operating Lease

The Company has taken office buildings on operating lease. The lease term is for periods of three to nine years and renewable at the option of the Company.

Disclosures in respect of operating leases of office buildings as per the requirement of AS-19 on Leases, notified under the Rules are as under:

- (a) Lease payments recognised in the statement of profit and loss for the year is Rs. 5.46 Crores (31 March 2012: Rs. 4.31 Crores).
- [b] The future minimum lease payments payable over the next one year is Rs. 3.22 Crores (31 March 2012: Rs. 2.64 Crores).
- (c) The future minimum lease payments payable later than one year but not later than five year is Rs. 7.48 Crores (31 March 2012: ₹ 1.65 Crores).

### Note 30: Capitalisation of Expenditure

During the year, the Company has capitalised the following expenses to the cost of fixed assets/ capital work-in-progress (CWIP). Consequently, expenses disclosed under the respective notes are net of amounts capitalised by the Company.

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Employee benefit expenses	-	8.56
Consumption of stores and spares	-	0.30
Power and fuel	-	1.00
Finance costs	-	5.22
Other expenses	0.29	10.51
Total	0.29	25.59

### **Note 31: Capital Commitments**

- a] Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances) are ₹91.14 Crores (31 March 2012: Rs. 38.07 Crores.)
- b] As on March 31, 2013, the Company has commitments of Rs. 146.00 Crores (31 March 2012: Rs. 897.18 Crores) relating to further investment in subsidiaries.

# **Note 32: Contingent Liabilities**

	<u> </u>	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
1	Disputed liabilities in appeal		
	a) Sales tax	0.43	0.43
	b) Excise duty (Including excise duty case in Supreme Court, refer note 8 and note 43 (A))	248.99	248.18
	c) Customs duty	67.24	67.24
	d) Income tax	6.92	6.92
	e) Claims lodged by a bank against the Company (*) (refer note 8)	18.87	18.87
2	f) Claims against the Company not acknowledged as debt	25.17	22.32 36.58
2	Outstanding amount of export obligation against advance licence	45.86	30.58
3	The company has given corporate guarantee to the income tax department on behalf of group companies.	114.00	114.00
4	Corporates guarantees given on behalf of its subsidiaries for loans and hedging facilities		
	taken from bank / financial institution (to the extent of loans and hedging facilities		
	outstanding as at balance sheet date)		
	(The total amount of corporate guarantees is Rs. 832.46 Crores (31 March 2012:		
	Rs.119.59 Crores))	548.34	30.00
5	Bank guarantee given to Long-term Transmission Customers on behalf of its subsidiary		
	company.	30.00	30.00

The Company has not provided for disputed sales tax, excise duty, customs duty and service tax arising from disallowances made in assessments which are pending with appellate authorities for its decision.

It is not practicable to indicate the uncertainties which may affect the future outcome and estimate the financial effect of the above liabilities.

(\*) In an earlier year, one of the Bankers of the Company had wrongly debited an amount of Rs. 18.87 Crores, towards import consignment under letter of credit not accepted by the company, owing to discrepancies in the documents. The company has filed the case against the bank in the High Court of Mumbai. The bank has also filed a claim against the company in the Debt Recovery Tribunal. The company does not believe that any liability will arise to the company.

### **Note 33: Derivative Instruments**

The Company has entered into the following derivative instruments:

(a) The following are the outstanding forward exchange contracts entered into by the company, for hedge purpose, as on March 31, 2013:

Purpose	Foreign currency (in Crores)	Amount (₹ in Crores)	Buy/Sell	No. of contracts (Quantity)
March 31, 2013				
Hedge of payables and buyers credit	US \$ 14.10	779.64	Buy	388
Hedge of trade receivables and highly probable foreign currency sale	US \$ 8.30	473.72	Sell	111
Hedge of payables and buyers credit	EUR 0.96	69.50	Buy	53
Hedge of trade receivables and highly probable foreign currency sale	EUR 1.07	76.53	Sell	28
Hedge of payables and buyers credit	GBP 0.03	2.37	Buy	1
Hedge of trade receivables and highly probable foreign currency sale	GBP 0.53	47.02	Sell	10
March 31, 2012				
Hedge of payables and buyers credit	US \$ 12.79	670.32	Buy	308
Hedge of trade receivables and highly probable foreign currency sale	US \$ 16.29	832.07	Sell	208
Hedge of payables and buyers credit	EUR 0.64	44.02	Buy	11
Hedge of trade receivables and highly probable foreign currency sale	EUR 1.71	117.71	Sell	39
Hedge of payables and buyers credit	GBP 0.03	2.32	Buy	1
Hedge of trade receivables and highly probable foreign currency sale	GBP 0.71	57.44	Sell	11

(b) The year end foreign currency exposures that have not been hedged by a derivative instrument or otherwise are given below:
(i) Amount receivable in foreign currency on account of the following:

		31 March, 2013		31 March, 2012	
Category		Foreign currency	Amount	Foreign currency	Amount
		(in Crores)	(₹ in Crores)	(in Crores)	(₹ in Crores)
Export of goods	US\$	-	-	_	-
Export of goods	EUR	0.06	4.18	_	_
Export of goods	ETB	-	-	0.00	0.01
Export of goods	AED	0.16	2.32	_	-
Export of goods	AUD	-	-	0.02	1.17
Export of goods	ZAR	0.01	0.04	_	-
Export of goods	GBP	0.04	3.52	_	_
Advance to suppliers	US\$	0.43	23.19	0.01	0.73
Advance to suppliers	EUR	0.02	1.18	0.03	1.93
Advance to suppliers	GBP	0.00	0.17	_	_
Advance to suppliers	CHF	0.01	0.38	_	_
Advance to suppliers	AED	0.00	0.07	_	_
Balance with banks	US\$	-	-	0.01	0.31
Balance with banks	EUR	0.03	1.90	0.01	0.95
Balance with banks	GBP	0.01	0.51	0.04	2.90
Balance with banks	CNY	-	-	0.03	0.21
Balance with banks	ZAR	0.02	0.12	0.01	0.07
Balance with banks	ETB	0.05	0.19	0.05	0.15
Balance with banks	RUB	0.02	0.03	_	_

(ii) Amounts payable in foreign currency on account of the following:

		31 March, 2013		31 Marc	h, 2012
Category	Currency type	Foreign currency (in Crores)	Amount (₹ in Crores)	Foreign currency (in Crores)	Amount (₹ in Crores)
Import of goods and services	US\$	1.27	68.73	0.21	10.53
Import of goods and services	EUR	-	-	0.04	2.49
Import of goods and services	GBP	0.00	0.05	0.02	1.42
Import of goods and services	CHF	0.00	0.00	0.00	0.03
Import of goods and services	ZAR	0.04	0.02	0.01	0.04
Import of goods and services	AED	0.00	0.02	_	-
Advance from customer	US\$	0.13	7.14	0.30	15.26
Advance from customer	EUR	0.01	0.39	_	-
Advance from customer	ETB	0.02	0.07	0.03	0.08

(c) Commodity future contracts to hedge against fluctuation in commodity prices.

The following are the outstanding future contracts entered into by the company as on 31 March 2013

Year	Commodity type	No. of contracts	Contracted quantity (MT)	Buy/sell
31 March, 2013	Aluminium	67	10,743	Buy
31 March, 2013	Aluminium	3	2,430	Sell
31 March, 2013	Copper	4	73	Buy
31 March, 2012	Aluminium	25	22,200	Buy
31 March, 2012	Aluminium	8	7,875	Sell
31 March, 2012	Copper	4	4	Sell

### Note 34: Details of Loans and Advances given to Subsidiaries

The details are provided as required by SEBI Circular SMD/Policy/Cir-2/2003 dated 10 January, 2003 of the Listing Agreement.

	31 March, 2013		31 March, 2012	
Name of Subsidiary	Outstanding amount	Maximum balance	Outstanding amount	Maximum balance
Sterlite Display Technologies Private Limited	-	-	_	6.16
Sterlite Global Ventures (Mauritius) Limited	-	0.77	0.77	1.20
Sterlite Grid Limited	479.67	479.67	97.83	97.83
East North Interconnection Company Limited	39.30	39.30	33.04	33.04
Sterlite Technologies Americas LLC	9.05	9.05	0.61	0.61
Sterlite Networks Limited	55.90	55.90	4.10	4.10
Maharashtra Transmission Communication Infrastructure Limited	1.32	1.32	_	_

# Note 35: Details of dues to Micro and Small Enterprises as defined under MSMED Act, 2006

Descript	ion	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
	principal amount and the interest due thereon (to be shown separately) remaining aid to any supplier as at the end of each accounting year.		
	Principal amount due to micro and small enterprises	0.57	0.01
	Interest due on above	-	0.00*
Med	amount of interest paid by the buyer in terms of section 16, of the Micro Small and lium Enterprise Development Act, 2006 along with the amounts of the payment made supplier beyond the appointed day during each accounting year.	-	-
have	amount of interest due and payable for the period of delay in making payment (which e been paid but beyond the appointed day during the year) but without adding the rest specified under Micro Small and Medium Enterprise Development Act, 2006.	Nil	0.00*
(iv) The	amount of interest accrued and remaining unpaid at the end of each accounting year.	Nil	0.00*
until for tl	amount of further interest remaining due and payable even in the succeeding years, I such date when the interest dues as above are actually paid to the small enterprise the purpose of disallowance as a deductible expenditure under section 23 of the Micro and Medium Enterprise Development Act, 2006	-	-

<sup>\*</sup> Amount is below ₹ 0.01 Crore.

Interest payable as per section 16 of the Micro, Small and Medium Enterprises Act, 2006 is Nil (31 March, 2012 Rs. 0.00) and same is not accrued in the books of accounts. During, the year 2012-2013 the Company has not received any confirmation for Micro, Small and Medium enterprise.

### Note 36: Value of Imports Calculated on CIF Basis

Particulars	31 March, 2013 ₹in Crores	31 March, 2012 ₹ in Crores
Raw materials	700.88	540.67
Components and spare parts	13.77	12.00
Capital goods	46.92	25.58
Total	761.57	578.25

### Note 37: Expenditure in Foreign Currency (Accrual Basis)

Particulars	31 March, 2013 ₹in Crores	31 March, 2012 ₹ in Crores
Travelling and conveyance	7.33	11.23
Sales commission	4.87	7.02
Interest and bank charges	12.32	7.22
Royalty	1.56	2.61
Employee benefit expenses	18.64	16.85
Others	31.08	39.72
Total	75.81	84.65

# Note 38: Imported and Indigenous Raw Materials, Components and Spare Parts Consumed

Particulars	% of total consumption 31 March, 2013	Value (₹ in Crores) 31 March, 2013	% of total consumption 31 March, 2012	Value (₹ in Crores) 31 March, 2012
Raw material				
Imported	27.78	631.63	25.41	484.10
Indigenous	72.22	1,642.11	74.59	1,420.90
	100.00	2,273.74	100.00	1,905.00
Components and spare parts				
Imported	26.32	14.51	21.35	9.17
Indigenous	73.68	40.60	78.65	33.78
_	100.00	55.11	100.00	42.95

### Note 39: Net Dividend Remitted in Foreign Exchange

Year of remittance (ending on)	31 March, 2013	31 March, 2012
Period to which it relates	1 April, 2011 to	1 April, 2010 to
	31 March, 2012	31 March, 2011
Number of non-resident shareholders	7	1
Number of equity shares held on which dividend was due	20,94,57,700	20,94,02,750
Amount remitted, net of tax (₹ in Crores)	6.28	10.47

### Note 40: Earnings in Foreign Currency (Accrual Basis)

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
F.O.B. value of exports	952.99	813.25
F.O.B. value of deemed exports	143.67	205.14

### **Note 41: Share Application Money**

Share application money pertains to the amount of exercise price of Rs. 2 per share for 3,650 equity shares (31 March 2012: 22,822 equity shares) under Employee Stock Option Plan.

### Note 42: Accounting for Amalgamation

The Hon'ble High Court of judicature at Mumbai vide its Order dated October 21, 2011 approved the Scheme of Amalgamation of Sterlite Infra-Tech Limited (100% subsidiary of the Company) with the company. The subsidiary was engaged in the manufacture of optical fiber. The appointed date as per the scheme of amalgamation was April 1, 2011. Sterlite Infra-Tech Limited amalgamated with the Company effective from the appointed date. The Company has accounted for the amalgamation under the pooling of interests method.

Particulars	₹ in Crores
Assets	
Tangible fixed assets (including CWIP)	93.08
Inventories	1.46
Loans and advances	1.77
Cash and bank balances	0.02
Total assets (A)	96.33
Liabilities	
Short-term borrowing	31.01
Current liabilities	18.25
Provisions	0.30
Loan from holding company (eliminated on amalgamation)	46.17
Total liabilities (B)	95.73
Net assets (share capital and reserves) (A-B)	0.60

### Note 43: Other Notes

- A. The Company had in an earlier year received an order of CESTAT upholding the demand of Rs. 188 Crores (including penalties and excluding interest) (31 March 2012: Rs. 188 Crores) in the pending excise/custom matters on various grounds. The Company's appeal with the Honourable High Court of Mumbai was rejected on the grounds of jurisdiction. The Company preferred an appeal with the Honourable Supreme Court of India against the order of CESTAT which has been admitted. The Company has re-evaluated the case on admission of appeal by the Honourable Supreme Court. Based on their appraisal of the matter, the legal advisors/consultants are of the view that under most likely event, the provision of Rs. 4.50 Crores made by the company against the above demand is adequate. The management is confident of a favourable order and hence no further provision is considered against the said demand.
- B. There are no amounts due and outstanding to be credited to Investor Education and Protection Fund.

### **Note 44: Related Party Disclosures**

- (A) Name of related party and nature of its relationship:
  - (a) Related parties where control exists
  - (i) Holding company

Twin Star Overseas Limited, Mauritius (Immediate holding company) Volcan Investments Limited, Bahamas (Ultimate holding company)

### (ii) Subsidiaries

Sterlite Grid Limited

East North Interconnection Company Limited

Jabalpur Transmission Company Limited

**Bhopal Dhule Transmission Company Limited** 

Sterlite Global Ventures (Mauritius) Limited

Jiangsu Sterlite Tongguang Fiber Co. Limited

Sterlite Networks Limited

Sterlite Display Technologies Private Limited

Sterlite Technologies Americas LLC

Sterlite Technologies Europe Ventures Limited

Maharashtra Transmission Communication Infrastructure Limited

- (b) Other related parties with whom transactions have taken place during the year
- (i) Key management personnel (KMP)

Mr. Pravin Agarwal

Dr. Anand Agarwal

(ii) Entities where key management personnel / relatives of key management personnel have significant influence (EKMP)

Sterlite Industries (India) Limited

Fujairah Gold FZE

**Bharat Aluminium Company Limited** 

Hindustan Zinc Limited

Sterlite Energy Limited

Vedanta Aluminium Limited

Vedanta Resources PLC

(B) The transactions with related parties during the year and their outstanding balances are as follows:-

₹ in Crores

S. No.	Particulars Particulars	Subsid	liaries	Holding (	Company	KM	1P	EKI	ΜР
3. NU.	Transactions	12-13	11-12	12-13	11-12	12-13	11-12	12-13	11-12
1	Remuneration	-	_	-	_	6.02	5.37	-	_
2	Salary advance	_	_	_	_	_	3.21	_	_
3	Issue of equity shares	_	_	_	3.65	_	_	_	_
4	Securities premium received on equity shares issued	-	_	-	104.75	-	_	-	_
5	Dividend paid	-	_	6.28	10.47	-	_	0.14	0.24
6	Investment during the year	15.30	41.85	-	_	-	_	-	_
7	Share application money paid	0.03	_	-	_	-	_	-	_
8	Investment in compulsorily convertible debentures	-	129.96	-	_	-	_	-	_
9	Loans and advances given *	421.93	128.74	-	_	-	_	-	_
10	Repayment of loans / advances from subsidiary	-	6.80	-	-	-	_	-	_
11	Advance received from subsidiary *	0.57	1.23	-	_	-	_	-	_
12	Interest charged on loans	26.96	4.84	-	_	-	_	_	_
13	Management fees charged / (paid)	3.00	3.00	-	_	-	_	(0.20)	(0.48)
14	Sale of fixed assets	_	0.70	_	_	_	_	_	_
15	Purchase of goods	-	_	-	_	-	_	1,174.34	919.41
16	Purchase of services	1.39	_	_	_	_	_	_	_
17	Sale of goods (net of excise duty)	284.61	111.19	_	_	_	_	11.13	47.29
18	Sale of services	6.62	_	_	_	_	_	_	_
19	Interest paid	_	_	_	_	_	_	2.58	1.68
20	Expenses incurred	_	_	_	_	_	_	1.61	1.98
21	Advance received against supplies	25.73	10.83	_	_	_	_	0.35	_
22	Corporate and bank guarantees given	710.00	149.59					0.00	
	Outstanding Balances	1 10.00	145.55	_	_	_	_	_	_
1	Advance outstanding against supplies	27.07	10.83					0.35	
2	Loans/advance receivables	585.24	136.35	_	_	_	3.21	0.55	_
3		1.80	1.23	_	_	_	3.21	_	_
3 4	Loans/advance payables Debtors/(creditors)	64.41	19.75	_	_	_	_	6 00	20.99
4 5	•	24.82	24.79	_	_	_	_	6.90	20.99
_	Share application money pending allotment	24.82	24.79	_	_	_	_	_	_
6	Investment in compulsorily convertible debentures	129.96	129.96	-	_	-	_	-	_
7	Corporate and bank guarantees given and outstanding	862.46	149.59	_	_	_	_	114.00	114.00

<sup>\*</sup> Includes expenses incurred recoverable.

### Disclosure in respect of material related party transactions during the year:

	Particulars	Relationship	31 March, 2013	31 March, 2012
1.	Remuneration #			
	Mr. Pravin Agarwal	KMP	3.55	3.14
	Dr. Anand Agarwal	KMP	2.47	2.23
2.	Salary Advance			
	Mr. Pravin Agarwal	KMP	-	3.21
3.	Issue of equity shares			
	Twin Star Overseas Limited	Holding company	-	3.65
4.	Securities premium received on equity shares issu	ed		
	Twin Star Overseas Limited	Holding company	-	104.75
5.	Dividend paid			
	Twin Star Overseas Limited	Holding company	6.28	10.47
6.	Investment during the year			
	Sterlite Global Ventures (Mauritius) Limited	Subsidiary	10.10	26.66

	Particulars	Relationship	31 March, 2013	31 March, 2012
	Maharashtra Transmission Communication			
	Infrastructure Limited	Subsidiary	5.10	_
	Sterlite Grid Limited	Subsidiary	-	15.09
7.	Share application money paid			
	Maharashtra Transmission Communication			
	Infrastructure Limited	Subsidiary	0.03	_
8.	Investment in Compulsorily Convertible Debentures	v		
	East North Interconnection Company Limited	Subsidiary	_	129.96
9.	Loans and advance given	v		
	Sterlite Grid Limited	Subsidiary	381.84	97.53
	East North Interconnection Company Limited	Subsidiary	6.26	29.77
10.	Repayment of loans / advances from subsidiary	•		
	Sterlite Display Technologies Private Limited	Subsidiary	-	6.16
11.	Advance received from subsidiary			
	Sterlite Display Technologies Private Limited	Subsidiary	0.57	1.23
12.	Interest charged on loans			
	Sterlite Grid Limited	Subsidiary	23.83	4.53
	East North Interconnection Company Limited	Subsidiary	3.13	0.27
13.	Management fees charged / (paid)			
	East North Interconnection Company Limited	Subsidiary	3.00	3.00
	Vedanta Resources PLC	EKMP	(0.20)	(0.48)
14.	Sale of fixed assets			
	East North Interconnection Company Limited	Subsidiary	-	0.70
15.	Purchase of goods			
	Vedanta Aluminium Limited	EKMP	1,010.50	706.12
	Bharat Aluminium Company Limited	EKMP	32.26	125.20
16.	Purchase of services			
	Sterlite Networks Limited	Subsidiary	1.39	_
17.	Sale of goods (net of excise duty)			
	East North Interconnection Company Limited	Subsidiary	118.36	100.57
	Bhopal Dhule Transmission Company Limited	Subsidiary	104.34	_
	Jabalpur Transmission Company Limited	Subsidiary	33.02	_
	Sterlite Energy Limited	EKMP	5.83	46.74
18.	Sale of services	0		
40	Sterlite Networks Limited	Subsidiary	6.62	_
19.	Interest paid	FIGNE	2.20	4.00
	Vedanta Aluminium Limited	EKMP	2.28	1.03
20	Bharat Aluminium Company Limited	EKMP	0.24	0.62
20.	Expenses incurred  Vedanta Aluminium Limited	EKMP	1.28	1.70
	Hindustan Zinc Limited	EKMP	0.18	0.14
21.	Advance received against supplies	ENML	0.10	0.14
21.	East North Interconnection Company Limited	Subsidiary		10.83
	Bhopal Dhule Transmission Company Limited	Subsidiary	25.73	10.03
22.	Corporate and bank guarantee given	Subsidiary	25.13	_
۲۲.	Sterlite Grid Limited	Subcidiaru	560.00	
	Bhopal Dhule Transmission Company Limited	Subsidiary Subsidiary	500.00	30.00
	Jabalpur Transmission Company Limited	Subsidiary	150.00	30.00
	Jiangsu Sterlite Tongguang Fiber Co. Limited	Subsidiary	130.00	89.59
	Siding Sid Stellife Tonggading Tiber Co. Littlifed	Subsidiary		05.55

<sup>#</sup> As the liabilities for gratuity and leave encashment are provided on an actuarial basis for the company as a whole, the amounts pertaining to the directors are not included above.

### **Note 45: Segment Information**

In accordance with the Notified AS 17 under the Companies (Accounting Standards) Rules, 2006 (as amended) on "Segment Reporting", the Company has identified two reportable Business Segments i.e. Telecom Product and Solutions Business and Power Product and Solutions Business, which are regularly evaluated by the Management, in deciding the allocation of resources and assessment of performance. Common allocable costs are allocated to each segment according to the relative contribution of each segment to the total common cost. The segment performance is as follows:

**Business segment** (₹ in Crores)

Particulars	Telecom Product and Solutions		Power Product and Solutions		Unallocable		Total	
	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12
Segment revenue	1,097.35	792.18	2,301.91	1,957.64	-	_	3,399.26	2,749.82
Less: Excise	41.52	21.30	72.28	55.85	_	_	113.80	77.15
Net revenue	1,055.83	770.88	2,229.63	1,901.79	_	_	3,285.46	2,672.67
Segment results (EBIT)	107.77	90.13	66.61	61.74	_	_	174.38	151.87
Less: Interest	_	_	-	_	105.57	95.10	105.57	95.10
Profit before tax	_	_	-	_	_	_	68.81	56.77
Less: Income taxes (net)	_	_	-	_	21.35	12.93	21.35	12.93
Net Profit	_	_	-	_	_	_	47.46	43.84
Segment assets	1,544.20	1,391.20	994.39	1,049.95	-	_	2,538.59	2,441.15
Common assets	-	_	-	_	747.86	355.36	747.86	355.36
Total assets	1,544.20	1,391.20	994.39	1,049.95	747.86	355.36	3,286.45	2,796.51
Segment liabilities	305.92	333.75	607.14	554.67	-	_	913.06	888.42
Common liabilities	-	_	-	_	107.74	94.84	107.74	94.84
Total liabilities	305.92	333.75	607.14	554.67	107.74	94.84	1,020.80	983.26
Capital expenditure incurred	78.08	141.34	32.23	90.77	-	_	110.31	232.11
Depreciation	58.47	49.34	27.48	22.02	_	_	85.95	71.36
Significant non cash expenditure	15.87	10.25	20.56	24.03	_	_	36.42	34.28

### Geographical segment

The Company's secondary segments are the geographic distribution of activities. Revenue and receivables are specified by location of customers while the other geographic information is specified by location of the assets

Particulars	31 March 2013	31 March 2012
Particulars	(₹ in Crores)	(₹ in Crores)
(1) Segment revenue - external turnover (gross)		
- Within India	2,239.06	1,919.34
- Outside India	1,160.19	830.48
Total	3,399.26	2,749.82
(2) Segment assets		
- Within India	2,251.18	2,143.70
- Outside India	287.41	306.45
Total	2,538.59	2,441.15
(3) Capital expenditure		
- Within India	110.31	232.11
- Outside India		
Total	110.31	232.11

### **Note 46: Previous Year Figures**

Previous year figure have been regrouped / reclassified where necessary, to confirm to this year's classification.

As per our report of even date For S.R. Batliboi & Co. LLP

Firm Registration No.: 301003E

Chartered Accountants

per Arvind Sethi

Partner

Membership No.: 89802

Place: Mumbai Date: April 26, 2013 For and on behalf of the board of directors of Sterlite Technologies Limited

Pravin Agarwal Anand Agarwal

Whole-time Director CEO & Whole-time Director

Anupam JindalSandeep DeshmukhChief Financial OfficerCompany Secretary

# Statement Pursuant to Section 212 of the Companies Act, 1956

₹ in Crores

Relating to Subsidiary Companies

2012 Ϋ́ 10,000 100.0% (8.12)(1.01)Ē Ē 31st December, **Fechnologies Americas LLC** Sterlite 2013 2,000 100.0% Ē Ē ΑĀ 31st March, 0.54 Ventures Limited Europe 2013 75.0% (1.92)31st March, 31st March, (0.58)Ē Ē Ϋ́ **Tongguang** 7.50,000 Fiber Co. Limited\* 2013 Ē Ē ΑĀ 7,506,447 100.0% (0.00)(0.12)[Mauritius] Limited Venture 31st March, Communication Infrastructure 51.0% Ϋ́ (1.22)Ē Ē Maharashtra 25,500 **Iransmission** Limited 31st March, 2013 50,000 (4.27)(0.03)Ē Ξ Ϋ́ 100.0% Networks Limited 31st March, 2013 (0.06)(0.04)Ē Ē Ϋ́ Transmission Transmission 369,000 100.0% Company Limited\* Jabalpur (0.03)31st March, (0.08) Ē Ē ΑĀ **Bhopal Dhule** 100.0% 421,000 Company Limited\* Interconnection 50,000 (0.09)(0.07) Ē Ē ΑĀ 31st March, 100.0% East North Limited Ē Ē 31st March, 31st March, 1,00,000 100.0% (2.25)(0.98)ΑĀ Limited Sterlite 85.3% 2013 3.60 **Fechnologies** 87,30,000 (0.38)Ē Ē ₹ Private Limited i) Not deal with the holding company's account subsidiary since it became subsidiary of subsidiary since it became subsidiary of the members of Sterlite Technologies Limited a) For the financial year of the subsidiary The net aggregate amount of the subsidiary's a) For the financial year of the subsidiary Material changes, if any, between the end of the financial year of the subsidiary company ii) Deal with the holding company's account b) For the previous financial year of the 1. Financial Year of the subsidiaries company Shares of the Subsidiary Company held on b) For the previous financial year of the profit/(loss) so far as it is concerned with (c) Equity shares of Euro 1 each (a) Equity shares of₹10 each that date and extent of holding (b) Equity shares of \$1 each the holding company the holding company and holding company Extent of holding (₹ in Crores) (₹ in Crores) ლ ۲, 4.

\*Step Down Subsidiary/JV

For and on behalf of the Board of Directors of Sterlite Technologies Limited

Pravin Agarwal	Anand Agarwal
wnoie-time Director	CEU & WHOIE-UIT
Anupam Jindal	Sandeep Deshr

Date: April 26, 2013 Place: Mumbai

Chief Financial Officer

₹ in Crores

Statement Pursuant to Section 212 of the Companies Act, 1956

Relating to Subsidiary Companies, in accordance with General Circular No.: 02/2011 dated February 8, 2011 from the Ministry of Corporate Affairs

	Name of the Subsidiary	Sterlite Display Technologies Private Limited	Sterlite Grid Limited	East North Interconnection Company Limited	Bhopal Dhule Transmission Company Limited	Jabalpur Transmission Company Limited	Sterlite Networks Limited	Maharashtra Transmission Communication Infrastructure Limited	Sterlite Global Venture (Mauritius) Limited	Jiangsu Sterlite Tongguang Fiber Co. Limited	Sterlite Technologies Europe Ventures Limited	Sterlite Technologies Americas LLC
1.	Country of Incorporation	India	India	India	India	India	India	India	Mauritius	China	Cyprus	USA
2	Reporting Currency	INR	INR	INR	IN	INR	IN	INR	\$SN	RMB	Euro	\$SN
κi	Exchange Rate as at March 31, 2012 (INR)	AN	NA	NA	NA	N	N	A	54.39	8.74	69.54	54.39
4.	Capital	10.23	0.10	0.05	0.45	0.37	0.05	I	36.64	48.95	0.10	0.05
Ŋ.	Reserves	[7.97]	11.61	(0.25)	78.16	46.15	[4.31]	3.88	(0.01)	0.27	0.54	[9.14]
9	Total Assets	2.50	826.65	955.44	1,022.46	485.41	77.31	2.62	36.66	122.31	2.04	6.24
۲.	Total Liabilities	0.23	814.93	955.64	943.88	438.89	81.57	1.74	0.05	73.09	1.40	15.32
œ	Investments (except in case of Investments in the Subsidiaries)	I	I	30.38	14.00	I	I		I	I	I	I
6	Turnover/Total Income	ı	33.63	ı	I	1	1.13	0.01	0.06	0.13	4.27	19.32
10.	Profit/(Loss) Before Taxation	[0.44]	[2.25]	(0.09)	(0.08)	(0.06)	[4.27]	[1.22]	(0:00)	[3.45]	09:0	[8.12]
11.	Provision for Taxation	ı	1	ı	I	1	I		I	[0.89]	0.06	0.00
12.	Profit/(Loss) After Taxation	[0.44]	(2.25)	[60.0]	(0.08)	(0.06)	[4.27]	(1.22)	(0:00)	[2.57]	0.54	[8.12]
13.	Proposed Dividend	Ē	Ë	Ϊ́ΙΝ	Ī	Ē	Ē	Ξ̈́Z	Ē	Ë	Ë	Ē

For and on behalf of the Board of Directors of Sterlite Technologies Limited

Anand Agarwal	Sandeep Deshmukh
CEO & Whole-time Director	Company Secretary
Anand Agarwal CEO & Whole-tin	Sandeep C
<b>Pravin Agarwal</b>	<b>Anupam Jindal</b>
Whole-time Director	Chief Financial Officer

Place: Mumbai Date: April 26, 2013

### **Independent Auditor's Report**

To

### The Board of Directors of Sterlite Technologies Limited

We have audited the accompanying consolidated financial statements of Sterlite Technologies Limited ("the Company") and its subsidiaries, which comprise the consolidated Balance Sheet as on March 31, 2013, and the consolidated Statement of Profit and Loss and the consolidated Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

### Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation of these consolidated financial statements that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Company in accordance with accounting principles generally accepted in India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the consolidated financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and presentation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Basis for Qualified Opinion**

As stated in Note no. 38(A) in the accompanying financial statements, the Company had in an earlier year received an order of CESTAT upholding a demand of Rs.188 Crores (including penalties and excluding interest) (Rs. 188 Crores as on March 31 2012) in a pending excise/customs matter. The Company's appeal against this order with the Honourable Supreme Court has been admitted. Based on the current status and legal advice received, provision for liability as recorded and disclosed in Note no. 9 in the accompanying financial statements is considered adequate by Management. In the event the decision of the Honourable Supreme

Court goes against the Company on any of the grounds of appeal, additional provision against the said demand may be required. Pending disposal of the matter by the Honourable Supreme Court, we are unable to comment on the adequacy of the provisions made towards the amount of excise / customs duty payable. Our audit opinion on the standalone and consolidated financial statements for the year ended March 31, 2012 were also qualified in respect of this matter.

### Qualified opinion

In our opinion and to the best of our information and according to the explanations given to us, except for the possible effects of the matter described in the Basis for Qualified Opinion paragraph, the consolidated financial statements give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the consolidated Balance Sheet, of the state of affairs of the Company as on March 31, 2013;
- in the case of the consolidated Statement of Profit and Loss, of the profit for the year ended on that date; and
- (c) in the case of the consolidated Cash Flow Statement, of the cash flows for the year ended on that date.

### Other Matter

We did not audit total assets of Rs. 122.78 Crores as on March 31, 2013, total revenues of Rs. 4.47 Crores and net cash outflows amounting to Rs. 27.77 Crores for the year then ended, included in the accompanying consolidated financial statements in respect of certain subsidiaries whose financial statements and other financial information have been audited by other auditors and whose reports have been furnished to us. Our opinion, in so far as it relates to the affairs of such subsidiaries is based solely on the report of other auditors. Our opinion is not qualified in respect of this matter.

We did not audit total assets of Rs. 5.13 Crores as on March 31, 2013, total revenues of Rs. 19.32 Crores and net cash outflows amounting to Rs. 0.50 Crores for the year then ended, included in the audited consolidated financial statements in respect of a subsidiary whose financial statements and other financial information have been certified by the management. Our opinion, in so far as it relates to the affairs of such subsidiary is based solely on the management certified accounts. Our opinion is not qualified in respect of this matter.

### For S.R. Batliboi & Co. LLP

Chartered Accountants
ICAI Firm Registration No.: 301003E

per Arvind Sethi

Partner

Membership No.: 89802

Place: Mumbai Date: April 26, 2013

### Consolidated Balance Sheet as on 31 March , 2013

(All amounts in ₹ Crores unless otherwise stated)

Particulars	Note	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
EQUITY AND LIABILITIES			
Shareholders' funds	2	70.00	78.65
Share capital Reserves and surplus	3 4	78.69 1,080.56	78.65 1,066.20
Reserves and surplus	-	1,159.25	1,144.85
Share application money pending allotment	37	0.00	0.00
Minority interest		12.78	9.14
Non-current liabilities			
Long-term borrowings	5	1,911.56	372.00
Deferred tax liabilities (net)	6	84.98	73.51
Trade payables	8	1.59	19.43
Other long-term liabilities	8	0.60	40.33
Long-term provisions	9	15.80	39.85
Courant liabilities		2,014.53	545.12
Current liabilities Short-term borrowings	10	858.60	664.37
Trade payables	11	606.88	538.35
Other current liabilities	11 9	695.66	376.30 15.30
Short-term provisions	9		1,594.32
TOTAL		5,366.70	3,293.43
ASSETS Non-current assets Fixed assets Tangible assets Intangible assets Capital work-in-progress Fixed assets held for sale	12	1,099.59 16.93 2,181.20 ————————————————————————————————————	957.96 6.29 712.93 <u>8.05</u> 1,685.23
Goodwill		_	3.35
Deferred tax assets	7	2.17	-
Long-term loans and advances	13	307.72	123.66
Trade receivable	14	69.12	117.22
Other non-current assets	15	4.83	
Current assets		3,681.56	1,929.46
Current investments	16	44.38	13.00
Inventories	17	301.05	272.07
Trade receivables	14	576.10	668.71
Cash and bank balances Short-term loans and advances	18 12	571.21 178.11	216.24 185.44
Other current assets	13 15	14.29	8.51
	-	1,685.14	1,363.97
TOTAL		5,366.70	3,293.43
Summary of significant accounting policies	2.1		
Sammary or Significant accounting policies	£.1		

The accompanying notes are an integral part of the consolidated financial statements. As per our report of even date

For S.R. Batliboi & Co. LLP

Firm Registration No.: 301003E

Chartered Accountants

**per Arvind Sethi** Partner

Membership No.: 89802 Place: Mumbai

Date: April 26, 2013

For and on behalf of the board of directors of Sterlite Technologies Limited

Pravin Agarwal

Whole-time Director

**Anupam Jindal** Chief Financial Officer **Anand Agarwal** 

CEO & Whole-time Director

Sandeep Deshmukh Company Secretary

### Consolidated Statement of Profit and Loss for the Year Ended 31 March, 2013

(All amounts in ₹ Crores unless otherwise stated)

Particulars	Note	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
INCOME	40	2 400 52	
Revenue from operations (gross) Less : Excise duty	19 19	3,180.52 88.18	2,698.90 77.15
Revenue from operations (net)		3,092.34	2,621.75
Other income	20	15.29	27.14
Total Income (I)		3,107.63	2,648.89
EXPENSES	0.4		4 000 00
Cost of raw material and components consumed Purchase of traded goods	21	1,993.77 96.80	1,800.39 54.57
(Increase)/decrease in inventories of finished goods, work-in-			(== ==)
progress and traded goods	22	1.44	(55.26)
Employee benefits expense	23	124.71	99.83
Other expenses	24	652.77	533.63
Total Expenses (II)		2,869.49	2,433.16
Earnings before interest, tax, depreciation and amortisation			
(EBITDA) (I) - (II)		238.14	215.73
Depreciation and amortisation expense	25	89.09	71.53
Finance costs	26	106.28	92.40
Profit before tax		42.77	51.80
Tax expense:			
Current tax		16.29	18.30
Less: MAT credit entitlement		(0.92)	(18.30)
Net current tax expense		15.37	-
Deferred tax Income tax for earlier years		9.29 (6.37)	7.50 5.43
Total tax expenses		18.29	12.93
Profit for the year		24.48	38.87
Minority interest		(0.71)	(0.77)
Profit for the year after minority interest		25.19	39.64
Earnings per equity share [nominal value of share ₹ 2 (31 March, 2012: ₹ 2)] Basic	27		
Computed on the basis of profit for the year (₹)  Diluted		0.64	1.01
Computed on the basis of profit for the year (₹) Summary of significant accounting policies	2.1	0.64	1.00

The accompanying notes are an integral part of the consolidated financial statements.

As per our report of even date

### For S.R. Batliboi & Co. LLP

Firm Registration No.: 301003E Chartered Accountants

per Arvind Sethi

Partner Membership No.: 89802

Place: Mumbai Date: April 26, 2013

### For and on behalf of the board of directors of Sterlite Technologies Limited

Pravin Agarwal

Whole-time Director

**Anupam Jindal** Chief Financial Officer **Anand Agarwal** 

CEO & Whole-time Director

Sandeep Deshmukh Company Secretary

### Consolidated Cash Flow Statement for the Year Ended 31 March, 2013

Par	ticulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
A.	Cash flow from operating activities		
	Net Profit as per consolidated statement of profit and loss	24.48	38.87
	Adjustment for taxation	18.29	12.93
	Profit before tax	42.77	51.80
	Non-cash adjustment to reconcile profit before tax to net cash flows		74.50
	Depreciation and amortisation expense	89.09	71.53
	Provision for doubtful debts and advances	17.22	9.98
	Bad debts and advannces written off	16.71	1.06
	Provision for litigations / contingencies	- 2.25	20.46
	Goodwill on consolidation written off	3.35 4.23	_
	Loss on sale of assets, net	4.23 0.44	6.69 1.00
	Employees stock option expenses Income from investments		
	Finance costs	(1.04) 106.28	(9.11) 92.40
	Interest income	(14.09)	(14.34)
	Unrealized exchange difference	(11.40)	10.13
	Increase / (decrease) in foreign currency translation reserve	2.56	_
	morease / (accrease) in rereign carreing various and reserve	213.34	189.80
	Operating profit before working capital changes	256.11	241.60
	Movements in working capital :		
	Increase in trade payables	45.44	67.55
	Increase/(decrease) in long-term provisions	(20.43)	2.42
	Increase in short-term provisions	3.31	0.21
	Increase/(decrease) in other current liabilities	(33.20)	25.92
	Increase/(decrease) in other long-term liabilities	(39.73)	0.01
	Decrease in trade receivable	124.83	87.51
	Increase in inventories	(28.98)	(79.23)
	Increase in long-term loans and advances	(3.43)	(5.16)
	Decrease/(increase) in short-term loans and advances	10.70	(1.00)
	Increase in other current assets	(5.78)	(0.16)
	Increase in other non-current assets	(4.83)	_
	Change in working capital	47.90	98.07
	Cash generated from operations	304.01	339.67
	Direct taxes paid (net of refunds)	(21.04)	(16.35)
	Net cash flow from operating activities	282.97	323.32
R	Cash flow from investing activities		
-	Purchase of fixed assets, including capital work-in-progress and		
	capital advances	(1458.87)	(653.42)
	Proceeds from sale of fixed assets	2.22	1.30
	Proceeds of non-current investments	-	109.11
	Purchase of current investments (net)	(30.34)	(1.00)
	Investments in bank deposits (having original maturity of more than three months)	(124.81)	
	Redemption of bank deposits	(124.01)	_
	(having original maturity of more than three months)	102.62	82.53
	Interest received	14.09	6.07
	Net cash flow used in investing activities	(1495.08)	(455.42)
		(2700.00)	(133.12)

Particulars		31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
C.	Cash flow from financing activities		
	Proceeds of issue of shares against share warrants	-	81.30
	Increase in minority interest due to issue of shares by subsidaries	3.50	8.89
	Proceeds of long-term borrowings	1,589.24	255.00
	Repayment of long-term borrowings	-	(0.05)
	Proceeds/(repayment) of short-term borrowings (net)	194.23	(9.72)
	Proceeds of share application money	0.00**	0.00
	Proceeds of issue of shares against employee stock options	0.01	0.03
	Interest paid	(228.49)	(63.60)
	Dividend paid on equity shares	(11.70)	(18.73)
	Tax on equity dividend paid	(1.90)	(3.20)
	Net cash flow from financing activities	1,544.89	249.92
	Net increase in cash and cash equivalents	332.78	117.82
	Cash and cash equivalents as at beginning of year	135.79	17.97
	Cash and cash equivalents as at year end*	468.57	135.79
	* The cash and cash equivalents include balance of ₹ 1.11 Crores (31 March 2012: ₹ 1.02 Crore) which is not available for use by the company/group.  ** Amount is below ₹ 0.01 Crore.		
	Components of cash and cash equivalents:	31 March, 2013	31 March, 2012
		₹ in Crores	₹ in Crores
Bal	ance with banks:	( III 610100	( iii dididd
0n	current accounts	62.11	39.71
Der	posit with original maturity of less than 3 months	405.30	95.00
	unpaid dividend account	1.11	1.02
	sh in hand	0.05	0.06
Tot	al cash and cash equivalents (refer note 18)	468.57	135.79

The accompanying notes are an integral part of the consolidated financial statements. As per our report of even date

### For S.R. Batliboi & Co. LLP

### TOT GITG OIL DC

### For and on behalf of the board of directors of Sterlite Technologies Limited

Firm Registration No.: 301003E Chartered Accountants per Arvind Sethi

Partner Membership No.: 89802

Place: Mumbai Date: April 26, 2013 Pravin Agarwal
Whole-time Director
CEO & Whole-time Director

Anupam JindalSandeep DeshmukhChief Financial OfficerCompany Secretary

# Notes to consolidated financial statements for the year ended 31 March, 2013

### **Note 1. Corporate information**

Sterlite Technologies Limited (hereinafter referred to as the 'company') and its subsidiaries (together referred to as 'the Group') is primarily engaged in the manufacture and sale of Power and Telecom products and solutions and setting up of transmission and distribution networks. Telecom products and solutions mainly include integrated optical fiber, other Telecom products such as fiber optical cables, copper Telecom cables, structured data cables, access equipments, fiber connectivity and system integration solution offerings for Telecom networks and other service providers. Power products and solutions mainly include power transmission conductors and cables.

### Note 2. Basis of consolidation

The consolidated financial statements are prepared in accordance with AS 21, Consolidated Financial Statements notified by Companies Accounting Standards Rules, 2006 as amended ('the Rules') and the relevant provisions of the Companies Act, 1956 ('the Act'). The accounting policies have been consistently applied by the Group except for the change in accounting policy explained below and are in conformity with Indian Generally Accepted Accounting Principles ('Indian GAAP'). The consolidated financial statements have been prepared on the following basis:

- (i) The financial statements of the company and its subsidiaries have been combined on a line-by-line basis by adding together the book values of like items of assets, liabilities, income and expenses, after eliminating all significant intra group balances and intra group transactions and unrealised profits. Unrealised losses resulting from intragroup transactions are eliminated unless cost cannot be recovered.
- (ii) The excess of the cost to the company of its investment in the subsidiary over the company's portion of equity of the subsidiary on the acquisition date is recognised in the financial statements as goodwill and is tested for impairment annually. The excess of company's portion of equity of the subsidiary over the cost of investment therein is treated as capital reserve
- iii) The consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances and necessary adjustments required for deviations, if any, are made in the consolidated financial statements and are presented in the same manner as the company's standalone financial statements.
- (iv) The financial statements of the entities used for the purpose of consolidation are drawn up to same reporting date as that of the company i.e. year ended March 31, 2013.

### Note 2.1 Summary of significant accounting policies

### (a) Change in accounting policy

Change in classification of foreign operation from integral to non-integral.

During the current year, the Group has changed the classification of its subsidiary Jiangsu Sterlite Tongguang Fiber Co. Limited, China from Integral operation to Non-integral operation with effect from 1 April 2012. In the previous years, the activities of the subsidiary were limited. The change in the current year was made to reflect the changes/increase in nature/quantum of activities undertaken by it which require the subsidiary to be classified as non-integral as per the provisions of Accounting Standard - 11 "The Effects of Changes in Foreign Currency Rates" notified by the Rules.

Had the change in classification occurred at the beginning of the earliest period presented in these financial statements, the net profit after minority interest for the year ended 31 March 2012 would have been lower by Rs. 2.37 Crores, the surplus in the statement of profit and loss as at 31 March 2012 would have been lower by Rs. 2.37 Crores, the foreign currency translation reserve account would have balance of Rs. 2.56 Crores as at 31 March 2012 and the minority interest as at 31 March 2012 would have been higher by Rs. 0.06 Crore.

### (b) Use of estimates

The preparation of financial statements in conformity with the Indian GAAP requires the management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities, at the end of the reporting period. Difference between the actual result and estimates are recognised in the year in which the results are known / materialised. Although these estimates are based upon management's best knowledge of current events and actions, actual results could differ from these estimates.

### (c) Tangible fixed assets

Fixed assets, are stated at cost (net of cenvat), net of accumulated depreciation and accumulated impairment losses, if any. The cost comprises purchase price, borrowing costs if capitalisation criteria are met and directly attributable cost of bringing the asset to its working condition for the intended use. Any trade discounts and rebates are deducted in arriving at the purchase price.

Subsequent expenditure related to an item of fixed asset is added to its book value only if it increases the future benefits from the existing asset beyond its previously assessed standard of performance. All other expenses on existing fixed assets, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the statement of consolidated profit and loss for the period during which such expenses are incurred.

The Group adjusts exchange differences arising on translation/settlement of long-term foreign currency monetary items pertaining to the acquisition of a depreciable asset to the cost of the asset and depreciates the same over the remaining life of the asset. In accordance with MCA circular dated 09 August 2012, exchange differences adjusted to the cost of fixed assets are total differences, arising on long-term foreign currency monetary items pertaining to the acquisition of a depreciable asset, for the period. In other words, the company does not differentiate between exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost and other exchange difference. Expenditure directly relating to construction activity is capitalised. Indirect expenditure incurred during construction period is capitalised as part of the construction costs to the extent the expenditure can be attributable to construction activity or is incidental there to. Income earned during the construction period is deducted from the total of the indirect expenditure. Gains or losses arising from derecognition of fixed assets are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of consolidated profit and loss when the asset is derecognised.

### (d) Depreciation on tangible fixed assets

- i. Depreciation on Fixed Assets is provided on straight line method, unless otherwise stated, pro-rata to the period of use of assets at the rates specified in Schedule XIV of the Companies Act, 1956 which represents the useful life of these assets
- ii. Cost of leasehold land is amortised over the period of lease on a straight line basis.
- iii. Cost of capital and insurance spares is amortised over a period of four years.

### (e) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less accumulated amortisation and accumulated impairment losses, if any. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is reflected in the statement of consolidated profit and loss in the year in which the expenditure is incurred.

Duct taken on Indefeasible Right of Use (IRU) is amortized over the agreement period on a straight line basis. Customer acquisition costs consist of payments made to obtain consents/permissions for laying of fiber cables and other Telecom infrastructure in residential and commercial complexes/townships. Such cost is amortized over the period of the consent/permission on a straight line basis.

Right of way (ROW) pertains to the right granted by Maharashtra State Electricity Transmission Company Limited to one of the subsidiaries of the Company to establish communication network in the state of Maharashtra. ROW is amortized on a straight line basis over a period of 20 years for which the right has been granted.

Other intangible assets are amortised on a straight line basis over a period of five years. Intangible assets not yet available for use and intangible assets amortized over a period exceeding ten years from the date they are available for use are tested for impairment annually, either individually or at the cash-generating unit level. All other intangible assets are assessed for impairment whenever there is an indication that the intangible asset may be impaired.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of consolidated profit and loss when the asset is derecognised.

Research and development costs.

Revenue expenditure on research activities is expensed as incurred.

### (f) Leases

Where the group is lessee

Leases, where the lessor effectively retains substantially all the risks and benefits of ownership of the leased item, are classified as operating leases. Operating lease payments are recognised as an expense in the statement of consolidated profit and loss on a straight-line basis over the lease term.

### (g) Borrowing costs

Borrowing cost includes interest, amortisation of ancillary costs incurred in connection with the arrangement of borrowings and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost. Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective asset. All other borrowing costs are expensed in the period they occur.

### (h) Impairment of tangible and intangible assets

The group assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) net selling price and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value

using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining net selling price, recent market transactions are taken into account, if available. If no such transactions can be identified, an appropriate valuation model is used.

Impairment losses are recognised in the statement of consolidated profit and loss.

After impairment, depreciation is provided on the revised carrying amount of the asset over its remaining useful life.

An assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the group estimates the asset's or cash generating unit's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit and loss.

### (i) Government grants and subsidies

Grants and subsidies from the government are recognized when there is reasonable assurance that (i) the group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognized as income on a systematic basis in the consolidated statement of profit and loss over the periods necessary to match them with the related costs, which they are intended to compensate.

### (j) Investments

Investments, which are readily realisable and intended to be held for not more than one year from the date on which such investments are made, are classified as current investments. All other investments are classified as long-term investments.

On initial recognition, all investments are measured at cost. The cost comprises purchase price and directly attributable acquisition charges such as brokerage, fees and duties.

Current investments are carried in the financial statements at lower of cost and fair value determined on an individual investment basis. Long-term investments are carried at cost. However, provision for diminution in value is made to recognise a decline other than temporary in the value of the investments.

On disposal of an investment, the difference between its carrying amount and net disposal proceeds is charged or credited to the statement of consolidated profit and loss.

### (k) Inventories

Raw materials, components, stores and spares and traded goods are valued at lower of cost and net realisable value. However, materials and other items held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. Cost of raw materials, components and stores and spares is determined on a weighted average basis except in case of inventory for aluminium conductors in the power product and solutions business, wherein the cost is determined on specific identification method based on costing details of each project.

Work-in-progress and finished goods are valued at lower of cost and net realisable value. Cost includes direct materials and labour and a proportion of manufacturing overheads based on normal operating capacity. Cost of finished goods includes excise duty and is determined on a weighted average basis.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale.

### (I) Revenue recognition

Revenue is recognised to the extent it is probable that the economic benefits will flow to the group and that the revenue can be reliably measured. The following specific recognition criteria must also be met before revenue is recognised:

### Sale of goods

Revenue from sale of goods is recognised when all the significant risks and rewards of ownership of the goods have been passed to the buyer. The group collects sales taxes and value added taxes (VAT) on behalf of the government and, therefore, these are not economic benefits flowing to the group. Hence, they are excluded from revenue. Excise duty deducted from revenue (gross) is the amount that is included in the revenue (gross) and not the entire amount of liability arising during the year. Sales are net of quantity discounts. Freight charged on sales and recovered is included as a part of revenue.

### Income from services

Revenues from services are recognised pro-rata over the period of the contract as and when services are rendered. The group collects service tax on behalf of the government and, therefore, it is not an economic benefit flowing to the group. Hence, it is excluded from revenue.

Revenue from one time charges billed to service providers is recognized over the related estimated customer relationship period. Amount received as one-time cost from developers towards setting up of Telecom infrastructure in their premises is recognized as revenue over the period of the agreement with the developers.

### Interest

Interest income is recognised on a time proportion basis taking into account the amount outstanding and the applicable interest rate.

### Dividends

Dividend income is recognised when the group's right to receive dividend is established by the reporting date.

### Export incentives

Export incentive benefits consist of duty drawback, high value added licenses and DEPB entitlements. These are recognised on the basis of receipt of proof of export.

### (m) Foreign currency translation

Foreign currency transactions and balances

### (i) Initial recognition

Foreign currency transactions are recorded in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction.

### (ii) Conversion

Foreign currency monetary items are retranslated using the exchange rate prevailing at the reporting date. Non-monetary items, which are measured in terms of historical cost denominated in a foreign currency, are reported using the exchange rate at the date of the transaction.

### (iii) Exchange differences

The company accounts for exchange differences arising on translation/ settlement of foreign currency monetary items as below:

- 1. Exchange differences arising on long-term foreign currency monetary items related to acquisition of a fixed asset are capitalized and depreciated over the remaining useful life of the asset.
- Exchange differences arising on other long-term foreign currency monetary items are accumulated in the "Foreign Currency Monetary Item Translation Difference Account" and amortized over the remaining life of the concerned monetary item.
- 3. All other exchange differences are recognized as income or as expenses in the period in which they arise. For the purpose of 1 and 2 above, the company treats a foreign currency monetary item as "long-term foreign currency monetary item", if it has a term of 12 months or more at the date of its origination. In accordance with MCA circular dated 09August 2012, exchange differences for this purpose, are total differences arising on long-term foreign currency monetary items for the period. In other words, the company does not differentiate between exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost and other exchange differences.

### (iv) Forward exchange contracts entered into to hedge foreign currency risk of an existing asset/liability

The premium or discount arising at the inception of forward exchange contract is amortised and recognised as an expense/income over the life of the contract. Exchange differences on such contracts, are recognised in the statement of consolidated profit and loss in the period in which the exchange rates change. Any profit or loss arising on cancellation or renewal of such forward exchange contract is also recognised as income or as expense for the period. None of the foreign exchange contracts are taken for trading or speculation purpose.

Translation of integral and non-integral foreign operation

The group classifies all its foreign operations as either "integral foreign operations" or "non-integral foreign operations."

The financial statements of an integral foreign operation are translated as if the transactions of the foreign operation have been those of the group itself.

The assets and liabilities of a non-integral foreign operation are translated into the reporting currency at the exchange rate prevailing at the reporting date. Their statement of profit and loss are translated at exchange rates prevailing at the dates of transactions or weighted average weekly rates, where such rates approximate the exchange rate at the date of transaction. The exchange differences arising on translation are accumulated in the foreign currency translation reserve. On disposal of a non-integral foreign operation, the accumulated foreign currency translation reserve relating to that foreign operation is recognised in the statement of consolidated profit and loss.

When there is a change in the classification of a foreign operation, the translation procedures applicable to the revised classification are applied from the date of the change in the classification. {Also refer Note 2.1(a) above}

### (n) Retirement and other employee benefits

Retirement benefit in the form of provident fund and superannuation fund are defined contribution schemes. The company recognises contribution payable to the provident fund and superannuation fund as an expenditure, when an employee renders the related service. The group has no obligation, other than the contribution payable to the provident fund and superannuation funds.

The group operates a defined benefit plan in the form of gratuity for its employees. The cost of providing benefits under the plan is determined on the basis of actuarial valuation at each year-end. Actuarial valuation is carried out using the projected unit credit method. Actuarial gains and losses for the defined benefit plan are recognised in full in the period in which they occur in the statement of consolidated profit and loss.

Accumulated leave, which is expected to be utilised within the next 12 months, is treated as short-term employee benefit. The group measures the expected cost of such absences as the additional amount that it expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The group treats accumulated leave expected to be carried forward beyond twelve months, as long-term employee benefit for measurement purposes. Such long-term compensated absences are provided for based on the actuarial valuation using the projected unit credit method at the year-end. Actuarial gains/losses are immediately taken to the statement of consolidated profit and loss and are not deferred.

### (o) Income taxes

Tax expenses comprise current and deferred taxes. Current income-tax is measured at the amount expected to be paid to the tax authorities in accordance with the Income-tax Act, 1961 enacted in India. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Deferred income taxes reflect the impact of timing differences between taxable income and accounting income originating during the current year and reversal of timing differences for the earlier years. Deferred tax is measured using the tax rates and the tax laws enacted or substantively enacted at the reporting date.

Deferred tax liabilities are recognised for all taxable timing differences. Deferred tax assets are recognised for deductible timing differences only to the extent that there is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. In situations where the group has unabsorbed depreciation or carry forward tax losses, all deferred tax assets are recognised only if there is virtual certainty supported by convincing evidence that they can be realised against future taxable profits.

In the situations where the group is entitled to a tax holiday under the Income-tax Act, 1961 enacted in India or tax laws prevailing in the respective tax jurisdictions where it operates, no deferred tax (asset or liability) is recognised in respect of timing differences which reverse during the tax holiday period, to the extent the group's gross total income is subject to the deduction during the tax holiday period. Deferred tax in respect of timing differences which reverse after the tax holiday period is recognised in the year in which the timing differences originate. However, the group restricts recognition of deferred tax assets to the extent that it has become reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which such deferred tax assets can be realised. For recognition of deferred taxes, the timing differences which originate first are considered to reverse first.

At each reporting date, the group re-assesses unrecognised deferred tax assets. It recognises unrecognised deferred tax asset to the extent that it has become reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which such deferred tax assets can be realised.

The carrying amount of deferred tax assets are reviewed at each reporting date. The group writes-down the carrying amount of deferred tax asset to the extent that it is no longer reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available against which deferred tax asset can be realised. Any such write-down is reversed to the extent that it becomes reasonably certain or virtually certain, as the case may be, that sufficient future taxable income will be available.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set-off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to the same taxable entity and the same taxation authority.

Minimum alternate tax [MAT] paid in a year is charged to the statement of consolidated profit and loss as current tax. The group recognises MAT credit available as an asset only to the extent that there is convincing evidence that the group will pay normal income tax during the specified period, i.e., the period for which MAT credit is allowed to be carried forward. In the year in which the group recognises MAT credit as an asset in accordance with the Guidance Note on Accounting for Credit Available in respect of Minimum Alternative Tax under the Income-tax Act, 1961, the said asset is created by way of credit to the statement of consolidated profit and loss and shown as "MAT Credit Entitlement." The group reviews the "MAT credit entitlement" asset at each reporting date and writes down the asset to the extent the group does not have convincing evidence that it will pay normal tax during the specified period.

### (p) Employee stock compensation cost

Measurement and disclosure of the employee share-based payment plans is done in accordance with SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999 and the Guidance Note on Accounting for Employee Share-based Payments, issued by the Institute of Chartered Accountants of India ('ICAI'). The group measures compensation cost relating to employee stock options using the fair value method. Compensation expense is amortised over the vesting period of the option on a straight line basis.

### (q) Earnings Per Share

Basic earnings per share are calculated by dividing the net profit or loss for the period attributable to equity shareholders by the weighted average number of equity shares outstanding during the period. The weighted average number of equity shares outstanding during the period is adjusted for events such as bonus issue, bonus element in a rights issue, share split, and reverse share split (consolidation of shares) that have changed the number of equity shares outstanding, without a corresponding change in resources.

For the purpose of calculating diluted earnings per share, the net profit or loss for the period attributable to equity shareholders and the weighted average number of shares outstanding during the period are adjusted for the effects of all dilutive potential equity shares.

### (r) Provisions

A provision is recognised when the group has a present obligation as a result of past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions are not discounted to their present value and are determined based on the best estimate required to settle the obligation at the reporting date. These estimates are reviewed at each reporting date and adjusted to reflect the current best estimates.

Where the group expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of consolidated profit and loss net of any reimbursement.

### (s) Contingent liabilities

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The group does not recognise a contingent liability but discloses its existence in the financial statements.

### (t) Cash and cash equivalents

Cash and cash equivalents for the purposes of consolidated cash flow statement comprise cash at bank and in hand and short-term investments with an original maturity of three months or less.

### (u) Derivative instruments

In accordance with the ICAI announcement, derivative contracts, other than foreign currency forward contracts covered under AS 11, are marked to market on a portfolio basis, and the net loss, if any, after considering the offsetting effect of gain on the underlying hedged item, is charged to the consolidated statement of profit and loss. Net gain, if any, after considering the offsetting effect of loss on the underlying hedged item, is ignored.

Gains and losses from designated and effective hedging instruments are included in the same line as the gains and losses from the hedged items such as sales revenue or cost of goods sold as the case may be. Gains and losses on other derivatives are included in other income or other expenditure as the case may be.

The group enters into commodity futures contracts (aluminium contracts) against future sales transactions. These commodity futures contracts are rolled over in case the period of the contracts is less than the period of future sales transactions. On roll over, the group has to pay/receive the differential amount, in case aluminum prices have gone down/up (loss/profit). The group carries the loss/profit in the balance sheet till the future sales transactions take place. This loss/profit is transferred to consolidated statement of profit and loss on conclusion of the future sales transactions except in case where such loss/profit relates to the acquisition or construction of fixed assets, in which case, it is adjusted to the carrying cost of such fixed assets.

### (v) Segment Reporting Policies

The group's operating businesses are organised and managed separately according to the nature of products and services provided, with each segment representing a strategic business unit that offers different products and serves different markets. The analysis of geographical segment is based on the areas in which major operating divisions of the group operate.

Inter segment transfers

The group accounts for intersegment sales and transfers as if the sales or transfers were to third parties at current market prices.

Allocation of common costs

Common allocable costs are allocated to each segment according to the relative contribution of each segment to the total common costs.

Unallocated items

The corporate and other segment includes general corporate income and expense items which are not allocated to any business segment.

Segment policies

The group prepares its segment information in conformity with the accounting policies adopted for preparing and presenting the financials statements of the group as a whole.

### (w) Measurement of EBITDA

As permitted by the Guidance Note on the Revised Schedule VI to the Companies Act, 1956, the group has elected to present earnings before interest, tax, depreciation and amortisation expense (EBITDA) as a separate line item on the face of the statement of consolidated profit and loss. The group measures EBITDA on the basis of profit/(loss) from continuing operations. In its measurement, the group does not include depreciation and amortisation expense, finance costs and tax expenses.

### **Note 3: Share Capital**

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Authorised shares (No. Crores)		
75.00 (31 March, 2012: 75.00) equity shares of ₹ 2 each	150.00	150.00
Issued, subscribed and fully paid-up shares (No. Crores)		
39.34 (31 March, 2012: 39.33) equity shares of ₹ 2 each (fully paid-up)	78.69	78.65
Total	78.69	78.65

### a. Reconciliation of the shares outstanding at the beginning and at the end of the reporting period.

	31 March, 2013		31 March, 2012	
	Nos. in Crores	₹ in Crores	Nos. in Crores	₹ in Crores
At the beginning of the period	39.33	78.65	35.64	71.28
Issue during the year - exercise of share warrant	-	-	1.83	3.65
Issued during the year - ESOP Issued during the period - bonus on share warrants and ESOP	0.01	0.02	0.02	0.04
	0.01	0.02	1.84	3.68
Outstanding at the end of the year*	39.34	78.69	39.33	78.65

<sup>\*</sup> The difference in reconciliation of the number of shares is due to rounding off.

### b. Terms/rights attached to equity shares

The company has only one class of equity shares having a par value of ₹2 per share. Each holder of equity shares is entitled to one vote per share. The company declares and pays dividends in Indian rupees.

The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting. During the year ended 31 March, 2013, the amount of per share dividend recognised as distributions to equity shareholders was ₹0.30 (31 March, 2012: ₹0.30).

In the event of liquidation of the company, the holders of equity shares will be entitled to receive remaining assets of the company, after distribution of all preferential amounts. The distribution will be in proportion to the number of equity shares held by the shareholders.

### c. Shares held by holding company and their subsidiaries/associates:

	31 March, 2013		31 March, 2012	
	Nos. in Crores	% holding	Nos. in Crores	% holding
Holding company Twin Star Overseas Limited	20.94	53.22%	20.94	53.25%
Subsidiary of Volcan Investments Limited, Bahamas (Ultimate Holding Company)				
Sterlite Industries (I) Limited	0.43	1.08%	0.43	1.08%
Madras Aluminium Company Limited	0.05	0.13%	0.05	0.13%

## d. Aggregate number of bonus shares issued, share issued for consideration other than cash during the period of five years immediately preceding the reporting date:

	31 March, 2013 Nos. in Crores	31 March, 2012 Nos. in Crores
Equity shares allotted as fully paid bonus shares by capitalisation of	40.07	40.66
securities premium	19.67	19.66

In addition company has issued total 1,173,950 shares (31 March, 2012: 1,270,994 shares) during the period of five years immediately preceding the reporting date on exercise of option granted under the employee stock option plan (ESOP) wherein part consideration was received in form of employee services.

### e. Detail of shareholders holding more than 5% of shares in the company

		31 March, 2013		31 March, 2012	
		Nos. in Crores	% holding	Nos. in Crores	% holding
1.	Twin Star Overseas Limited (Holding Company)	20.94	53.22%	20.94	53.25%
2.	Life Insurance Corporation of India	2.13	5.41%	2.13	5.41%

### 5. Shares reserved for issue under options:

For details of shares reserved for issue under the employee stock option (ESOP) plan of the company, refer note 30.

### Note 4: Reserves and Surplus

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Capital reserve	0.04	0.04
Securities premium account		
Balance as per last financial statements	196.37	93.96
Add: Premium on issue of shares on exercise of share warrants	<del>-</del>	104.75
Add: Additions on ESOPs exercised	0.61	1.35
Less: Utilised for issue of bonus shares	0.02	3.69
Closing balance	196.96	196.37
Employee stock option outstanding		
Balance as per last financial statements	2.63	2.98
Add: Employees stock option expenses for the year	0.44	1.00
Less: Transferred to securities premium account	0.61	1.35
Closing balance	2.46	2.63
Foreign currency translation reserve		
Balance as per last financial statements	_	_
Add: Effect of foreign exchange rate variations during the year	2.56	_
Closing balance	2.56	
General reserve		
Balance as per last financial statements	130.97	128.78
Add: Amount transferred from surplus in the consolidated statement of profit		
and loss	2.37	2.19
Closing balance	133.34	130.97
Surplus in the consolidated statement of profit and loss		
Balance as per last financial statements	736.19	712.46
Profit for the year	25.19	39.64
Less: Appropriations		
Proposed final equity dividend (amount per share ₹ 0.30		
(31 March, 2012: ₹ 0.30))	11.80	11.81
Tax on proposed equity dividend	2.01	1.91
Transfer to general reserve	2.37	2.19
Total appropriations	16.18	15.91
Net surplus in the consolidated statement of profit and loss	745.20	736.19
Total reserves and surplus	1,080.56	1,066.20

### Note 5: Long-term Borrowings

	Non-current portion		Current maturities	
	31 March, 2013	31 March, 2012	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores	₹ in Crores	₹ in Crores
Term Loans:				
Indian rupee term loan from bank (secured)	1493.06	372.00	42.89	-
Foreign currency loan from bank (secured)	56.11	-	6.23	_
Foreign currency loan from financial institution (secured)	13.64	-	-	-
Indian rupee loan from financial institutions (secured)	348.70	-	-	_
Deferred payment liabilities				
Sales tax loan (interest free) (unsecured)	0.05		1.47	0.14
	1911.56	372.00	50.59	0.14
The above amount includes				
Secured borrowings	1911.51	372.00	49.12	_
Unsecured borrowings	0.05	-	1.47	0.14
Amount disclosed under the head "other current				
liabilities" (note 11)	-	-	50.59	0.14
Net amount	1911.56	372.00		

### Sterlite Technologies Limited (STL)

- a) Indian rupee term loan from bank amounting to Rs. 85.00 Crores carries interest @ BPLR + 1.35% p.a. loan amount is repayable in 20 quarterly equated installments of Rs. 4.25 Crores (excluding interest) from the end of moratorium period. The term loan is secured by first charge on the movable fixed assets of STL (both present and future)
- b) Indian rupee loan from bank amounting to Rs. 150.00 Crores carries interest @ BPLR + 1% p.a. loan amount is repayable in 16 quarterly equated installments of Rs. 9.38 Crores (excluding interest) from the end of moratorium period. The term loan is secured by first charge on the movable fixed assets of STL (both present and future)

### East North Interconnection Company Limited (ENICL)

c) "Indian rupee term loan of Rs. 622.48 Crores from banks carries interest @ BPLR + 2.5% p.a. 65% of total loan amount is repayable in 47 quarterly equated installments of Rs. 23.42 Crores (including principal and interest) from the end of moratorium period. Balance 35% of the total loan amount shall be repayable as a bullet repayment at the end of 11.75 years from the end of moratorium period. The term loan is secured by first charge on all the immovable assets pertaining to the project, tangible movable assets, receivables including trust accounts and retention accounts and intangible assets both present and future. Loans are also secured by assignment by way of security of all the right, title, interest benefits, claims and demands whatsoever of the ENICL in the project documents, duly acknowledged and consented to by the relevant counter parties to such project documents, all as amended, varied or supplemented from time to time; All rights, title, interest and benefits of ENICL in to and under all clearances pertaining to the project (including transmission licence) to the extent same are assignable; all rights, title, interest, benefits, claims and demands whatsoever of ENICL in any letter of credit, guarantee including contract guarantees and liquidated damages, consent agreements, side letters and performance bond provided by any party to the project document; all rights, title, interest, benefits, claims and demands whatsoever of the borrower in, to and under all insurance contracts and insurance proceeds pertaining to the project. Loans are also secured by negative lien on 51% of the shares held by promoters."

### Bhopal Dhule Transmission Company Limited (BDTCL)

d) Indian rupee term loan of Rs. 539.75 Crores from bank carries interest @ BPLR + 2.00% p.a. 65% of total loan amount is repayable in 46 quarterly installments in accordance with amortisation schedule. Balance 35% of the total loan amount shall be repayable as a bullet repayment as per amortisation schedule such that door to door tenure of facility is 14 years and 6 months. The term loan is secured by first charge on all the immovable assets pertaining to the project, tangible movable assets, current assets, all the accounts and intangible assets both present and future. Loans are also secured by assignment by way of security of all the right, title, interest benefits, claims and demands whatsoever of the BDTCL in the project documents, duly acknowledged and consented to by the relevant counter parties to such project documents, all as amended, varied or supplemented from time to time; all rights, title, interest and benefits of BDTCL in to and under all clearances pertaining to the project (including transmission licence) to the extent same are assignable; all rights, title, interest, benefits, claims and demands whatsoever of BDTCL in any letter of credit, guarantee including contract guarantees and liquidated damages, consent agreements, side letters and performance bond provided by any party to the project document; all rights, title, interest, benefits, claims and demands whatsoever of the borrower in, to and under all insurance contracts and insurance proceeds pertaining to the project. Loans are also secured by non disposable undertaking from sponsor directly/ indirectly to hold at least 51% of equity till final settlement date. Upon occurrence of event of default the negative lien shall be converted in pledge of 51% of the equity capital of BDTCL.

e) Foreign currency loan of Rs. 13.64 Crores from bank carries interest @ LIBOR + 2.10% p.a. 65% of total loan amount is repayable in 46 quarterly installments as per repayment schedule. Balance 35% of the total loan amount shall be repayable as a bullet repayment in accordance with the repayment schedule such that average tenor of the facility shall be more than 8.51 years. The foreign currency loan is secured by first charge on all the immovable assets pertaining to the project, tangible movable assets, current assets, all the accounts and intangible assets both present and future. Loans are also secured by assignment by way of security of all the right, title, interest benefits, claims and demands whatsoever of the BDTCL in the project documents, duly acknowledged and consented to by the relevant counter parties to such project documents, all as amended, varied or supplemented from time to time; all rights, title, interest and benefits of BDTCL in to and under all clearances pertaining to the project (including transmission licence) to the extent same are assignable; all rights, title, interest, benefits, claims and demands whatsoever of BDTCL in any letter of credit, guarantee including contract guarantees and liquidated damages, consent agreements, side letters and performance bond provided by any party to the project document; all rights, title, interest, benefits, claims and demands whatsoever of the borrower in, to and under all insurance contracts and insurance proceeds pertaining to the project. Loans are also secured by non disposable undertaking from sponsor directly/ indirectly to hold at least 51% of equity till final settlement date. Upon occurrence of event of default the negative lien shall be converted in pledge of 51% of the equity capital of BDTCL.

### Sterlite Grid Limited (SGL)

f) India rupee term loan of Rs. 300.00 Crores from financial institution carries interest 11.85% p.a. (L&T Infra PLR +/- Spread). The loan is repayable in 2 equal annual installments. The loan is secured by first charge of by way of hypothecation on the entire current assets and receivables both present and future of the borrower. Loan is also secured by pledge of 49% of total paid up equity capital of the borrower with all accretions thereon by the promoter and unconditional irrecoverable corporate gaurantee by the promoter.

### Jabalpur Transmission Company Limited (JTCL)

p.a. 65% of total loan amount is repayable in 47 structured quarterly installments in accordance with amortisation schedule.Balance 35% of the total loan amount shall be repayable as a bullet repayment as per amortisation schedule such that door to door tenure of facility is 14 years and 6 months. The loan is secured by first charge on all the immovable assets pertaining to the project,tangible movable assets,current assets, all the accounts and intangible assets both present and future. Loans are also secured by assignment by way of security of all the right, title,interest benefits,claims and demands whatsoever of the JTCL in the project documents,duly acknowledged and consented to by the relevant counter parties to such project documents, all as amended, varied or supplemented from time to time; all rights, title, interest and benefits of JTCL in to and under all clearances pertaining to the project (including transmission licence) to the extent same are assignable; all rights, title, interest, benefits, claims and demands whatsoever of JTCL in any letter of credit,guarantee including contract guarantees and liquidated damages,consent agreements, side letters and performance bond provided by any party to the project document; all rights, title, interest,benefits,claims and demands whatsoever of the borrower in, to and under all insurance contracts and insurance proceeds pertaining to the project. Loans are also secured by non disposable undertaking from sponsor directly/indirectly to hold at least 51% of equity till final settlement date. Upon occurrence of event of default the negative lien shall be converted in pledge of 51% of the equity capital of JTCL.

### Jiangsu Sterlite Tongguang Fiber Co. Limited (JSTFCL)

h) Foreign currency term loan from bank of Rs. 23.40 Crores carries interest @ PBOC + 2.5% p.a. and USD term loan of Rs. 38.94 Crores carries an interest of LIBOR + 4.5% p.a. Term loan is payable over 5 years after an initial moratorium of 2 years in half-yearly installments of Rs. 6.23 Crores (excluding interest) and Rs. 8.42 Crores (including interest before repayment starts) from the end of moratorium period. The term loan is secured by first charge on the immovable fixed assets of **JSTFCL**.

### Note 6: Deferred Tax Liabilities

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Fixed assets: Impact of difference between tax depreciation and depreciation/amortisation		
for the financial reporting	109.16	95.40
Others	10.70	2.11
Gross deferred tax liability	119.86	97.51
Less: Netted off against deferred tax assets	34.88	24.00
Net deferred tax liabilities	84.98	73.51

### Note 7: Deferred Tax Assets

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Provision for doubtful debts and advances	22.34	14.86
Impact of expenditure charged to the statement of profit and loss in the current year		
but allowed for tax purposes on payment basis	3.14	2.14
Provision for inventory	2.90	_
Provision for litigations / contingencies	2.46	_
Impact of income considered for tax purpose but not credited to the statement of profit and		
loss in the current year.	1.28	_
Accumulated losses and unabsorbed depreciation in subsidiary $^{st}$	1.68	_
Others	3.25	7.00
Gross deferred tax assets	37.05	24.00
Less: Netted off against deferred tax liabilities	34.88	24.00
Net deferred tax assets	2.17	

<sup>\*</sup> In the absence of virtual certainty as required by AS-22 "Accounting for taxes on income" notified by Companies (Accounting Standards) Rules, 2006, (as amended), deferred tax asset on accumulated losses and unabsorbed depreciation in subsidiary has been recognized only to the extent that it has timing differences on depreciation on fixed assets, the reversal of which will result in sufficient income against which the deferred tax asset can be utilized.

### Note 8: Other Long-Term Liabilities

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Trade payables	1.59	19.43
Payables for purchase of fixed assets	_	40.33
Others	0.60	-
Total	2.19	59.76

### **Note 9: Provisions**

	Long-term		Short-term	
	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Provision for employee benefits				
Provision for gratuity (note 29)	6.30	3.95	_	_
Provision for leave benefits	-	2.33	3.91	0.60
Other provisions	6.30	6.28	3.91	0.60
Provision for income tax (net of advance income tax)	_	3.61	1.28	1.00
Provision for litigations/contingencies	9.50	29.96	_	_
Proposed equity dividend	-	_	11.80	11.80
Provision for tax on proposed equity dividend	-	-	2.01	1.90
	9.50	33.57	15.09	14.70
Total	15.80	39.85	19.00	15.30

### Provision for litigations/contingencies

The provision of Rs. 9.50 Crores as at March 31, 2013 is towards contingencies in respect of disputed claims against the company as described in note 34 and note 38 (A), the timing of outflow and quantum of which is presently unascertainable. Provision of Rs. 20.46 Crores was utilized during the year.

### **Note 10: Short-term Borrowings**

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Cash credit from banks (secured)	52.89	16.14
Working capital demand loan from banks (secured)	80.95	65.00
Other loan from banks (unsecured)	699.76	583.23
Commercial papers (unsecured)	25.00	
	858.60	664.37
The above amount includes		
Secured borrowings	133.84	81.14
Unsecured borrowings	724.76	583.23
Net amount	858.60	664.37

### Note:

Cash credit and working capital demand loans from banks are secured by hypothecation of raw materials, work in progress, finished goods and trade receivables.

The cash credit is repayable on demand and carries interest @ 9.5-10%

Working capital demand loans from banks are secured by first charge on current assets (both present and future) and second charge on movable fixed assets (both present and future) & carry interest @9.5-11%.

Other loans from banks include buyer's credit arrangements and export bill discounting. They are repaid / rolled over after a period of six months and carry interest @0.95-2% (excluding hedging premium).

Commercial papers carry interest @ 10 -12% and are issued for a term of 76 days.

### **Note 11: Other Current Liabilities**

	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Trade payables (including acceptances)		
(i) Micro, medium and small enterprises (refer note 36)	0.59	0.04
(ii) Others	606.29	538.31
Other liabilities		
Current maturities of long-term borrowings (refer note 5)	50.59	0.14
Interest accrued but not due on borrowings	10.02	6.65
Unclaimed dividend	1.11	1.02
Advance from customers	98.44	202.16
Interest free deposit from customers	0.28	0.16
Interest free deposit from vendors	6.81	0.30
Payables for purchase of fixed assets	388.04	89.40
Service tax payable	0.75	1.50
TDS payable	9.17	4.88
Value added tax payable	25.19	15.44
Central sales tax payable	5.58	4.17
Others	99.68	50.48
	695.66	376.30
Total	1,302.54	914.65

₹ in Crores

# Note 12: Tangible and Intangible Assets

			GROSS BLOCK	UCK				DEPRECIATION	DEPRECIATION/AMORTISATION	NOIL				IMPAIRMENT	MENT		NET BLOCK	I DCK
			1					מבו וובכוטווו	201101101101101								1	
			Transfer						Topografica									
Nature of assets			mom assets held		Deletions/ Translation				Assets held	Deletions/ Translation	Translation				Deletions/			
	Ason	As on Additions*	2	-		Ason	Ason	Additions	for sale	Adjustment Adjustment		As on	As on	Additions		Ason	As on 2012	Ason
	01.04.2012								ĺ	ĺ	ĺ	31.03.2013	01.04.2012	ĺ	ĺ	31.03.2013	31.03.2013	31.03.2012
Tangible assets																		
Freehold land	34.45	19.75	5.50	0.02	•	59.65		•	•	•	•	•	•	•	•	•	59.65	34.45
Leasehold land	37.42	0.45	•		0.27	38.14	1.02	0.35	•	•	0.01	1.38		•	•	•	36.76	36.40
Buildings #	173.21	32.31	3.07	0.11	•	208.48	30.41	6.72	0.72	•	•	37.85			•	•	170.63	142.79
Plant and machinery	1,121.56	166.06	•	11.27		1,276.35	403.40	73.23	•	6.05	•	470.58	26.70		0.16	26.54	779.23	691.44
Furniture and fixtures	9:38	0.64	0.02	0.22	•	9.87	2.41	0.72	0.04	0.12	•	3.05		•	•	•	6.82	6.97
Data processing	r C			(		0				0		0					L	C L
equipments Office equipments	17.25	2.03	0.28	0.10		18.90	11.72	1.65	0.11	0.02		13.30	- 0.05			0.05	5.36	3.77
Electric fittings	48.18					48.83	15.43	2.38	•	0.16	•	17.65	0.45			0.45	30.73	32.29
Vehicles	5.30		•	1.16		6.01	0.95	0.63	•	0.38	•	1.20					4.81	4.35
Sub - total	1,452.46	225.94	8.92	13.41	0.27	1,674.18	467.26	86.21	0.87	6.80	0.01	547.55	27.20	•	0.16	27.04	1,099.59	957.96
Intangible assets																		
Software/licences	2.70	5.11				7.81	1.38	0.71	•	•	•	2.09		•	'	•	5.72	1.33
Patents	9.32				•	9.32	4.37	1.86	•	•	•	6.23	•	•	•	•	3.09	4.96
Customer acquisition		2.34	•	•		2.34		0.11		•	•	0.11	•	•	•	•	2.23	•
Right of way	•	5.10	•	•	•	5.10	-	0.16	•	•	•	0.16	•	•	•	•	4.94	•
Indefeasible rights of Use	•	0.99	-	•	•	0.99		0.04	•	•	•	0.04	•	•	•		0.95	•
Sub - total	12.02	13.54	•	•	•	25.56	5.75	2.88	•	•	•	8.63	•		•		16.93	6.29
Total	1,464.48	239.48	8.92	13.41	0.27	1,699.74	473.01	89.09	0.87	6.80	0.01	556.18	27.20		0.16	27.04	1,116.52	964.25
Capital work in progress																	2,181.20	712.93
Total	1,464.48	239.48	8.92	13.41	0.27	1,699.74	473.01	89.09	0.87	6.80	0.01	556.18	27.20	•	0.16	27.04	3,297.72	1,677.18
Previous year	1,180.70	342.37	(8.92)	49.67		1,464.48	450.44	71.51	(0.87)	18.07	•	473.01	53.95	•	26.72	27.20	1,677.18	

\* Refer note 32 for amount of expenses capitalised during the year.

# Buildings include those constructed on leasehold land
Gross block Rs. 97.53 Crores [31 March 2012 Rs. 71.2 Crores]
Depreciation for the year Rs. 3.21 Crores [31 March 2012 Rs. 2.12 Crores]
Accumulated depreciation Rs. 19.72 Crores [31 March 2012 Rs. 4.95 Crores]
Net block Rs. 77.81 Crores [31 March 2012 Rs. 66.25 Crores]

### Note 13: Loans and Advances

	Non-c	urrent	Curr	ent
	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Capital advances (unsecured, considered good)				
Covered by bank guarantee	239.07	57.88	-	_
Others	9.89	15.24		0.00
(A)	248.96	73.12	-	0.00
Security deposits (unsecured, considered good) (B) Advances receivable in cash or kind (unsecured)	3.56	1.19	3.66	3.38
Considered good	-	_	137.29	96.67
Considered doubtful	0.67	0.12		
	0.67	0.12	137.29	96.67
Provision for doubtful advances	0.67	0.12	-	_
(c)	_		137.29	96.67
Other loans and advances (unsecured, considered good)  Advance income taxes, including TDS				
[net of provision]	4.43	_	4.61	1.24
Minimum Alternate tax credit entitlement	46.22	45.30	-	_
Balances with central excise authorities	-	_	20.52	17.85
Other advances	4.55	4.05	12.03	66.30
(D)	55.20	49.35	37.16	85.39
Total (A+B+C+D)	307.72	123.66	178.11	185.44

Note 14: Trade Receivables (Unsecured)

	Non-co	urrent	Curr	ent
	31 March, 2013	31 March, 2012	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores	₹ in Crores	₹ in Crores
Outstanding for a period exceeding six months from				
the date they are due for payment				
Considered good	32.32	87.05	89.52	36.43
Considered doubtful	65.91	49.24		
	98.23	136.29	89.52	36.43
Less: provision for doubtful receivables	65.91	49.24		
(A)	32.32	87.05	89.52	36.43
Other receivables				
Considered good	36.80	30.17	486.58	632.28
(B)	36.80	30.17	486.58	632.28
Total (A+B)	69.12	117.22	576.10	668.71

### **Note 15: Other Assets**

	Non-co	urrent	Curr	ent
	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Unamortised expenditures Ancillary cost of arranging the borrowings Others	4.83		0.00*	
Interest accrued on fixed deposits Unbilled revenue	-	- -	0.66 0.26	8.35 —
Others  Total	4.83		13.37 14.29 14.29	0.16 8.51 8.51

<sup>\*</sup> Amount below Rs. 0.01 Crore.

### **Note 16: Current Investments**

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Current investments (valued at lower of cost and fair value)		
(Other than trade, quoted)		
0.01 Crore units ( 31 March 2012 : 0.23 Crore units ) of Rs 10/- each of Reliance Liquid Fund -		
Treasury Plan -IP-Growth	24.38	6.00
Nil units (31 March 2012 : 0.04 Crore units) of Rs 10/- each of Birla Sun Life Cash Plus -IP- Growth	-	7.00
0.02 Crore units (31 March 2012 : Nil units) of Rs 10/- each of Axis Liquid Fund - Growth	20.00	_
	44.38	13.00
Aggregate amount of quoted investments (Market Value Rs. 44.77 (March 31, 2012:		
Rs. 13.00 Crores))	44.38	13.00

### **Note 17: Inventories**

(Valued at lower of cost and net realisable value)

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Raw materials and components		
[Includes stock in transit Rs 48.81 Crores (31 March 2012: Rs. 12.53 Crores]] (refer note 21)	119.14	93.77
Work-in-progress (refer note 22)	56.58	46.19
Finished goods (Including stock in transit Rs.10.77 Crores (31 March 2012: Rs. 26.50))		
(refer note 22)	82.40	99.10
Traded goods (including stock in transit Rs. 1.14 Crores (31 March 2012: Rs. Nil)) (refer note 22)	9.55	4.68
Stores, spares, packing materials and others	33.38	28.33
Total	301.05	272.07

### Note 18: Cash and Bank Balances

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Cash and cash equivalents		
Balance with banks:		
On current accounts	62.11	39.71
Deposit with original maturity of less than 3 months	405.30	95.00
On unpaid dividend account	1.11	1.02
Cash in hand	0.05	0.06
	468.57	135.79
Other bank balances		
Deposit with original maturity for more than 12 months	100.42	80.45
Deposit with original maturity for more than 3 months	2.22	_
but less than 12 months	102.64	80.45
Total	571.21	216.24

### Note 19: Revenue from Operations

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Sale of products		
Finished goods	3,005.31	2,578.02
Traded goods	100.76	63.04
Sale of services	6.20	3.04
Other operating revenue		
Scrap sales	24.92	15.32
Export incentives	43.33	39.48
Revenue from operations (gross)	3,180.52	2,698.90
Less: Excise duty #	88.18	77.15
Revenue from operations (net)	3,092.34	2,621.75

# Excise duty on sales amounting to Rs.88.18 Crore (31 March 2012: Rs. 77.15 Crore) has been reduced from sales in statement of consolidated profit and loss and excise duty on (increase) / decrease in stock amounting to Rs. 4.19 Crore (31 March 2012: Rs. (2.87 Crore)) has been considered as (income)/expense in note 24 of consolidated financial statements.

### Note 20: Other Income

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Interest income on		
Bank deposits	9.33	8.63
Long-term investments	-	9.11
Current investments	1.04	_
Others	4.76	5.71
Exchange difference on translation of integral foreign operations	-	3.17
Miscellaneous income	0.16	0.52
Total	15.29	27.14

### Note 21: Cost of Raw Material and Components Consumed

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Inventory at the beginning of the year	93.77	76.50
Add: Purchases	2,019.14	1,817.66
	2,112.91	1,894.16
Less: Inventory at the end of the year	119.14	93.77
Cost of raw materials and components consumed	1,993.77	1,800.39

### Note 22: (Increase) / Decrease In Inventories

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Opening inventories:		
Traded goods	4.68	0.20
Work-in-progress	46.19	32.05
Finished Goods	99.10	62.46
	149.97	94.71
Closing inventories:		
Traded goods	9.55	4.68
Work-in-progress	56.58	46.19
Finished goods	82.40	99.10
	148.53	149.97
(Increase)/decrease in inventories	1.44	(55.26)

### Note 23: Employee Benefits Expense

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Salaries, wages and bonus	107.78	86.78
Contribution to provident fund and superannuation fund	5.00	3.36
Employees stock option expenses (refer note 30)	0.44	1.00
Gratuity expenses (refer note 29)	2.33	1.89
Staff welfare expenses	9.16	6.80
Total	124.71	99.83

Note 24: Other Expenses		
	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Increase /(decrease) of excise duty on inventory	4.19	(2.87)
Consumption of stores and spares	55.55	43.01
Power, fuel and water	133.23	127.29
Repairs and maintenance		
Building	2.08	1.36
Machinery	13.35	10.98
Others	1.50	_
Carriage inwards	1.99	1.90
Consumption of packing materials	109.48	85.60
Sales commission (other than sole selling agent)	19.50	17.49
Sales promotion	5.62 73.97	5.63
Carriage outwards Rent	6.94	72.27 5.09
Insurance	6.95	6.07
Rates and taxes	6.53	1.77
Travelling and conveyance	23.58	19.10
Loss on sale of fixed assets, net	4.23	6.69
Bad debts / advances written off	16.71	1.06
Provision for doubtful debts and advances	17.22	9.98
Provision for contingencies	1r.22	20.46
Compensation to customers	27.21	
Directors sitting fee and commission	0.20	0.17
Payment to auditors	1.10	0.95
Goodwill on consolidation written off	3.35	0.33
	110.63	92.45
Miscellaneous expenses	110.63	92.45
Research and development expenses	2.40	0.70
Salaries, wages and bonus	3.10	0.73
Raw materials consumed	1.80	3.95
General expenses	2.76	2.50
Total	652.77	533.63
Note 25: Depreciation and Amortisation Expense		
	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Depreciation of tangible assets	86.22	69.19
Amortisation of intangible assets	2.87	2.34
-		-
Total	89.09	71.53
Note 26: Finance Costs		
	31 March, 2013	31 March, 2012
	₹ in Crores	₹ in Crores
Interest		

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Interest		
On fixed loans	3.10	_
Others	55.95	56.77
Bank charges	9.58	8.79
Amortisation of ancillary borrowing costs	-	0.04
Exchange difference to the extent considered as an adjustment to borrowing costs	37.65	26.80
Total	106.28	92.40

### Note 27: Earnings per Share

The following reflects the profit and share data used in the basic and diluted EPS computation.

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Profit for the year	25.19	39.64
Weighted average number of equity shares in calculating basic EPS	39.34	39.25
Effect of dilution:		
Employee stock option outstanding during the year	0.34	0.13
Share warrants outstanding during the year	-	0.07
Weighted average number of equity shares in calculating diluted EPS	39.68	39.45
Earnings per share		
Basic (On nominal value of ₹ 2 per share) Rupees/share	0.64	1.01
Diluted (on nominal value of ₹ 2 per share) Rupees/share	0.64	1.00

# Note 28: The list of subsidiary companies which are included in the consolidation and the Company's effective holdings therein are as under:

Name of the Company	Effective ownership in subsidiaries as on 31 March, 2013	Effective ownership in subsidiaries as on 31 March, 2012	Country of incorporation
Sterlite Display Technologies Private Limited	85.34%	85.34%	India
East North Interconnection Company Limited	100.00%	100.00%	India
Sterlite Grid Limited	100.00%	100.00%	India
Bhopal Dhule Transmission Company Limited	100.00%	100.00%	India
Jabalpur Transmission Company Limited	100.00%	100.00%	India
Sterlite Networks Limited	100.00%	100.00%	India
Maharashtra Transmission Communication Infrastructure Limited	51.00%	_	India
Sterlite Global Ventures (Mauritius) Limited	100.00%	100.00%	Mauritius
Jiangsu Sterlite Tongguang Fiber Co. Limited	75.00%	75.00%	China
Sterlite Technologies Americas LLC	100.00%	100.00%	USA
Sterlite Technologies Europe Ventures Limited	100.00%	-	Cyprus

### Note 29: Gratuity

The Group has a defined benefit gratuity plan. Every employee who has completed five years or more of service gets a gratuity on departure at 15 days' salary (last drawn salary) for each completed year of service. The scheme is funded with Life Insurance Corporation of India in the form of a qualifying insurance policy.

Changes in the present value of the defined benefit obligation are as follows:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Defined benefit obligation at the beginning of the year	4.84	3.69
Current service cost	0.90	0.52
Interest cost	0.41	0.31
Actuarial (gain)/loss	1.27	1.19
Benefits paid	(0.59)	(0.87)
Defined benefit obligation, at the end of the year	6.83	4.84

### Changes in the fair value of plan assets are as follows:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Fair value of plan assets at the beginning of the year	0.92	1.78
Expected return on plan assets	0.08	0.14
Contribution by employer	-	_
Benefits paid	(0.59)	(0.87)
Actuarial gain/(loss)	0.12	(0.13)
Fair value of plan assets at the end of the year	0.53	0.92

The Group expects to contribute Rs. Nil (31 March 2012: Rs. Nil ) to its defined benefit gratuity plan in 2013-14.

The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

Particulars	31 March, 2013 %	31 March, 2012 %
Investment with insurer (Life Insurance Corporation of India)	100	100

### Details of defined benefit obligation

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Present value of defined benefit obligation	6.83	4.84
Fair value of plan assets	0.53	0.92
Plan liability	6.30	3.92

### Net employee benefit expense recognised in the statement of consolidagted profit and loss:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Current service cost	0.90	0.52
Interest cost on benefit obligation	0.41	0.31
Net actuarial (gain)/loss recognised	1.15	1.32
Expected return on plan assets	(0.08)	(0.14)
Contribution by employer	-	_
Net benefit expense	2.38	2.01

### Amounts for the current and previous periods are as follows:

Particulars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores	31 March, 2011 ₹ in Crores	31 March, 2010 ₹ in Crores	31 March, 2009 ₹ in Crores
Defined benefit obligation	6.83	4.84	3.69	3.23	2.34
Plan assets	0.53	0.92	1.78	1.62	1.73
Surplus/(deficit)	6.30	3.92	1.91	1.61	0.61
Experience adjustments on plan					
liabilities	(0.12)	0.13	(0.06)	0.70	_
Experience adjustments on plan assets	(80.0)	(0.14)	(0.14)	1.31	_

### The principal assumptions used in determining defined benefit obligation are shown below:

Particulars	31 March, 2013	31 March, 2012
Discount rate	8.50%	8.50%
Expected rate of return on plan asset	8.70%	8.60%
Employee turnover	2.00%	2.00%
Actual rate of return on plan assets	9.40%	9.30%

The estimated future salary increase, considered in actuarial valuation, takes into account the effect of inflation, seniority, promotion and other relevant factors such as supply and demand in the employment market. The overall expected rate of return on plan assets is determined based on the market prices prevailing as on Balance Sheet date, applicable to the period over which the obligation is to be settled.

### Note 30: Employee Stock Option Scheme

The Group has granted employees stock options plan, 2006 (ESOP Scheme 2006) and employees stock options plan, 2010 (ESOP Scheme 2010) to its employees pursuant to the resolution passed by the shareholders at the extraordinary general meeting held on March 13, 2006 and annual general meeting held on July 14, 2010 respectively. The Company has followed the fair value method (Black Scholes Options Pricing Model) for the valuation of these options. The compensation committee of the company has approved six grants vide their meeting held on June 14, 2006; March 19, 2007, September 28, 2007, June 14, 2008, June 26, 2009 and December 29, 2011. As per the plan, options granted under ESOP would vest in not less than one year and not more than five years from the date of grant of such options. Vesting of options is subject to continued employment with the company. The plan is an equity settled plan.

The Group has charged Rs. 0.44 Crore (31 March, 2012 Rs.1.00 Crore) to the statement of consolidated profit and loss in respect of options granted under ESOP scheme 2006 and options granted under ESOP scheme 2010

Other details of the options granted under ESOP scheme 2006 are as follows:

Particulars	Grant 1	Grant 2	Grant 3	Grant 4	Grant 5
Date of grant	14-Jun-06	19-Mar-07	28-Sep-07	14-Jun-08	26-Jun-09
Number of options granted	11,64,250	3,18,000	6,53,875	1,27,750	12,09,500
Method of settlement	Equity	Equity	Equity	Equity	Equity
Vesting period (years)	3	2.25	1.71	1	5
Exercise period (years)	1	1	1	1	1
Vesting Conditions	Business	Business	Business	Business	Business
	performance	performance	performance	performance	performance

Other details of the options granted under ESOP scheme 2010 are as follows:

Particulars	Grant 1
Date of grant	29-Dec-11
Number of options granted	22,24,000
Method of settlement	Equity
Vesting period (years)	5
Exercise Period (years)	1
Vesting conditions	Business
	performance

The details of the activity under ESOP scheme 2006 have been summarised below:

	31 Marc	31 March, 2013		31 March, 2012	
Particulars	Number of options	Weighted average exercise price (₹)	Number of options	Weighted average exercise price (₹)	
Outstanding at the beginning of the year	275,613	2.00	519,654	2.00	
Granted during the year	Nil	-	Nil	_	
Forfeited during the year	Nil	-	Nil	_	
Exercised during the year	87,156	2.00	1,91,347	2.00	
Expired during the year	29,817	2.00	52,694	2.00	
Outstanding at the end of the year	158,640	2.00	275,613	2.00	
Exercisable at the end of the year	34,682	2.00	61,367	2.00	
Weighted average remaining contractual life (in years)	0.75		1.24		
Weighted average fair value of options granted	35.23		35.23		

The outstanding ESOPs as above are entitled to bonus in the ratio of 1:1.

The weighted average share price for the year ended March 31,2013 was Rs. 31.58 (March 31, 2012: Rs. 46.18)

The fair value as per the Black Scholes Options Pricing Model was measured based on the following input:

Date of grant: June 14, 2006	Vest 1	Vest 2	Vest 3
Variables	June 14, 2007	June 14, 2008	June 14, 2009
Weighted average stock price	17.85	17.85	17.85
Expected volatility (*)	59.78%	58.90%	60.52%
Risk free rate	7.07%	7.16%	7.26%
Exercise price (₹ Per Option)	1	1	1
Time to maturity (years)	1.50	2.50	3.50
Dividend yield	0.57%	0.57%	0.57%
Outputs			
Option fair value	16.80	16.76	16.72
Vesting percentage	20.00%	40.00%	40.00%
Option fair value	-	16.76	-

Date of grant: March 19, 2007	Vest 1	Vest 2
Variables	June 19, 2008	June 19, 2009
Weighted average stock price	35.80	35.80
Expected volatility (*)	62.90%	57.75%
Risk free rate	8.07%	8.06%
Exercise price (₹ Per Option)	1	1
Time to maturity (years)	1.50	2.50
Dividend yield	0.57%	0.57%
Outputs		
Option fair value	34.61	34.47
Vesting percentage	60.00%	40.00%
Option fair value	34.55	_

Date of grant: September 28, 2007	Vest 1	Vest 2
Variables	September 28, 2008	September 28, 2009
Weighted average stock price	47.46	47.46
Expected volatility (*)	56.69%	60.98%
Risk free rate	7.20%	7.29%
Exercise price (₹ Per Option)	1	1
Time to maturity (years)	1.50	2.21
Dividend yield	0.51%	0.51%
Outputs		
Option fair value	46.20	46.08
Vesting percentage	50.00%	50.00%
Option fair value	46.14	-

Date of grant: June 14, 2008	Vest 1
Variables	June 14, 2009
Weighted average stock price	39.70
Expected volatility (*)	72.11%
Risk free rate	8.34%
Exercise price (₹ Per Option)	1
Time to maturity (years)	1.50
Dividend yield	0.49%
Outputs	
Option fair value	38.53
Vesting percentage	100.00%
Option fair value	38.53

Date of grant: June 26, 2009	Vest 1	Vest 2	Vest 3	Vest 4	Vest 5
Variables	June 26, 2010	June 26, 2011	June 26, 2012	June 26, 2013	June 26, 2014
Weighted average stock price	36.65	36.65	36.65	36.65	36.65
Expected volatility (**)	97.30%	81.93%	77.57%	72.68%	70.10%
Risk free rate	5.61%	5.83%	6.05%	6.27%	6.47%
Exercise price (₹ Per Option)	1	1	1	1	1
Time to maturity (years)	1.50	2.50	3.50	4.50	5.50
Dividend yield	0.60%	0.60%	0.60%	0.60%	0.60%
Outputs					
Option fair value	35.40	35.24	35.08	34.93	34.77
Vesting percentage	50.00%	20.00%	10.00%	10.00%	10.00%
Option fair value	_	-	_	35.23	

<sup>\*</sup>As approved by the Extra-Ordinary General Meeting of the company held on February 25, 2010, the company has made sub-division of the face value of its equity share capital from ₹ 5 per share to ₹ 2 per share. Further, the company in the same meeting has approved bonus shares in the ratio of 1:1. Thus, ESOP data as above has been recalculated and presented after considering the impact of the sub-division of face value of the equity share and bonus thereon.

The details of the activity under ESOP scheme 2010 have been summarised below:

	31 Marc	h, 2013	31 March, 2012	
Particulars	Number of options	Weighted average exercise price (₹)	Number of options	Weighted average exercise price (₹)
Outstanding at the beginning of the year	2,056,000	2	_	-
Granted during the year	2,668,800	, 2	2,224,000	2
Forfeited during the year	2,668,800	2	_	_
Exercised during the year	-	-	_	_
Expired during the year	1,327,430	2	168,000	2
Outstanding at the end of the year	728,570	2	2,056,000	2
Exercisable at the end of the year	367,660	2	_	_
Weighted average remaining contractual life (in years)	0.98	-	1.85	_
Weighted average fair value of options granted	25.87	_	25.87	_

<sup>#</sup>The Company had granted 2,668,800 options in ESOP scheme 2010 on July 27, 2012, the vesting for which was linked to business performance which could not be meet. Hence the options were forfeited during the year.

The fair value as per the Black Scholes Options Pricing Model was measured based on the following input:

D D	Vest 1	Vest 2	Vest 3	Vest 4	Vest 5
Date of grant: December 29, 2011 Variables	December 29,	December 29, 2013	December 29, 2014	December 29, 2015	December 29, 2016
	2012	2013	2014	2015	2010
Weighted average stock price	28.00	28.00	28.00	28.00	28.00
Expected volatility (*)	48.31%	47.36%	64.15%	68.63%	65.78%
Risk free rate	8.33%	8.34%	8.35%	8.37%	8.39%
Exercise price (₹ Per Option)	2	2	2	2	2
Time to maturity (years)	1.50	2.50	3.50	4.50	5.51
Dividend yield	0.73%	0.73%	0.73%	0.73%	0.73%
Outputs					
Option fair value	25.93	25.87	25.82	25.78	25.70
Vesting percentage	50.00%	20.00%	10.00%	10.00%	10.00%
Options fair Value	_	-	_	25.87	_

<sup>[\*]</sup> The measure of volatility used in the above model is the annualised standard deviation of the continuously compounded rates of return on the stock over a period of time. The volatility periods considered above, corresponding to the respective expected lives of the different vests are prior to the grant date. The daily volatility of stock prices is considered as per the National Stock Exchange (NSE) prices over these years.

### Note 31: Operating Lease (Non-cancellable)

The Group has taken office buildings on operating lease. The lease term is for periods of three to nine years and renewable at the option of the Group. Disclosures in respect of operating leases of office buildings as per the requirement of AS- 19 on Leases, notified under the Rules are as under:

- (a) Lease payments recognised in the statement of Profit and Loss for the year is Rs. 6.94 Crores (31 March 2012: Rs. 4.99 Crores).
- (b) The future minimum lease payments payable over the next one year is Rs. 5.22 Crores (31 March 2012: Rs. 3.73 Crores).
- (c) The future minimum lease payments payable later than one year but not later than five year is Rs. 17.49 Crores (31 March 2012: Rs. 3.14 Crores).

### Note 32: Capitalisation of Expenditure

During the year, the Group has capitalised the following expenses to the cost of fixed assets/capital work-in-progress (CWIP). Consequently, expenses disclosed under the respective notes are net of amounts capitalised by the Group.

	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
Emloyee benefit expenses	26.50	13.40
Consumption of stores and spares	•	0.30
Power and fuel	•	1.00
Finance cost	125.59	30.41
Other expenses	30.30	25.94
Total	182.39	71.05

### **Note 33: Capital Commitments**

Estimated amount of contracts remaining to be executed on Capital Account and not provided for (Net of Advances) are Rs. 1478.67 Crores (31 March 2012: Rs. 1,402.74 Crores.)

# **Note 34: Contingent Liabilities**

		31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
1)	Disputed liabilities in appeal		
	a) Sales tax	0.43	0.43
	b) Excise duty (Including excise duty case in Supreme Court, refer note 9 and		
	38(A))	248.99	248.18
	c) Customs duty	67.24	67.24
	d) Income tax	6.92	6.92
	e) Claims lodged by a bank against the Company (*) (refer note 9)	18.87	18.87
	f) Claims against the Company not acknowledged as debt	25.17	22.32
2)	Outstanding amount of export obligation against advance licence.	45.86	36.58
3)	The company has given corporate guarantee to the income tax department on		
	behalf of group companies.	114.00	114.00

The Company has not provided for disputed Sales Tax, Excise Duty, Customs Duty and Service Tax arising from disallowances made in assessments which are pending with Appellate Authorities for its decision.

It is not practicable to indicate the uncertainties which may affect the future outcome and estimate the financial effect of the above liabilities.

(\*) In an earlier year, one of the Bankers of the Company had wrongly debited an amount of Rs. 18.87 Crores, towards import consignment under letter of credit not accepted by the company, owing to discrepancies in the documents. The Company has filed the case against the bank in the High Court of Mumbai. The bank has also filed a claim against the Company in the Debt Recovery Tribunal. The Company does not believe that any liability will arise to the Company.

# **Note 35: Derivative Instruments**

The company has entered into the following derivative instruments:

(a) The following are the outstanding forward exchange contracts/futures contracts entered into by the company, for hedge purpose, as on March 31, 2013:

Purpose	Foreign currency (in Crores)	Amount (₹ in Crores)	Buy/Sell	No. of contracts (Quantity)
March 31, 2013				
Hedge of payables and buyers credit	US \$ 16.25	896.07	Buy	404
Hedge of trade receivables and highly probable foreign currency sale	US\$ 8.30	473.72	Sell	111
Hedge of payables and buyers credit	EUR 0.96	69.50	Buy	53
Hedge of trade receivables and highly probable foreign currency sale	EUR 1.07	76.53	Sell	28
Hedge of payables and buyers credit	GBP 0.03	2.37	Buy	1
Hedge of trade receivables and highly probable foreign currency sale	GBP 0.53	47.02	Sell	10
March 31, 2012				
Hedge of payables and buyers credit	US \$ 16.54	851.96	Buy	319
Hedge of trade receivables and highly probable foreign currency sale	US \$ 16.29	832.07	Sell	208
Hedge of payables and buyers credit	EUR 0.64	44.02	Buy	11
Hedge of trade receivables and highly probable foreign currency sale	EUR 1.71	117.71	Sell	39
Hedge of payables and buyers credit	GBP 0.03	2.32	Buy	1
Hedge of trade receivables and highly probable foreign currency sale	GBP 0.71	57.44	Sell	11

- b) The year end foreign currency exposures that have not been hedged by a derivative instrument or otherwise are given below:
  - (i) Amounts receivable in foreign currency on account of the following:

		31 March	, 2013	31 March, 2012			
Category	Currency type	Foreign currency	Amount	Foreign currency	Amount		
		(in Crores)	(₹ in Crores)	(in Crores)	(₹ in Crores)		
Export of goods	US\$	-	-	-	-		
Export of goods	EUR	0.06	4.18	-	-		
Export of goods	ETB	-	-	0.00	0.01		
Export of goods	AED	0.16	2.32	-	-		
Export of goods	AUD	-	-	0.02	1.14		
Export of goods	ZAR	0.01	0.04	-	-		
Export of goods	GBP	0.04	3.52	-	-		
Advance to suppliers	US\$	0.43	23.19	0.01	0.73		
Advance to suppliers	EUR	0.02	1.18	0.03	1.93		
Advance to suppliers	GBP	0.00	0.17	-	-		
Advance to suppliers	CHF	0.01	0.38	-	-		
Advance to suppliers	AED	0.00	0.07	-	-		
Balance with banks	US\$	-	-	0.01	0.31		
Balance with banks	EUR	0.03	1.90	0.01	0.95		
Balance with banks	GBP	0.01	0.51	0.04	2.90		
Balance with banks	CNY	-	-	0.03	0.21		
Balance with banks	ZAR	0.02	0.12	0.01	0.07		
Balance with banks	ETB	0.05	0.19	0.05	0.15		
Balance with banks	RUB	0.02	0.03	-	-		

(ii) Amounts payable in foreign currency on account of the following:

		31 Marc	ch, 2013	31 March,	2012
Category	Currency type	Foreign currency (in Crores)	Amount (₹ in Crores)	Foreign currency (in Crores)	Amount (₹ in Crores)
Import of goods and services	US\$	1.27	68.73	0.21	10.53
Import of goods and services	EUR	-	-	0.04	2.49
Import of goods and services	GBP	0.00	0.05	0.02	1.42
Import of goods and services	CHF	0.00	0.00	0.00	0.03
Import of goods and services	AED	0.00	0.02	_	_
Import of goods and services	ZAR	0.04	0.02	0.01	0.04
Advance from customer	US\$	0.13	7.14	0.30	15.26
Advance from customer	EUR	0.01	0.39	_	_
Advance from customer	ETB	0.02	0.07	0.03	0.08

c) Commodity futures contracts to hedge against fluctuation in commodity prices :

The following are the outstanding future contracts entered into by the company as on 31 March, 2013:

Year	Commodity	No. of contracts	Contracted quantity (MT)	Buy/Sell
31 March 2013	Aluminium	116	41,568	Buy
31 March 2013	Aluminium	3	2,430	Sell
31 March 2013	Copper	4	73	Buy
31 March 2012	Aluminium	83	58,200	Buy
31 March 2012	Aluminium	8	7,875	Sell
31 March 2012	Copper	4	4	Sell

(d) Interest rate swap contracts outstanding as at 31 March 2013 to hedge against exposure to variable interest outflow on loans:

Year	No. of contracts	Amount in USD (Crores)
31 March 2013	2	4.69
31 March 2012	_	_

# Note 36: Details of dues to Micro and Small Enterprises as defined under MSMED Act, 2006

31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
0.59	0.04
-	-
Nil	0.00*
Nil	0.00*
_	_
	₹ in Crores  0.59  Nil

<sup>\*</sup> Amount is below ₹ 0.01 Crore.

Interest payable as per section 16 of the Micro, Small and Medium Enterprises Act, 2006 is Nil (31 March, 2012 Rs. 0.00 Crore) and same is not accrued in the books of accounts. During, the year 2012-2013 the Company has not received any confirmation for Micro, Small and Medium enterprise.

### **Note 37: Share Application Money**

Share application money pertains to the amount of exercise price of Rs. 2 per share for 3,650 equity shares (31 March 2012: 22,822 equity shares) under Employee Stock Option Plans.

#### **Note 38: Other Notes**

- (a) The Company had in an earlier year received an order of CESTAT upholding the demand of Rs. 188 Crores (including penalties and excluding interest) (31 March 2012: Rs. 188 Crores) in the pending excise/custom matters on various grounds. The Company's appeal with the Honourable High Court of Mumbai was rejected on the grounds of jurisdiction. The Company preferred an appeal with the Honourable Supreme Court of India against the order of CESTAT which has been admitted. The Company has revaluated the case on admission of appeal by the Honourable Supreme Court. Based on their appraisal of the matter, the legal advisors/consultants are of the view that under most likely event, the provision of Rs. 4.50 Crores made by the Company against the above demand is adequate. The management is confident of a favourable order and hence no further provision is considered against the said demand.
- (b) The Ministory of Corporate Affairs (MCA) issued the amendment dated 29 December 2011 to AS 11 The Effect of Changes in Foreign Exchange Rate, to allow companies deferral / capitalisation of exchange difference arising on long-term foreign currency monetory items. In accordance with the amendment to AS 11, the Company has capitlised exchange loss arising on long-term foreign currency loan amounting to Rs. 0.77 Crore (31 March 2012: Rs. Nil) to the capital work in progress. The Company does not have any other long-term foreign currency monetory item. Hence, the amount of exchange loss deferred in the "Foreign Currency Monetory Item Translation Difference Account" is Nil (31 March 2012: Nil).
- [c] There are no amounts due and outstanding to be credited to Investor Education and Protection Fund.

# **Note 39: Segment Reporting**

The primary segment reporting format is determined to be business segments as the group's risks and rates of return are affected predominantly by differences in the products and services produced. Secondary information is reported geographically. The operating businesses are organised and managed separately according to the nature of the products and services provided, with each segment representing a strategic business unit that offers different products and serves different markets.

Business segments ₹in Crores

Particulars	Telecom pro		Power pro solut		Power tran		Unallocable		Elimina	ations	Tot	al
	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12
Segment revenue	1,091.10	786.71	2,301.91	1,965.95	-	-	-	-	(280.74)	(108.56)	3,112.27	2,644.10
Less: Excise	40.92	21.30	72.28	64.16	_	_	_	-	(25.02)	(8.31)	88.18	77.15
Net revenue	1,050.18	765.41	2,229.63	1,901.79	_	-	-	-	(255.72)	(100.25)	3,024.09	2,566.95
Segment results (PBIT)	90.24	88.01	66.61	61.75	(2.01)	(1.12)	(2.52)	(3.13)	(3.27)	(1.31)	149.05	144.20
Less: Interest	-	-	-	-	-	-	106.28	92.40	-	-	106.28	92.40
Profit before tax	-	-	-	-	-	-	-	-	-	-	42.77	51.80
Provision for tax (net)	-	-	-	-	-	-	18.29	12.93	-	-	18.29	12.93
Minority interest	-	-	-	-	-	-	(0.71)	(0.77)	-	-	(0.71)	(0.77)
Net profit	-	-	-	-	-	-	-	-	-	-	25.19	39.64
Segment assets	1,619.95	1,461.80	994.38	913.21	2,771.05	908.60	-	-	(75.66)	-	5,309.71	3,283.61
Common Assets	-	-	-	-	-	-	56.99	9.82	-	-	56.99	9.82
Total assets	1,619.95	1,461.80	994.38	913.21	2,771.05	908.60	56.99	9.82	(75.66)	-	5,366.70	3,293.43
Segment liabilities	321.25	394.69	607.13	418.99	473.17	240.74	-	-	(149.27)	-	1,252.29	1,054.42
Common liabilities	-	-	-	-	-	-	2,942.37	1,085.15	-	-	2,942.37	1,085.15
Total liabilities	321.25	394.69	607.13	418.99	473.17	240.74	2,942.37	1,085.15	(149.27)	-	4,194.66	2,139.57
Capital expenditure incurred	232.26	49.75	32.23	90.78	1633.11	566.79	5.50	12.85	(19.51)	19.87	1,883.59	740.04
Depreciation	60.79	49.40	27.48	22.02	0.24	0.11	0.59	0.01	_	_	89.09	71.53
Significant non cash expenditure	16.07	10.25	20.56	24.03	0.07	2.73	-	-	-	-	36.70	37.00

### **Geographical segments**

The Group's secondary segments are based on the geographic distribution of activities. Revenue and receivables are specified by location of customers while the other geographic information is specified by location of the assets.

Part	culars	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
(1)	Segment Revenue - External turnover (Gross)		
	Within India	1,952.61	1,813.62
	Outside India	1,159.66	830.48
	Total	3,112.27	2,644.10
(2)	Segment Assets		
	Within India	4,928.58	2,959.90
	Outside India	381.13	323.71
	Total	5,309.71	3,283.61
(3)	Capital Expenditure		
	Within India	1,787.72	738.14
	Outside India	95.87	1.90
	Total	1,883.59	740.04

# **Note 40: Related Party Disclosures**

### (A) Name of related party and nature of its relationship:

### (a) Related parties where control exists

(i) Holding company

Twin Star Overseas Limited, Mauritius (Immediate holding company)

Volcan Investments Limited, Bahamas (Ultimate holding company)

### (b) Other related parties with whom transactions have taken place during the year

(i) Key management personnel (KMP)

Mr. Pravin Agarwal

Dr. Anand Agarwal

(ii) Entities where key management personnel / relative of key management personnel have significant influence (EKMP)

Sterlite Industries (India) Limited

Fujairah Gold FZE

**Bharat Aluminium Company Limited** 

Hindustan Zinc Limited

Sterlite Energy Limited

Vedanta Aluminium Limited

Vedanta Resources PLC

#### (B) The transactions with related parties during the year and their outstanding balances are as follows:

₹in Crores

S.	Particulars	Holding o	ompany	KN	4P	EKI	MP
No.	Transactions	12-13	11-12	12-13	11-12	12-13	11-12
1.	Remuneration	_	_	6.02	5.37	_	_
2.	Salary Advance	-	_	-	3.21	-	_
3.	Issue of equity shares	-	3.65	-	_	_	_
4.	Securities premium received on equity shares issued	-	104.75	-	_	-	_
5.	Dividend paid	6.28	10.47	-	_	0.14	0.24
6.	Management fees paid	-	_	-	_	0.20	0.48
7.	Purchase of goods	-	_	-	_	1,174.34	919.41
8.	Sale of goods (net of excise duty)	-	_	-	_	11.13	47.29
9.	Interest paid	-	_	-	_	2.58	1.68
10.	Expenses incurred	-	_	-	_	1.61	1.98
11.	Advance received against supplies	-	_	_	_	0.35	_
	Outstanding Balances						
1.	Advance outstanding against supplies	_	_	_	_	0.35	_
2.	Loans/advance receivables	_	_	_	3.21	_	_
3.	Debtors/(creditors)	-	_	_	_	6.90	20.99
4.	Corporate guarantees given and outstanding	-	_	-	_	114.00	114.00

Disclosure in respect of material related party transactions during the year:

	Particulars	Relationship	31 March, 2013 ₹ in Crores	31 March, 2012 ₹ in Crores
1.	Remuneration #			
	Mr. Pravin Agarwal	KMP	3.55	3.14
	Dr. Anand Agarwal	KMP	2.47	2.23
2.	Salary advance			
	Mr. Pravin Agarwal	KMP	-	3.21
3.	Issue of equity shares			
	Twin Star Overseas Limited	Holding company	-	3.65
4.	Securities premium received on equity shares issued			
	Twin Star Overseas Limited	Holding company	-	104.75
5.	Dividend paid			
	Twin Star Overseas Limited	Holding company	6.28	10.47
6.	Management fees paid			
	Vedanta Resources PLC	EKMP	0.20	0.48
7.	Purchase of goods			
	Vedanta Aluminium Limited	EKMP	1,010.50	706.12
	Bharat Aluminium Company Limited	EKMP	32.26	125.20
8.	Sale of goods (net of excise duty)			
	Sterlite Energy Limited	EKMP	5.83	46.74
	Vedanta Aluminium Limited	EKMP	1.53	0.55
	Sterlite Industries (India) Limited	EKMP	3.76	_
9.	Interest paid			
	Vedanta Aluminium Limited	EKMP	2.28	1.03
	Bharat Aluminium Company Limited	EKMP	0.24	0.62
10.	Expenses incurred			
	Vedanta Aluminium Limited	EKMP	1.28	1.70
	Sterlite Industries (India) Limited	EKMP	0.15	0.14
	Hindustan Zinc Limited	EKMP	0.18	0.14
11.	Advance received against supplies			
	Vedanta Aluminium Limited	EKMP	0.35	_

# As the liabilities for gratuity and leave encashment are provided on an actuarial basis for the Group as a whole, the amounts pertaining to the directors are not included above.

# **Note 41: Previous Year Figures**

Previous year figures have been regrouped / reclassified where necessary, to confirm to this year's classification.

As per our report of even date

For S.R. Batliboi & Co.LLP For and on behalf of the board of directors of Sterlite Technologies Limited

Firm Registration No.: 301003E Chartered Accountants

per Arvind SethiPravin AgarwalAnand AgarwalPartnerWhole-time DirectorCEO & Whole-time Director

Membership No.: 89802

Place: Mumbai Anupam Jindal Sandeep Deshmukh
Date: April 26, 2013 Chief Financial Officer Company Secretary

# Honey, where are my socks?



Imagine if the answer to this question lay in your smartphone. That's what the techies predict for the near future, thanks to the concept they call 'Internet of Things'

# Posted by Abhas Tripathi

If you think the digital world is crowded now, wait till you see what the next few years will bring. Today, for every human on the planet there are about two interconnected devices. If the leading technology analysts are to be believed, this number will soon be more than six. Before I tried to digest the sheer size of that number and the tactical challenges of connecting and dealing with all those devices, the first question that came to my mind was, how is it even possible that considering only a limited section of the world's population is connected to the Internet. Only when I discovered more about 'Internet of Things', did I realise what these guys are talking about.

The semantic origin of the expression is composed of two words and concepts: "Internet" and "Thing", where "Internet" can be defined as the world-wide network of interconnected computer networks, while "Thing" is an object which is precisely identifiable. Therefore, semantically, "Internet of Things" means a world-wide network of interconnected objects uniquely addressable. Confused? Well, here's the deal. What if every device/object surrounding your daily life, inside your home, in retail stores, in hotels, while commuting has a unique identification attached to it and is also connected to the Internet enabling it to communicate with all other devices? How many times have you experienced that while buying vegetables you don't remember what is left in the refrigerator at home and what you should buy? Do you sometimes wonder if you have forgotten to switch off the lights before leaving the house? In times to come, these may not be your worry anymore. Most of the devices like refrigerator and other electric appliances will be connected to the Internet giving you real-time information in the grip of your smartphone.

If you think that is impossible, think again. London City Airport in May 2013 announced initiating the implementation of this concept for the entire airport. Once they are finished, missing luggage, delayed flights, long security lines or wading through a sea of taxi drivers to find the cardboard placard with your name will all be a thing of the past. Your smartphone will be tracking all that in real-time.

Individuals, businesses and governments however are unprepared for a possible future when Internet nodes reside in such basic devices of daily usage like food packages, furniture, paper documents and more. Today's developments are a pointer towards a likely future where people can remotely control, locate and monitor everyday things. This will create massive information pools needing to be stored, accessed and analysed in real time which will require robust networks with massive bandwidths for one and all. But then isn't that how ecosystems evolve?

It makes me wonder though, are we heading to an era where humans will become just another 'Thing' creating big data? Do I want to be in a situation where I am tempted to take a grab of pizza and the device in the palm of my hand reminds me of my medical records suggesting that cheese is not for me? I am not quite sure.

But again that is taking the hypothesis to the next level. But what I do know for certain is that the day is not far when I can track all my belongings and devices at home or outside at the tip of my fingers. I am excited with the thought of witnessing the revolution first hand. Are you?

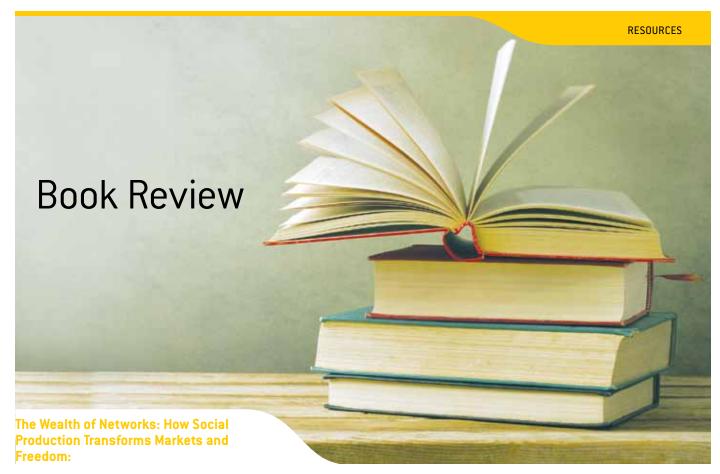












In this thought-provoking book, the author describes how patterns of information, knowledge and cultural production are changing. Benkler describes how the networked economy is reshaping markets, while at the same time offering new opportunities to enhance individual freedom, cultural diversity, political discourse and justice. But these results are by no means inevitable: a systematic campaign to protect the entrenched industrial information economy of the last century threatens the promise of today's emerging networked information environment.

Yochai Benkler's *The Wealth of Networks* is a comprehensive, informative and challenging meditation on the rise of the "networked information economy" and its implications on society, politics and culture. Benkler, the Lillian R. Berkman Professor of Entrepreneurial Studies at the Harvard Law School, is a leading authority on the law, economics and politics of networks, innovation, intellectual property and the Internet and he puts his wide knowledge and deep understanding to good use. He argues that the digital revolution is more revolutionary than has been recognised,

even by its most passionate defenders. The new information and communication technologies do not simply make the old way of doing things more efficient, but also supports fundamentally new ways of doing things. In particular, the past few years have seen the rise of social production, a radically decentralised, distributed mode of interaction that Benkler calls "commons-based peer production."

Further, the book deals with the economics of the networked information economy. Benkler proposes social production as an alternative to the traditional organisational modes of market and hierarchy. This part is followed by "The Political Economy of Property and Commons", which is the book's most original section. Benkler sees social production as a powerful force for individual liberty. People used to be passive recipients of news, information, norms and culture; now they are active creators. Benkler strongly opposes privatising the information commons by allowing owners to exercise property rights.

To ensure open access to the networked economy, Benkler favors a public-ownership

network infrastructure, loose enforcement of intellectual property rights, subsidised R&D, and "strategic regulatory interventions to negate monopoly control over essential resources in the digital environment".

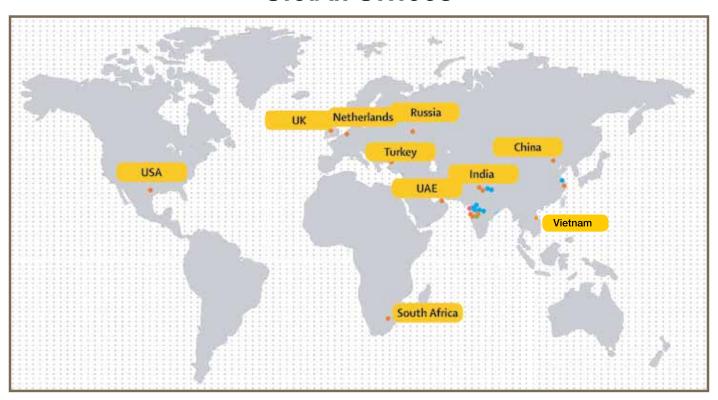
The book concludes with a section on public policy, summarising Benkler's concerns about privatising the digital commons—what he calls a "second enclosure movement" and outlining a positive role for the state, whose most important job, he argues, is to maintain openness or "neutrality" within the economy's digital infrastructure.

Author: Yochai Benkler is the Berkman Professor of Entrepreneurial Legal Studies at Harvard and faculty co-director of the Berkman Center for Internet and Society. Since the 1990s he has played a part in characterising the role of information commons and decentralised collaboration to innovation, information production and freedom in the networked economy and society.

Published: New Haven, Conn.: Yale University Press, 2006.

Pages: Pp. xii, 515.

# **Global Offices**





#### China

- Shanghai
- Beijing

### India

- Aurangabad
- Bangalore
- Gurgaon
- Mumbai
- New Delhi
- Pune

#### **Netherlands**

Eindhoven

### Russia

Moscow

#### **South Africa**

Sandton

### **Turkey**

Istanbul

### **United Arab Emirates**

Dubai

### **United Kingdom**

Milton Keynes

### **United States of America**

Duluth, Georgia

### **Vietnam**

· Ho Chi Minh City

# Manufacturing locations

### China

Hai Men City

### India

- Aurangabad
- Dadra
- Haridwar
- Piparia
- Silvassa

Rakholi

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Phone: +91-20-30514000 Fax: +91-20-26138083

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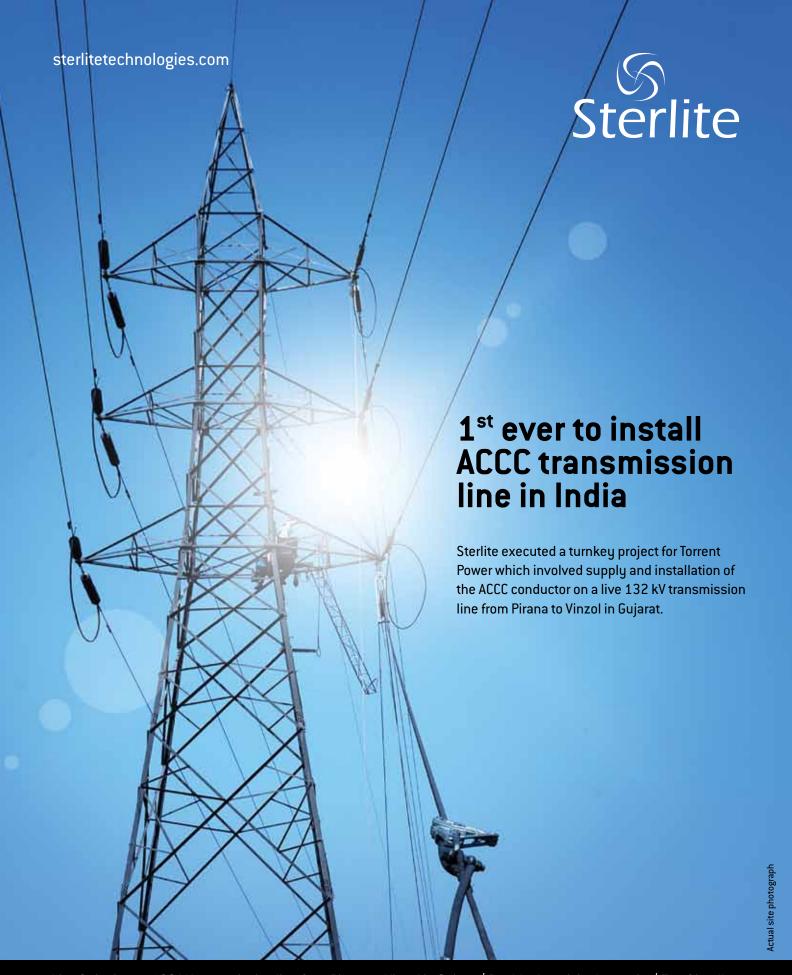
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We make it easier, faster and more cost-effective for service providers to build Telecom & Power infrastructure.