

#### Forward-looking statement

In this Annual Report we have disclosed forward-looking information to enable investors to comprehend our prospects and take informed investment decisions. This report and other statements - written and oral - that we periodically make, contain forward-looking statements that set out anticipated results based on the management's plans and assumptions. We have tried, wherever possible, to identify such statements by using words such as 'anticipates', 'estimates', 'expects', 'projects', 'intends', 'plans', 'believes' and words of similar substance in connection with any discussion of future performance.

We cannot guarantee that these forward-looking statements will be realised, although we believe we have been prudent in assumptions. The achievement of results is subject to risks, uncertainties and even inaccurate assumptions. Should known or unknown risks or uncertainties materialise, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Readers should bear this in mind.

We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

# Inside the document

### Contents

| Corporate identity                  | 02  |
|-------------------------------------|-----|
| Operational highlights              | 04  |
| Managing Director and CEO's message | 06  |
| Interview with COO                  | 08  |
| Subex – A cut above the rest        | 16  |
| Star awards                         | 17  |
| Board of directors                  | 18  |
| Executive leadership team           | 19  |
| Subex charitable trust              | 20  |
| Board's report                      | 22  |
| Corporate governance                | 48  |
| Management discussion & analysis    | 61  |
| Financial review-standalone         | 83  |
| Financial review-consolidated       | 115 |
| Shareholders' information           | 146 |
|                                     |     |

## Subex for the future



A collaborative spirit, unrelenting dedication and expert know-how helps us see possibilities where others see a full stop.

We are Subex. We are the future for optimization.

This is a story of reloading, reviving and resurging.

This is the story of Subex.

And the story has only just begun.

<sup>\*</sup> eight approved, eight pending

### Subex Limited.

- Provides top-of-the-line business and operations support systems.
- Bolsters the competitive advantage of communications service providers.
- Improves operational efficiencies.



 Enhances service experience of subscribers

By reloading, reviving and resurging.

#### About us

Subex Limited is a Bengaluru-based corporate providing business and operations support system products for telecom operators. Our products include ROC revenue assurance, ROC fraud management, ROC credit risk management, ROC partner settlement, ROC cost management, ROC route optimization, ROC asset assurance, ROC data integrity management and ROC capacity management.



#### Where we are located

Subex is headquartered in Bengaluru, India. The Company's global delivery centres are located in India, the US and the UK. Our branch offices are located in the US, the UK, the UAE and Singapore.



#### Listing

The Company's shares are listed on the Bombay Stock Exchange (BSE, India), the National Stock Exchange (NSE, India), the London Stock Exchange and the Singapore Stock Exchange. The Company enjoyed a market capitalization of ₹ 185.6 crore as on 31st March 2015.



#### Products and services

Subex provides industry-leading B/OSS solutions to leading telecom service providers across the globe. Subex has been the harbinger of change in the realm of telecom through its groundbreaking Revenue Operations Centre (ROC®). Subex is known for its entrenched ability to provide integrated infrastructural services for regular operations. Built to establish a link between operations and profitability, the ROC combines disparate operations and provides assurance and governance functions in a synergistic manner. It enables service providers to monitor and control the entire revenue chain and identify revenue risks, thereby resulting in augmented returns and customer gratification, hands-on management and diminished capex.

### The Subex value proposition - business and capex optimization

Protected Revenues **(** 

Revenue Assurance Prevents revenue leakages

Cost Management Reduces unnecessary expenditure

Asset Assurance Manages and reduces network capex

Fraud Management Prevents losses (fraud and payment defaults)

Partner Settlement Manages inter-carrier, partner expenses

Capacity Management Provides a holistic view of network capacity

Credit risk Management Reduces risk proactively

**Route Optimization** Manages and forecasts network cost information

Data integrity Management Oversees network discovery, reconciliation and analytics

Revenue

₹360.73

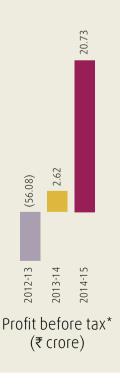
crore

2014-15

# Operational highlights, 2014-15







<sup>\*</sup>representing our continuing business

EBIDTA\*

₹84.89

crore

2014-15

Employees

Global patents#

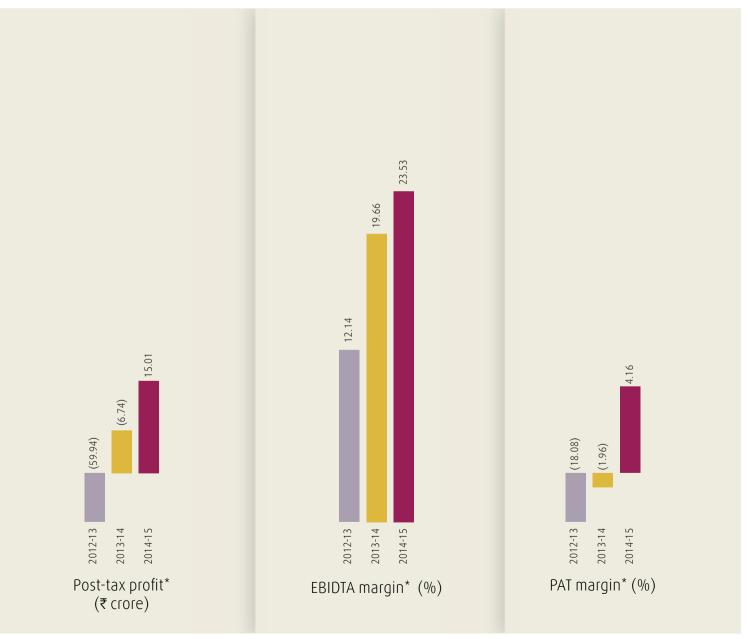
16

Customer base

As on 31st March 2015

As on 31st March 2015

As on 31st March 2015



#8 granted, 8 pending approval



# Managing Director and CEO's message

### Dear shareholders,

As we've seen over the past few years, telecom continues to be a growing, vibrant ecosystem, expanding rapidly across a broad swath of products, technologies and services. And we believe that there are plenty of new and emerging opportunities which could continue to provide robust growth across all telecommunications sub-sectors.

There are some conspicuous trends manifesting themselves in the B/OSS business which include a growing stringency in terms of regulatory demands, increasing commoditization, shrinking margins, proliferation of devices and services, and the implementation of new business models and strategies. What we have to realize now is what these changes means for telecom operators – our primary clients. Telecom operators now need to respond in days and not weeks or months. They must enhance their knowledge of the customer and sweat their assets to identify and remove procedural bottlenecks and leverage their biggest asset – data.

Traditional telecommunications organizations must realize that the sector is becoming more and more intimately intertwined. Hence, rather than 'going solo,' it will be prudent for them to walk the collaborative path. This is where, Subex's expertise comes in. Operators can leverage the Subex ROC value proposition and heighten customer satisfaction and rake in incremental incomes.

Our entrenched ability to plug business gaps and ensure capex optimization holds us in good stead to make the most of these developments. This warrants consistent monitoring of all processes and systems and making sure that the are working in the manner they are supposed to and taking corrective actions in case of any discrepancies.

One of the more momentous developments during the fiscal gone by has been the growth of audio and video streaming among smartphone users, with most consumers now using more than a gigabyte of data per month. The 2014 Global Mobile Consumer Survey showed a 19 per cent increase among US consumers streaming television or film content over the past year, and there was an impressive 30 per cent year-over-year growth in streaming music. Even more compelling was that the number of consumers who indicated they streamed media has nearly doubled since last year. With 16 global patents in our kitty – (eight approved and eight pending) and 700+ engineers working indefatigably towards creating cutting-edge IPs, the Subexian school of thought leadership has become a veritable industry benchmark.

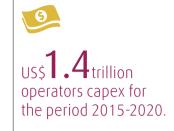
And it's not just the developed markets that are holding sway; the emerging markets are set for pulsating growth too. Cognisant of these trends, CSPs in North America are no longer wary of adopting state-of-the-art business optimization tools which Subex has to offer. Such tools include those that enable advanced market segmentation based on transient and unstructured data.

### The mobile economy 2015



subscribers by 2020.





The LATAM mobile market is becoming more and more sophisticated with each passing fiscal. Subex, with its ability to provide tools for revenue assurance, fraud management and market segmentation in order to help reduce churn and revenue leakage from operations, is expected to be a major beneficiary in the aftermath of all this.

CSPs in Western Europe have already purchased commercial software tools and platforms but the need to improve efficiency will continue to drive additional spending. In addition, sales of customer data will become more significant towards the end of the forecast period.

CSPs in China and India, and other large, emerging countries in APAC have also taken to business optimization tools and the overall market is pegged to grow at a CAGR of 9.2%. This healthy growth rate is spurred by the region's comparatively open regulations for the use of customer data.

Subex's Network Analytics solution suite addresses capex issues of operators and helps in substantial capex reduction. Asset assurance, data integrity management and capacity management represent the three key components of the suite. While the first component manages telecommunications network assets across all dimensions of the asset lifecycle and helps reduce capex substantially, the second discovers devices and services across diverse network environments and uninterruptedly reconciles this data with the OSS/BSS. The third engages analytical functions to accurately envisage situations and assess their impact on network capacity,

thereby helping CSP's plan capacity investments in a prudent manner.

Subex is a pioneer in this space; the Company's initial projects have yielded superior customer value. Going ahead, it is expected that this segment will contribute significantly to the annual revenues over the foreseeable future.

Our expertise and experience in these emerging fields have been vindicated by recognition coming from all across the telecom industry. Subex along with Mobily, has been awarded the prestigious GTB Innovation Award 2015 for Business Service Innovation and has also been named one of the 'Top 10 to Watch' companies by leading analyst firm, Frost & Sullivan.

Subex's resurgence has been much like that of the proverbial Phoenix. Standing at what can be accurately described as our inflection point, we pledge to remain firmly committed to delivering enhanced value to all our stakeholders. All of us at Subex are very excited about the road ahead. We feel confident that we will achieve outstanding results through focus and efficient execution. Our passionate and committed team of 800+ Subexians join us in thanking you and we look forward to an exciting year ahead with the aim of garnering newer milestones and greater achievements.

Regards, Surjeet Singh Managing Director and CEO

# Interview with Vinod Kumar, COO

Analysys Mason research shows that capex spending in the top – 125 CSPs worldwide has fallen consistently over the last four years; in 2014 capex totalled US\$320 billion, or 16% of revenue

Capex optimization is a term that has featured in every major communication service provider's (CSP) financial reports in recent years and while it may seem like a proactive buzzword to use in the annual shareholders letter, there are genuine large-scale initiatives currently taking place within the CSPs to streamline capex spending.

The lean years of global economic downturn, falling ARPUs, falling EBITDA and increased competition from outside the industry has forced all CSPs to seriously address the way they deliver their services, dramatically reducing costs, increasing operational efficiency and maximizing margins while simultaneously dealing with the drive towards deploying next generation network technologies and services.

# What are the key inefficiencies in capital investments decision making within CSPs?

Subex sees three main challenges faced by CSPs undergoing a transformative initiative to optimize capex spending:

The first key investment challenge facing CSPs with multiple large networks is that separate OSS/BSS systems are used to manage and support different types and ages of network technology with no single system accounting for all of the Company's assets. In global CSPs with a track record of M&A, this situation is amplified greatly as a large number of legacy systems continue to function in the country-specific operating companies due to the costs and time impacts involved with large scale data migration. In addition to this, inventory for

outside plant has traditionally been handled by a manual data entry system which models assets from physical data centre infrastructure to cell tower hardware to satellites modelled in an offline system. The only way to ensure data quality on these systems is to perform physical audits, which again can prove to be a costly exercise.

The second inefficiency we have seen in our research is a disconnection of motivations from the different buying centres within a CSP, mainly the alignment gap between the CTO and CFO. The CTO's key drivers are to authorize capital expenditure in the network based on technological improvements, maintenance requirement and the ongoing expansion of network capacity. The CFO's office is focused primarily on tackling eroding margins and preservation of capital, and the ability to free up liquid cash. Finance departments typically rely on ERP (Enterprise Resource Planning) software and techniques along with other supply chain, logistics or asset management applications to obtain metrics about the number, status and location of assets, which is a different view to that of the OSS. CSPs' CFOs and CTOs should work together in order to achieve best return on network investment.

The third key inefficiency that we see in the assessment of capex allocation comes from a driver perspective, where the vast majority of capex spending is automatically passed through purchase controls in an attempt to stay marginally ahead of capacity rather than from a strategic plan from the business.

With these fundamental problems in both business process and information management it is easy to see that capex spending activities in CSPs is not currently optimized. What is Subex doing to address these challenges?

The ROC Asset Assurance solution is a network analytics based software platform which is designed to drive actions and changes in critical business processes that relate directly to capex. The solution is comprised of three key elements; data