Management Discussion and Analysis ('MDA')

ECONOMIC OVERVIEW

The year 2022 marked significant progress in the global economic recovery from the Covid-19 pandemic. While the world witnessed considerable growth and stabilisation, it was also challenged by ongoing risks from the pandemic and geopolitical developments.

Global GDP growth in 2022 was estimated to be at 3.4%[1]. This growth was supported by a combination of monetary and fiscal policies, increasing vaccination rates, and the easing of restrictions that allowed for the resumption of economic activities.

However, the global growth is estimated to fall to 2.9% in 2023[1], as the rise in central bank rates to fight inflation and geopolitical issues continue to weigh on economic activity. Although, the global economy continues to display resilience and modest improvement, the estimates are well below the long term global growth average of 3.1%[1]. The recent banking sector turmoil in the United States and Europe has illustrated fragilities in the financial system, complicating the trade-off for central banks between fighting inflation and preserving financial stability. Debt levels remain high, limiting the ability of fiscal policymakers to respond to new challenges.

Risks to current economic scenario:

- **Covid-19 Related Risks:** Despite significant progress in vaccination campaigns and the lifting of restrictions, Covid-19 remained a key risk factor in 2022. The emergence of new variants and unequal vaccine distribution threatened to disrupt the recovery process. Governments and health organisations continued to closely monitor the situation and adapt strategies accordingly. While direct impact of covid is huge, it has also caused significant impact indirectly by the stress induced in medical & pharma supply chain including access to medicines for non-communicable diseases[2].

- **Russia-Ukraine War:** The ongoing conflict between Russia and Ukraine had significant implications for the global economy. Disruptions to energy supplies, trade routes, and financial markets increased uncertainty and weighed on global economic prospects. The conflict also strained relations between Russia and the West, leading to the imposition of economic sanctions and further disruptions. While the day-to-day situation continues to evolve, it has been predicted that this conflict has caused regional output to contract by 0.2%[3].

- **China-Taiwan Conflict:** Tensions between China and Taiwan also escalated in 2022, posing a risk to regional stability and global supply chains. The situation demanded increased diplomatic efforts to avoid a full-scale conflict and to mitigate potential negative impacts on the global economy. If this conflict worsens, it is expected to cost above USD 2 Trillion annually in economic impact even in the best-case scenarios[4].

  In the current complex situation of geopolitical and monetary pressures, the overall global outlook is still optimistic especially powered by strong developments in emerging and developing economies. Growth in emerging and developing Asia is expected to rise in 2023 and 2024 to 5.3% and 5.2% respectively[5]. While inflation and supply chain challenges will continue to affect many countries in the short term, underlying trends are expected to improve. Technological advancements will deliver major economic production and make consumption structures more sustainable. Institutions will need to prepare for their digital future and not remain just passive observers to the ongoing digital revolution. They should prepare for the ongoing changes with a strategic end-to-end digital transformation.

INDUSTRY OVERVIEW

The imperative for digitalisation across all sectors has pushed the Information & Communications Technology ('ICT') industry to develop new technologies, products, and services at an unprecedented pace while attracting new investment, talent, and players to the market. Demand for flexibility, affordability, and accessibility of ICT continues to rise while there is a persistent need for greater computing power and cybersecurity. These forces drive innovation and new approaches to value chains and business models in the industry. Today, every business, from financial services and healthcare to education

[1] www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023
[2] www.who.int/news/item/22-03-2023-covid-19-pandemic-significantly-impacted-access-to-medicines-for-noncommunicable-diseases
[3] www.worldbank.org/en/news/press-release/2022/10/04/russian-invasion-of-ukraine-impedes-post-pandemic-economic-recovery-in-emerging-europe-and-central-asia
[4] rhg.com/research/taiwan-economic-disruptions/
[5] www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023

and mobility, is embracing digital technology to attract target audiences, automate and optimise processes, cut costs, and grow revenue. Advances expected from the use of automation, robotics, and a historic explosion of data and intelligence present significant opportunity for unprecedented disruption and growth.

The concept of 'digital ecosystem' is fast becoming ubiquitous. As per Boston Consulting Group, digital ecosystems are fundamentally changing how businesses collaborate and compete. Many of the world's largest companies are part of vast digital ecosystems that are disrupting not just their industries but broad swaths of the economy. Orchestrators of collaboration networks need to create a sense of community and trust while ensuring that all participants benefit. Value—whether it's data, IP, or financial gain—must be shared to create strong and lasting partnerships. Every enterprise operates within a digital ecosystem player and they have no choice but to leverage its partner ecosystem including independent software vendors, system integrators, IT consultants, product Original Equipment Manufacturers ('OEMs'), value-added-resellers, cloud service providers, Software-as-a-Service ('SaaS') companies, right through to telecom providers. Growth for all in this ecosystem is imperative for shared growth.

Digital technology is projected to account for more than two-thirds of productivity growth over the last decade. By 2030, it will account for 25 percent of global GDP[6]. At the core of the digital economy, it is expected that heterogeneous network-of-networks will emerge. This next-generation architecture will encompass a seamless mix of terrestrial networks and multi-layer non-terrestrial networks. This network would not only incorporate elements from fixed, mobile terrestrial nodes, but also non-terrestrial nodes including Lower Earth Orbit ('LEO') satellites and high-altitude platform systems ('HAPS') as well as other ad-hoc networks (such as vehicular networks, or blockchain-based IoT networks).

Complementing the seamless integration of multi-layered networks will be the emergence of a new computing paradigm that facilitates computing with stronger combinations of centralised and distributed aspects (Core and Edge). Over the next half-decade, global multi-cloud networking revenue is expected to almost double and technologies such as quantum computing are projected to turn into a $10 billion industry.[7]

The proliferation of consumer and business devices, including IoT sensors, will generate an exponential increase in the volume of data produced. Estimates from leading vendors suggest that approximately 40 billion connected devices will be online in the next half decade[8]. With big data and analytics technology revenue, including from hardware, software, storage and services in the mining of unstructured data expected to reach $260 billion this year and spending forecasted to grow at a compound annual growth rate of 13 percent over the next three years,[9] Artificial Intelligence's (AI's) game-changing applications in education, retail, pharma, agriculture and more should compound further data generation and usage around the world.

TELECOM MARKET

The telecommunications industry is a pivotal force in enabling digital transformation globally, and an increased focus on digitalisation presents a plethora of challenges and opportunities like never seen before. Internally, operators are going through fundamental changes in the way they run their networks and operations as these become more software and data driven. Externally, they are facing rapidly evolving customer demands as their businesses and lives also adapt to a more software-centric world.

This in turn, is driving seismic change through disaggregation of the telecom's value chain as blurring lines between networks, cloud and IT opens new opportunities for specialised players in networking technology and services. This happens both, on the supply side for traditional operators, and in how enterprises and consumers buy connectivity services. All of this is compounded by a challenging macro-economic landscape with rising inflation and geopolitical tensions and the rapidly escalating impact of climate change.

Globally, telcos are at an inflection point due to:

- Heavy investment in 5G development and deployment, now demanding a return on investment.
- Innovation in networks – particularly in moving towards software-defined, cloud-native network and IT.
- Threat of hyperscalers, whose presence and interest in telecom markets is growing.
- Commoditisation of voice, messaging and data services consumer market and diminishing returns on network innovation.

[6] https://www.huawei.com/minisite/gci/en/digital-spillover/index.html
[7] https://www.morganstanley.com/ideas/quantum-computing
[8] https://www.ericsson.com/en/reports-and-papers/mobility-report/mobility-visualizer?f=15&ft=3&r=1&t=18&s=9,10,11,12,13&u=1&y=2021,2027&c=1
[9] https://www.businessinsider.in/enterprise/news/five-ways-big-data-analytics-can-boost-revenues/articleshow/91954212.cms

- Growth of B2B enterprise services due to 5G, edge computing and private networking.

In India's Union Budget FY 2023-24, it is proposed to set up 100 labs for developing applications using 5G services in engineering institutions to realise a new range of opportunities, business models, and employment potential. The labs would cover, among others, applications such as smart classrooms, precision farming, intelligent transport systems, and health care applications. Additionally, it was announced to set up three centres of excellence in India for Artificial Intelligence. The Government has also allocated ₹2,158 crores for optical fibre cable-based network for Defence Services and ₹716 crores for telecom projects in India's North-Eastern states. There is enhanced focus of Government to improve adoption of e-governance using cloud through 'Project Meghraj', which aims at making a multi-level, national cloud-sharing foundation giving affordable, secure, and safe data storage for everyone.

The telecom industry overall is facing increasing competition, market saturation, and commoditisation of traditional technology challenging operators to differentiate themselves with innovative services and applications. On a unit level, connectivity will continue to be commoditised, but the delivery, how easy it is to integrate and adapt to existing processes and systems, will remain a point of differentiation. The rise in technological savviness in enterprise consumers and increased adoption of sophisticated technologies has led to intra-industry and cross industry competition across several segments of the telecom sector to provide more end-to-end solutions. Following are a few key developments in the telecom sector:

Rising interest in multi-access edge computing and private cellular networks

The enterprise market for private cellular networks and edge computing is gaining momentum. The market is currently nascent but promises to be competitive, with many different players vying for their share. Network operators will have to compete against other players, who may prove key partners in delivering solutions.

5G is a trigger for transformational change

The investment in 5G is providing the telecom industry with a catalyst for change, as it forces change across businesses, while presenting opportunities for revenue growth. International Data Corporation ('IDC') estimates that the global shipment of 5G devices rose by 23.6% YoY in 2022. This implies that more than half of the 688 million devices shipped will be 5G-enabled[10].

5G also creates new security concerns and challenges. Since operators have taken steps to evaluate and minimise threats arising from 5G and software-centric networks in their own organisations, they are also in a unique position to offer 5G security services to enterprises seeking to deploy their own advanced wireless networks.

The potential for more competitive broadband markets

Faster mobile and fixed wireless connections create more viable alternatives to wired connections and new opportunities for bundled service offerings and business models for service providers. With ever-expanding options for high-quality communication and internet services from telecom, cable, wireless, and satellite internet providers, consumers will enjoy enhanced flexibility in purchasing and consuming services.

KEY TRENDS IMPACTING OUR INDUSTRY

Tata Communications is committed to meeting the needs of enterprises in today's rapidly evolving digital economy. As part of our ongoing transformation journey, we are committed to serve as a digital ecosystem enabler. We continue to enable digital transformation for enterprises across all layers of IT with infrastructure becoming invisible, cloud becoming dominant, data driving new business models and security requirements being the need of the hour.

The trends shaping 2023 and beyond underline the growing complexity of our world, underpinned by the hyper-connectivity of everything – be it people, machines, things or processes.

IT spending expected to remain steady despite economic concerns:

While the economic uncertainty took a toll on the stock market and companies' financial health, IT budgets came out relatively unscathed. Despite another year dominated by transformational and functional outcomes, IT leaders are making significant headway on modernising the IT estate in preparation for the next cycle of digital innovation. Worldwide IT spending is projected to be $4.5 trillion in 2023, an increase of 2.4% from 2022, as per the latest forecast by Gartner. This is down from the previous quarter's forecast of 5.1% growth (Source: www.gartner.com/en/newsroom/press-releases/2023-01-18-gartner-forecasts-worldwide-it-spending-to-grow-2-percent-in-2023). As inflation continues to erode purchasing power, enterprises are more focussed on achieving operational efficiencies by using technology as a lever.

[10] https://think.ing.com/uploads/reports/Telecom_Outlook_2023.pdf

- As per Gartner's 2023 Gartner CIO and Technology Executive Survey, 53% of the CIOs are focussing on improving operational efficiencies that directly impact the bottom-line performance of their enterprise.
- According to Foundry's State of the CIO Survey 2023, 91% of CIOs expect their tech budget to either increase or stay the same in 2023.
- The technology initiatives that are expected to drive the most IT investment in 2023 are security / risk management, data / business analytics, application / legacy systems modernisation, machine learning / AI, and customer experience technologies.

Human-to-Everything hyperconnectivity drives transformation:

In 2023, many businesses will start realising the transformative capabilities of 5G and its impact on their organisation. Human-to-Everything connectivity is the next frontier. As more and more devices become connected to the internet, and to each other, people will be able to interact in new and more powerful ways. Anything can be connected, from employees to factory floors, vehicles, remote sensors, and more.

A growth in standalone (or private) 5G networks will drive this, enabling new and immersive experiences that were not possible before. For example, using Augmented Reality ('AR') on a vehicle manufacturing line could help to assess faults in real-time. By bringing improved efficiency across the value chain, connectivity will act as a catalyst for further growth. Connected things such as security systems and smartphones would enable businesses to use data to power up decision-making.

Eventually, 6G is expected to allow even faster speeds and capacity than 5G by several levels of magnitude. For instance, 6G internet will aim to support one microsecond latency communications, 1,000 times faster than what's possible with 5G. Some other potential applications of 6G internet include an integrated space-air-ground-sea network for truly global network coverage, and more efficient wireless access points which can handle more users simultaneously. Mobile edge computing will also be built directly into all 6G networks, pushing the limits of AI beyond what's possible today.

Businesses striving to unlock 'total' experience:

Customer experience ('CX') and employee experience ('EX') will evolve to meet the ever-growing expectations of users. A clear vision for 'Total Experience' ('TX') – a strategy which brings these two areas together – sets businesses up for success in the digital era.

By focusing on TX, an organisation can instil advocacy, drive growth, and deliver wider transformation. Customer Relationship Management ('CRM') is a key component to TX. Best practices in CRM is supported by three pillars: innovation, AI and sustainability. Driven by the focus on a digitised and personalised user experience, these three focal points must shine through a company's contact centre operations and employee collaboration strategies.

Developing a sustainable omnichannel strategy will help businesses build on these three pillars. According to McKinsey research, businesses that improved TX, increased sales revenues by 2-7%, and profitability by 1-2%. True TX will drive revenue while also aligning with the digitalisation of customer journeys.

SUSTAINABILITY IN TELECOM

Tata Communications recognises the vital role that the ICT sector can play in helping enterprises achieve their Net Zero goals and promoting sustainable growth. As a digital ecosystem enabler, we believe that the hyperconnected systems and other ICT platforms can help businesses to secure a sustainable future by solving some of world pressing issues in the following ways.

- **Tackling the climate crisis –** Technologies such as 5G, AI, and Internet of Things ('IoT') can efficaciously transform the decarbonisation of any business operations, meet international targets and help limit global warming to 1.5 degrees above pre-industrial levels. Furthermore, energy efficiency and renewable energy technologies that are useful in reducing carbon emissions can be efficaciously utilised through hyperconnected systems that provide the ability to make real-time adjustments for efficiency and cost-effectiveness.
- **Augmenting resource efficiency -** The use of AI, IoT, and other technology that empowers hyperconnected systems can facilitate monitoring the use of resources in organisations, waste management, etc. With proper digital tracking techniques in place, the discarded devices and materials can be refurbished and reused; thereby, saving cost and creating a positive impact on the environment.
- **Fostering Social Accountability -** Skill-ification - which means enhancing human capital, will help to create new capabilities in employees and communities via learning new ways of working in the hyperconnected ecosystem without creating inequalities due to structural shifts in the workforce patterns and digital workflows. It will also impact the social responsibility of organisations because of increased cultural intelligence and a deeper appreciation of the relationship between business and society.
- **Securing new and innovative business models -** Hyperconnected ecosystem helps to build better products, improve customer experience and supplier relationships, and enhance transparency in the entire

value chain. This provides sustainable competitive advantages to enterprises by building rich and interconnected communities.

Sustainability at Tata Communications

The Natural Capital section of our Integrated Annual Report provides details regarding Sustainability initiatives at Tata Communications.

Greater competition also requires greater collaboration

The digital ecosystem is an operating environment that continues to be highly competitive and increasingly complex for customers to navigate for the following factors:

- Hyper-scale cloud service providers are evolving into the traditional telecom industry with bundled cloud and network offerings. These technology-companies are increasingly investing in the underlying infrastructure.
- System Integrators ('SIs') too, are competing with telecom players for overseeing customer relationships as they continue to grow their managed services portfolio.
- Product OEMs are particularly active in the overlay services play like SD-WAN.
- Pure-play technology vendors are offering services directly to enterprises in niche areas.
- There is increased competition from conventional telecom companies as well, especially in India. Following the Indian telecom sector consolidation, consumer mobility players have increased their focus towards serving enterprises.

As a digital ecosystem enabler, Tata Communications places the customer's business needs at the heart of everything and brings it together into a cohesive solution across varied components, thus precluding the need to deal with various components individually.

ORGANISATION OVERVIEW

Tata Communications is a leading global digital ecosystem enabler. With a leadership position in emerging markets, and an infrastructure that spans the globe, we leverage our advanced solutions capabilities and domain expertise across our global network to deliver managed solutions to multi-national companies and service providers. We partner with 300 of the Fortune 500 companies with our state-of-the-art solutions, including a wide range of communication, collaboration, cloud, mobility, connected solutions, network and data centre services.

Tata Communications' global network includes one of the most advanced and largest submarine cable networks. We are in the Top 5 IP providers on 5 continents and offer public and private network connectivity to more than 190 countries and territories.

A part of the Tata Group, Tata Communications is powering the fast-growing digital economy. We are orchestrating the digital ecosystem to assist enterprises globally in their digital transformation journeys.

Through our global digital infrastructure, we empower business by enabling borderless growth, boosting product innovation and customer experience, improving productivity and efficiency, building agility and managing risk.

We are simplifying the design and management of digital solutions for our customers to provide them the ability to concentrate on their core business with ease by unlocking opportunities that digital transformation provides.

Along with our globally established subsidiaries and associate companies, we serve customers in more than 190 countries and additional dependent territories worldwide leveraging our technology capabilities and partnerships.

Vision

To deliver a New World of Communications™ to advance the reach and leadership of our customers as a global digital ecosystem enabler

MISSION

To enable enterprises to succeed in the new world of digital (technologies and business models) by being borderless and always available (to our customers and partners).

SHARED AMBITION

To achieve profitable growth and become a leading digital ecosystem enabler in the eyes of our customers, and the industry.

VALUES:

Leadership with Trust

Tata Group values

a) **I**ntegrity
b) **P**ioneering
c) **E**xcellence
d) **R**esponsibility
e) **U**nity

OUR CULTURE

We have sharpened our values to align with the #Reimagine Strategy with the 6 key tenets:

1. Ownership and accountability
2. Collaboration
3. Can do attitude and growth mindset
4. Being agile
5. Continuous learning and skills transformation
6. Innovation and problem solving

In addition, we are building digital dexterity at the workplace by ensuring employees understand the importance of upskilling and how this aligns with the organisation's business objectives. We encouraged employees to explore, learn and create the best digital experiences for our customers. We also created an innovation framework that encourages them to innovate.

Inclusive Leadership was introduced as an immersive learning journey to enable people managers manage a diverse workforce, with the help of webinars from world class D&I (Diversity and Inclusion) leaders, and customised e-learning modules with assignments, case studies, and online social discussions.

A forward-thinking approach

We help businesses manage the complexities of embracing digital transformation and unlocking the opportunities it brings:

- Enabling borderless growth
- Boosting product innovation and customer experience
- Improving productivity and efficiency
- Building agility
- Managing risk

Strategy

- **Financial fitness** which is about getting our balance sheet healthy and achieving double-digit profitable data revenue growth. Having achieved sequential profitability for the last few quarters, we are now fit to compete and fit to grow as an organisation.
- **Our growth plan** which will move us towards our ambition of being recognised as a global digital ecosystem enabler addresses:
  - the **who** (superior customer experience),
  - the **what** (platforms, solutions and services) and
  - the **how** (the right operating model and our commitments in Sustainability, Innovation and Artificial Intelligence).
- And underpinning this is **our culture**, which embraces the behaviour shifts we need to collectively make to achieve success.

OUR 'REIMAGINE' STRATEGY

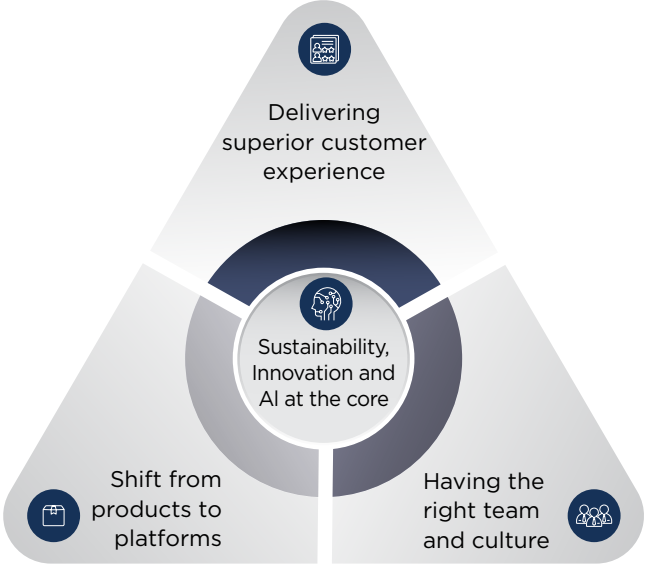
	Financial Fitness	Truly Compliant	Fit to Compete	Fit to Grow
Growth Plan		**Who** Customer Shift • Key segments focus	**What** Product to Platform Shift • Scalable and differentiated platform offerings	**How** Business Model Shift • Right operating model • Delivering and monetising superior customer experience
			Automation, Innovation and AI at the core	Sustainability at the core
Culture		Ownership and Accountability Agility	Collaboration Continuous Learning and Upskilling	Growth Mindset Innovation and Problem Solving

We are working closely with our customers to create complex solutions that cut across products and deliver it seamlessly; aggregating the capabilities we have and bringing it to the core, in order to deliver real value and superior experience to our customers.

We plan to generate investments in services through leading technological innovations and seek to enhance the existing offerings and optimise our assets. Through these innovations, we estimate an increase in demand for our services and expansion of our market presence as well.

These strategic shifts need to interlock and work in harmony as a complete whole for our strategy to be successful and help realise our shared ambition.

We have made good progress on our strategy shifts that are focused on:



CUSTOMER SEGMENTATION

Being a key global player in the industry in which we operate, we offer products and services to three customer segments:

- Enterprises
- Service Providers
- Hyperscale Cloud Providers (OTTs)

Enterprises

Particularly among enterprises, digital transformation is rapidly changing the way businesses are run in the post-pandemic world accelerating the shift toward hybrid work models and e-commerce.

Digitalisation brings transformation across industries and functions with unparalleled opportunity for value creation. Enterprises recognise the strategic implication of this and are designing digital transformation strategies to realise the maximum benefit from these opportunities, at times when specific sectors need to re-invent themselves and respective business models to overcome turmoil.

It is no longer just a driver of marginal efficiency but the key to enabling borderless growth, boosting product innovation and customer experience, improving productivity and efficiency, building agility and managing risk. These five customer drivers offer a set of opportunities for us to provide differentiated platforms, solutions and services for our customers. We aim to be the partner of choice in the digital transformation journey of our customers and are well positioned to enable workforce collaboration, enterprise mobility and provide omni-channel access to end-customers.

In order to capitalise on emerging changes and opportunities, we have further segmented our enterprise route to market by targeting specific verticals and sectors beyond media.

Service providers

The service provider segment is driven by growth in data consumption world-wide, primarily driven by consumers. To support the segment, we offer an integrated set of services covering:

- Wholesale voice
- Domestic and international data connectivity - Internet backbone connectivity (IP transit)
- Value-added roaming services for mobile operators
- Carrier-specific business process outsourcing services

We provide platforms which are reliable for service providers and keep their business relevant and in-tune with market dynamics and end-user demands.

Hyperscale Cloud Providers (OTT players)

OTTs are a fast-growing segment which are dominating the bulk of the world IP traffic. We offer the OTTs a set of connectivity services across the globe.

- Point-to-point network connectivity in India and globally
- Sub-sea cable capacity for inter-continental needs
- Inter-city and intra-city data centre to data centre connectivity

We enable OTTs to address the spurt in global growth in data consumption in a reliable and scalable manner.

BUSINESS EXCELLENCE

At Tata Communications, we strive to achieve business excellence by constantly developing and strengthening our key management systems and processes to improve our performance and deliver greater value for all our stakeholders. We leverage the 'Tata Business Excellence Model' ('TBEM') which is drawn up on the lines of Malcolm Baldridge Business Excellence Framework.

The TBEM framework helps us to analyse our business processes and to identify areas of improvement across various areas ranging from Leadership, Strategy, Customers, Analysis and Knowledge Management, Workforce, Operations and Business Results. The TBEM framework requires us to go through a rigorous assessment of our key processes and associated results every two years, which have enabled us to evaluate current maturity of processes and results, thereby guiding us in our journey to achieve greater levels of excellence.

In the last cycle in 2021, Tata Communications underwent two simultaneous assessments – a Business Excellence Assessment using the TBEM framework and a Data Maturity Assessment using DATOM (Data and Analytics Target Operations Model). Tata Communications achieved a TBEM score of 605 points (an improvement of 30 points compared to 575 in the previous exercise). We achieved a DATOM assessment score of 3.17 with a maturity level of 'synergised' which are improvements over the score of 2.86 and maturity level of 'scaled' of the previous exercise conducted in 2019. This improvement was driven largely by enhancement in data quality and related processes for all our products, platforms and services. Business Excellence Assessment using the TBEM framework and Data Maturity Assessment using DATOM for 2023 are currently underway.

FINANCIAL PERFORMANCE

We continued to invest in enhancing our products and services to better enable our customers in their digital transformation journeys, while simultaneously improving the health of our balance sheet. Financial Fitness for us, has been focussed on driving profitable revenue growth which enables us to improve our balance sheet health through strong cash flows and improved working capital efficiency.

Our focus on sustainable profitable growth is conveyed through a well-established finance strategy built on the key pillars of Fit to Compete and Fit to Grow. Our focus on these two pillars will be the key drivers in improving and maximising market capitalisation as well as shareholder value. With our continued focus on profitable growth and improving the balance sheet health, as an organisation, we will continue to create new avenues of growth, organically and inorganically.

Financial Performance (Standalone)

Particulars	FY 2022-23	FY 2021-22	YoY growth (%)	Reasons for deviation more than 25%
Net Revenue (₹ in crores)	7,236.28	6,587.35	9.85	-
EBITDA (₹ in crores)	1,846.10	1,955.78	(5.61)	-
PAT (₹ in crores)	666.15	1,167.32	(42.93)	Decreased due to impact of diminution in fair value of investment in a wholly-owned subsidiary
Debt Equity Ratio (in times)	0.05	0.05	-	-
Interest Coverage Ratio (in times)	20.50	22.08	(7.16)	-
Current Ratio (in times)	0.67	1.03	(34.95)	Decreased mainly due to reclassification of loan given to subsidiary from current to non-current and reclassification of secured debentures from non-current to current as per repayment terms
Debtors Turnover (in times)	6.39	6.01	6.32	-
Operating Profit Margin (in %)	11.75	15.78	(25.54)	Primarily attributable to increase in employee cost and operating and other expenses
Net Profit Margin (in %)	9.21	17.72	(48.02)	Decreased due to impact of diminution in fair value of investment in a wholly-owned subsidiary
Return on Net worth (in %)	6.76	11.91	(43.24)	Decreased due to impact of diminution in fair value of investment in a wholly-owned subsidiary

HUMAN RESOURCES

The Human Capital section of our Integrated Annual Report details the capabilities, competencies and experience of our employees and our initiatives towards creating a better holistic employee experience and work culture.

RISK MANAGEMENT

We operate across the globe and in numerous industry segments which create a complex and competitive environment for us and expose us to multiple threats and risks from internal as well as external sources.

We take adequate measures and steps to mitigate risks covering all our business operations and have adopted a holistic risk management framework to oversee rigorous systems which help us to identify any material impacts on our operations. By taking numerous possible scenarios into account, we make informed decisions to sustain our market leadership globally.

Internal control systems and their adequacy

Tata Communications has robust internal control mechanisms, and our financial authority is clearly defined at the appropriate management levels through Delegation of Powers policies and procedures. Technical and financial operations are controlled by state-of-the-art technology and systems.

Enterprise Risk Management risk assessments are a key input for our annual internal audit programme and cover various businesses and functions at Tata Communications. In addition to internal audit, Tata Communications also continues to conduct a detailed review and testing of the key internal controls related to financial reporting, which provides adequate assurance to the Management, Risk Management Committee, Audit Committee and the Board, regarding the effectiveness of the internal control procedures defined and implemented by the Management.

Enterprise Risk Management ('ERM')

To manage risks, the Board of Directors has implemented a comprehensive ERM framework, which comprises necessary organisational rules and procedures for identifying risks at an early stage and taking proactive steps to manage them. The Risk Management Committee, which is a committee of the Board, keeps an oversight on risks critical to the organisation's performance and strategic initiatives. After identifying and assessing the risks under various categories such as strategic, financial, operational, sectoral (market / competition), legal and regulatory, technology, ESG, etc., Tata Communications defines risk treatments and control measures aimed at reducing the likelihood of occurrence and its potential impact. Some events also present an opportunity, beyond their threats which are closely monitored to utilise them in the best interests of the organisation. The responsibility for effective and efficient implementation and maintenance of the risk management system rests with the Global Management Committee ('GMC'), which comprises of the CEO, CFO and key business and operations heads. Tata Communications' risk management procedures are subject to a continual improvement process.

We have a suite of well-established risk management policies and procedures to identify and assess risks across all our business units and operations. These take into consideration definite risk management principles based on experience, known best practices and principles of good corporate governance, with a focus to mitigate potential adverse impact on the business from changes in the external and internal environment. Risk management and mitigation of key risks is a vital on-going exercise to achieve our corporate objectives and deliver long-term value to our stakeholders.

An overview of the key business risks and our mitigation strategies is provided in the Integrated Annual Report.

Ongoing legal cases with risk implications

1. **Disputed Tax Matters**

   In past fiscal years, Tata Communications made certain tax holiday and expense claims based on its understanding of the tax laws, as reinforced by legal precedent and advice received from external tax counsel. In some cases, the Indian tax authorities have not accepted these claims and in a few instances, have sought to levy penalties against the Company. The disallowances and penalties have been challenged by the Company under the applicable legal appeals processes, which are at various stages of adjudication. Though no such appeal has been finally decided against us, in the unlikely event of all of the disputes culminating in judgments against us, this could have adverse financial implications on our business.

2. **License Fee Matters**

   i. In 2005, the Company had approached the Telecom Disputes Settlement and Appellate Tribunal ('TDSAT') to challenge the definition of 'gross revenue' and 'adjusted gross revenue' ('AGR') as interpreted by the Department of Telecommunications ('DoT') for levying license fees. Some other telecom operators, mostly UAS Licensees, had also separately approached TDSAT for the same relief. TDSAT issued its final order on August 30, 2007 (TDSAT's Order), which was broadly in line with the Company's arguments. However, not being satisfied on two issues viz., (i) date of applicability of the TDSAT Order and (ii) disallowance by the TDSAT on deduction

of certain charges passed on to other service providers, the Company had challenged TDSAT's Order in the Supreme Court of India. Concurrently, DoT also filed an appeal against TDSAT's Order. Based on submissions made by the Company, the appeals filed by the Company and the DoT were de-tagged from the other wider batch appeals. While the Company's Appeal and DoT's cross Appeal remained pending, the Hon'ble Supreme Court passed its judgment on October 11, 2011, setting aside the TDSAT Order, and permitted the telecom operators to approach the TDSAT for challenging the demands. This round before TDSAT culminated in the order dated April 23, 2015. Once again, Appeals and Cross-Appeals were filed by the parties. The Company was not a party to these proceedings as its earlier pending cases in Supreme Court were still not decided. During these proceedings which were in challenge to TDSAT order dated April 23, 2015, the Company's pending Appeal and DoT's Cross-Appeal against TDSAT's order of August 31, 2007 were again de-tagged from the other Appeals. While the Company's Appeal and DoT's Cross-Appeal were directed to be heard separately, the Supreme Court heard the Appeals filed by other Telecom Operators against the TDSAT order dated April 23, 2015, and pronounced its judgement on October 24, 2019. The Company believes that this judgment of the Supreme Court is not applicable to the Appeals and licenses of the Company. In August / September 2019, the Company received demand letters from DoT regarding license fees for financial years 2006-07 up to 2017-18, for which the Company has submitted its responses and awaits revert from DoT. Subsequently, in October 2022 Tata Communications received revised Show Cause cum demand notices from DoT towards License Fee on its Adjusted Gross Revenue ('AGR') for the financial years 2006-07 till 2017-18 in respect of its ILD, NLD and ISP-IT licenses. Part of the amount included in the revised Show Cause cum demand notices are assailed in the litigation pending before Madras High Court which concerns special audit for FY 2006-07 and FY 2007-08. Tata Communications has responded in detail to these Show Cause cum demand notices wherein the Company *inter alia* highlighted the apparent errors in the computation of license fee dues and provided detailed submissions against the items of revenue basis which demands were raised. Also, detailed justification has been provided as to why the Supreme Court AGR judgement dated October 24, 2019 is not applicable and for exemption for levy of license fees on non-telecom / unlicensed revenue.

ii. The Company had filed a Petition before TDSAT on the penalty and penalty interest provisions under its International and National Long-Distance License Agreements. Certain other telecom operators had also filed petitions before TDSAT on same issue. By a common order dated February 11, 2010, TDSAT allowed the said petitions vide its order of February 11, 2010, thereby entitling the Company to a refund of ₹115.73 crores being the penalty and interest thereon realised by DoT in January 2008. Under TDSAT's Order of May 2012, DoT refunded to the Company, an amount of ₹226.23 crores (₹115.73 crores plus interest), and simultaneously challenged the Order in the Supreme Court of India, for which Appeal is still pending.

iii. In 2013, the Company filed a Writ Petition before Madras High Court challenging the demand notice dated February 19, 2013, for additional license fee issued by DoT, which was issued pursuant to a special audit carried out for financial years 2006-07 and 2007-08, seeking the quashing of the said demand notice. The Madras High Court by its order dated March 1, 2013, stayed the demand. The said Writ Petition is pending for final hearing.

iv. In 2013, the DoT introduced a new Unified License ('UL') regime for Internet Service Providers ('ISPs') that replaced the old service-specific license regime and imposed a new license fee of 8% of AGR on internet services revenue under the new UL-ISP Licenses. This created a non-level playing field among ISPs. In 2014, the Company applied to the DoT for a new UL-ISP license with the condition that the Company would not pay the new license fee on internet services revenue to maintain a level playing field with providers not yet subject to the new license fee regime and requested an extension for the old service-specific license. DoT, while extending the old license to enable the Company to complete the formalities for obtaining UL, imposed a license fee on internet services, which was challenged by the Company along with Internet Service Providers Association of India before TDSAT. At its hearing on March 25, 2014, TDSAT granted a stay on payment of license fee on pure internet services and provisionally extended the Company's license during the pendency of the litigation. TDSAT granted similar stays on petitions filed by other service providers on imposition of license fee on pure internet revenue by DoT. Vide judgement and order dated October 18, 2019, TDSAT allowed the Petition, and the decision of DoT to include the revenue from pure internet services as part of AGR for levy of license fee on ISPs under Unified License regime was set aside, with direction to DoT to

raise revised demands of license fee based on the same concept of AGR as was being done in respect of ISPs holding a license under the old regime. TDSAT expressed its expectation for the DoT to expedite the process of taking a decision keeping in view the relevant recommendations of TRAI as well as the constitutional requirement of providing and safeguarding a 'level playing field' for all ISPs. DoT was further directed to take action without any delay to end the uncertainty. DoT filed a Civil Appeal before the Hon'ble Supreme Court challenging TDSAT's order dated October 18, 2019. The said Civil Appeal was listed on January 5, 2021 and the Supreme Court, after hearing the submissions, condoned the delay in filing of the Appeal and issued notice that in the event appeal succeeded, the respondents would be subject to such final directions as may be passed by the Supreme Court in its judgment. The Supreme Court further directed all the respondents to file their counter affidavit. While the Civil Appeal is pending, DoT on March 31, 2021, issued amendments to licences granted under the 2002 and 2007 guidelines, subjecting such licensees to payment of 8% licence fee on the revenue from pure internet services with immediate effect.

On August 6, 2021, the Company has been granted a UL with internet service authorisation with January 25, 2014 as the effective date.

In October 2021, DoT again amended the definition of Gross Revenue provided in various licenses, accepting the representations of various operators that revenue from non-licensed activities should not be included while calculating license fees.

The matter is pending final adjudication.

3. Access Costs on Cable Landing Stations ('CLS')

The Telecom Regulatory Authority of India ('TRAI') issued the International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 ('2007 Regulations') on June 7, 2007, authorising the owners of Cable Landing Stations ('CLS') to fix their own cost-based charges for access to CLS, after obtaining approvals from TRAI to ensure that the charges were cost based. In 2012, TRAI amended the 2007 Regulations vide Amendment Regulation dated October 19, 2012, empowering itself to specify / prescribe these charges, and thereafter issued another Regulation dated December 21, 2012 prescribing a uniform access charge in the form of a ceiling which led to an almost 90% reduction in the charges prevailing prior to issue of these Regulations and which were approved by TRAI in the year 2007 onwards. All these Regulations were challenged by the Company by way of a Writ Petition filed in the Hon'ble High Court of Madras. In 2016, a Single Judge bench of the Madras High Court, dismissed the Writ Petition filed by the Company and the Company filed an appeal before the Division Bench of the Madras High Court. Since the Division Bench refused to grant interim stay to the Company while deciding to hear the Writ Appeal finally and keeping the Misc. Petition ('CMP') for interim stay pending, the Company filed a Special Leave Petition ('SLP') before the Hon'ble Supreme Court of India. The Supreme Court requested the Division Bench of the Madras High Court to dispose of the Appeal at the earliest. The Division Bench of Madras High Court vide its judgment dated July 2, 2018, partly allowed the Writ Appeal and quashed the schedules to the Regulations which prescribed charges, kept the CLS Regulations in abeyance and further directed TRAI to rework the schedules within a period of six months. In October 2018, TRAI and other parties filed an SLP in Supreme Court against the judgement of July 2018 in which the Supreme Court ordered TRAI to re-work the figures within a period of six weeks from October 8, 2018. TRAI reworked and re-enacted the schedules and issued Amendment Regulations with effect from November 28, 2018.

On November 11, 2018, the Company filed another SLP before the Supreme Court challenging the jurisdiction of TRAI, which was admitted by the Supreme Court.

In December 2018, the Association of Competitive Telecom Operators ('ACTO') filed an application in Supreme Court seeking direction and interpretation that the November 28, 2018 Regulations may be declared to be effective retrospectively. This application was disposed of by the Supreme Court on January 28, 2019, stating that it is not for the Supreme Court to give any interpretation and the matter may be taken up in Appellate Court and consequently remanded the matter to TDSAT.

ACTO and Reliance Jio filed their separate Petitions before TDSAT in pursuance of the Supreme Court's order dated January 28, 2019. BSNL also filed a Petition before TDSAT. Vide its judgement dated April 16, 2020, TDSAT dismissed the petitions filed by ACTO, Reliance Jio and BSNL in favour of the Company and held that the Amendment Regulations would be applicable prospectively. Aggrieved by the said order of TDSAT, ACTO and Reliance Jio have filed their Civil Appeals before the Supreme Court challenging the TDSAT order dated April 16, 2020 and sought stay of the TDSAT order, which was not granted.

Subsequently, as there was no stay order in the matter, the Company, in consultation with Senior Advocate and Counsel, issued a disconnection notice dated July 19, 2022 against Reliance Jio wherein Reliance Jio was asked to clear its AFA (Access Facilitation Charges) outstanding at the earliest, failing which its services would be disconnected. Reliance Jio filed an application for staying the said disconnection notice before Hon'ble Supreme Court. The said application was listed before the Court of Hon'ble Chief Justice and during the course of hearing, the Company highlighted the fact that Reliance Jio has not been granted any stay in the matter and is enjoying the services without clearing its pending outstanding. The Hon'ble Court directed Reliance Jio to make a payment of ₹70 crores and subject to the payment of the said amount, directed the Company, not to disconnect the services.

The matter was adjourned and the same is pending final hearing.

4. Premature termination of exclusivity and compensation

As previously reported, the Government of India ('GoI') terminated the Company's exclusivity in the International Long Distance ('ILD') business two years ahead of schedule and allowed other players to enter the ILD business on April 1, 2002. The GoI offered the Company a compensation package for this early termination under the terms of a letter dated September 7, 2000. The GoI also gave the Company an assurance that it would consider additional compensation, if found necessary, following a detailed review of its decision to open up the ILD market.

Contrary to its assurances, on January 18, 2002, the GoI issued a further letter to the Company, unilaterally declaring that the compensation package provided in its original letter was to be treated as full and final settlement of every sort of claim against the early termination of the Company's exclusivity rights in the ILD business. The Company filed a suit in the Bombay High Court in 2005. On July 7, 2010, the Bombay High Court ruled that it did not have the jurisdiction to hear this suit, in view of the provisions of the Telecom Regulatory Authority of India Act, 1997. Aggrieved by this Order, the Company instituted an appeal before a division bench of the Bombay High Court on various grounds. This appeal is yet to come up for a hearing.

CAUTIONARY STATEMENT

Certain statements in the Integrated Annual Report, Board's Report and MDA describing Tata Communications' objectives, projections, estimates and expectations may be 'forward-looking statements' within the meaning of applicable securities laws and regulations. Actual results could differ substantially or materially from those expressed or implied. Important factors that could make a difference to our operations include economic conditions affecting demand / supply and price conditions in the domestic and overseas markets in which we operate, changes in government regulations, policies, tax laws and other incidental factors. Further, Tata Communications retains the flexibility to respond to fast-changing market conditions and business imperatives. Therefore, Tata Communications may need to change any of the plans and projections that may have been outlined in this report, depending on market conditions.