



# Manufactured capital

We have built our manufactured capital to a sizable portfolio across the African continent. Our manufactured capital extends from Cape to Cairo, reaching rural villages, capital cities, entrepreneurs, multinational organisations and millions of individual customers.

## What manufactured capital means to Vodacom

We define our manufactured capital as Vodacom's network footprint across Africa, including base stations and masts, fibre and microwave distribution channels. This includes our hardware, undersea capacity, site infrastructure and professional services to deploy new physical sites, upgrades to both hardware and software to increase the overall network capacity, new technologies to develop system compatibility, and our investments relating to maintenance and reliability. We actively pursue partnerships and joint ventures to expand our manufactured capital. Our retail presence, point-of-sale terminals and M-Pesa agents further extend our manufactured capital footprint to merchants and individual customers.



## How manufactured capital supports our System of Advantage

Our manufactured capital forms the backbone of our operations, enabling us to provide connectivity across our footprint, and powering our **System of Advantage**. We are committed to building the best infrastructure for mobile and fixed in support of our strategic ambition of becoming Africa's leading communications company. Building our manufactured capital provides further opportunities to scale our intellectual capital as we create diverse and innovative products and solutions, that rely on manufactured capital. We have invested R70.5 billion in total over the last five years to extend our network, maintain market share leadership and achieve leadership in network NPS in all markets.

# Our manufactured capital at a glance

Our key focus areas	Key FY2023 achievements	Strategic pillar affected
<b>Expanding our footprint selectively to strengthen our presence in Africa</b>	<ul style="list-style-type: none"> <li>Acquired a majority share in Vodafone Egypt</li> <li>Launched commercial operations in Ethiopia, through Safaricom in October</li> </ul>	<b>1 2</b>
<b>Expanding and enhancing our network to retain leadership</b>	<ul style="list-style-type: none"> <li>Vodacom Group sites added:                             <ul style="list-style-type: none"> <li>5G sites: <b>1 150</b> (FY2022: 434)</li> <li>4G sites: <b>2 352</b> (FY2022: 1 410)</li> <li>3G sites: <b>1 136</b> (FY2022: 519)</li> <li>2G sites: <b>1 037</b> (FY2022: 441)</li> </ul> </li> <li><b>Vodacom Fibre</b> passed <b>165 000</b> homes and enterprises in South Africa (FY2022: 155 903)</li> </ul>	<b>1 2 8</b>
<b>Investing in the resilience of our network to retain leadership</b>	<ul style="list-style-type: none"> <li><b>R16.5 billion</b> capital investment in network capacity and resilience (FY2022: R14.6 billion)</li> <li>To achieve network NPS <b>leadership</b> across our markets</li> </ul>	<b>2 5 8</b>
<b>Accelerating our digital services infrastructure to become the enterprise digital partner of choice</b>	<ul style="list-style-type: none"> <li>Vodacom Group has <b>50</b> data centres</li> <li>First TelCo to attain the MEF 3.0 SD-WAN certification</li> </ul>	<b>2 4</b>
<b>Enhancing our retail and agent presence to support our digital ecosystem</b>	<ul style="list-style-type: none"> <li>Increased our retail store footprint to <b>9 109</b> retail stores in South Africa</li> <li>Increased our M-Pesa agents to <b>552 612</b> (FY2022: 510 000)</li> </ul>	<b>4 5</b>

## The value we create, preserve and erode

### Expanding our footprint selectively to strengthen our presence in Africa

By implementing our strategy – the **System of Advantage** – we have engaged in landmark transactions to expand our footprint. These transactions included acquisitions, joint ventures, partnership agreements and infrastructure separation that have been tailored to the context of the operating countries in which they took place. This nuanced approach is essential to ensure success on a continent as diverse as Africa.

#### Growing our footprint from Cape to Cairo

In December 2022, we received final regulatory approvals and announced the completion of the Group’s binding agreement to acquire a controlling 55% shareholding in **Vodafone Egypt** in a transformational R43.6 billion deal. The finalisation of the Egypt transaction cements our position as a leading pan-African communications company in addition to diversifying our geographic presence and accelerating our growth profile. Our population reach has increased to over half a billion people across Africa.

Vodafone Egypt is the largest mobile network operator in Egypt in terms of revenue mobile market shares of 44%. Vodafone Egypt provides a range of integrated telecommunication services, including mobile and

fixed voice, SMS, data and mobile money to 45 million consumers and enterprise customers. The transaction has added attractive tower assets to our portfolio which now reaches from Cape to Cairo.

Vodacom Group contributes significant value to Egypt with our multiproduct strategy and financial service platforms, global partnerships and best practices. In addition to financial services, Vodacom Group sees attractive synergy potential from combining Vodafone Egypt’s software factory with Vodacom Group’s existing Big Data capabilities, closer cooperation in scaling pan-African enterprise and IoT solutions, enabling the proliferation of digital services through our platform approach, and talent sharing.

For more information on how the Egypt transaction contributes to our intellectual capital, see **Page 75**.

## Manufactured capital continued

### The value we create, preserve and erode continued

#### Rolling out a world-class network and services in Ethiopia

✓ Having officially secured a telecommunications licence granted by Ethiopia's government in July 2021, Safaricom Ethiopia<sup>1</sup>, a Safaricom-led consortium, switched on its mobile telecommunications network and services in Addis Ababa in October 2022 and held a ceremony to mark its national launch. Our subsequent network rollout reached 2.1 million customers in 22 cities across the country. Our ambition is to rollout a network of 10 000 to 12 000 sites in the next ten years.

[www https://www.safaricom.co.ke/images/calendars/FY23-Investor-Presentation-11-May-2023.pdf](https://www.safaricom.co.ke/images/calendars/FY23-Investor-Presentation-11-May-2023.pdf)

#### Bridging South Africa's digital divide with a strategic fibre deal

✓ In November 2021, Vodacom announced the proposed acquisition of an initial 30% stake in **MAZIV** (previously InfraCo), a joint venture that will house the fibre assets of Vodacom South Africa and CIVH. The joint venture is a major step forward in scaling our fibre offering in South Africa as we will gain exposure to highly attractive and fast-growing operating companies within MAZIV, including Vumatel and Dark Fibre Africa. We have the option to increase our stake in MAZIV to 40% and with our capital injection and strategic support we will further accelerate the growth trajectory of these fibre assets.

In October 2022, the joint venture received ICASA approval and is awaiting confirmation from the competition authorities in South Africa, following which Vodacom will transfer its fibre assets to MAZIV. Through this strategic deal, Vodacom has the opportunity to emerge as the leader in the wholesale fibre market.

In FY2023, Vodacom fibre passed 165 000 homes and enterprises in South Africa (FY2022: 155 903).

The MAZIV transaction is expected to narrow the digital divide in South Africa by enabling affordable access to connectivity in some of the most vulnerable parts of the country through an ambitious fibre rollout programme. The contribution of Vodacom South Africa's wholesale fibre to the home, fibre to the business and business-to-business (B2B) transmission access fibre network infrastructure further scales and enhances our fibre footprint.

#### Separating our South African tower portfolio

✓ We have separated our South African tower portfolio into a stand-alone **TowerCo** business. The separation forms part of our strategy, which seeks to optimise assets and is driven by new technologies, radio access network technology constraints and the increased use of sharing models, among others. We have established a separate legal entity that will be owned by Vodacom Group. The TowerCo includes our towers, rooftops and other network sites. The TowerCo will allow Vodacom to benefit from cost efficiencies, increase its ability to monetise assets, alignment with the evolution of technology, maximise tenancies, power resilience sharing opportunities and unlock alternative financing opportunities.



#### Case study

### Improving customers' fibre experience in South Africa

Although Vodacom strives to deliver a world-class customer experience, we still receive customer complaints. Despite good customer adoption of fibre, fibre-related complaints remain a concern. In FY2022, we observed a significant increase in fibre-related complaints in South Africa as our fixed services, such as fibre, expanded. In FY2023, we seized the opportunity to learn from these complaints and improve customer experience, recognising that the customer journey for a fibre connection is much more complex than a mobile connection.

Our newly established customer experience board in South Africa identified several pain points within the fibre customer journey. We reviewed each of these pain points in order to eradicate them and improve our customer's overall fibre

experience. Successes this year include the simplification of the application process, where we ramped up and simplified the on-boarding digital journey, resulting in a 9% increase in online connections during the year. We improved our time to connect a customer from order to connection resulting in 68% of all orders now connected within seven days. We increased our service hours to assist customers after hours. Through all of these initiatives and continued improvement, we saw our call centre volumes reduce by more than 2 000 calls in the second half of the year.

We recognise that we have progress to make in the customer journey, but we are proud of the decrease in escalations compared to the prior year. Looking forward, we intend to continue improving the various processes for our customers' fibre journey and overall find end-to-end solutions that improve the overall customer experience related to fibre.

1. The Group, excluding its indirect interest via its shareholding in Safaricom, has an effective direct interest of 6.2% in the consortium. In addition, the Group has indirect exposure through Safaricom's 55.7% effective interest in the consortium.

## Expanding and enhancing our network to retain leadership

Vodacom is committed to delivering the most advanced communication technology across all our markets to enable people to communicate, transact and interact with each other, information and things. In FY2023, we invested R16.5 billion in our network (FY2022: R14.6 billion). Expanding and developing our network, whether it be through mobile, fibre or from space enables us to accelerate economic growth through the provision of accessible and affordable products and services and the promotion of digital inclusion for all.

**PG** Refer to **Page 32** to read more about our products and services and **Page 22** to read more about how we support inclusion for all.

### Increasing our network coverage in South Africa

✔ During FY2023, we continued to roll out 3G, 4G and 5G network sites to increase our population coverage. Acquiring additional spectrum at auction resolved many of the challenges we faced in building our 5G capacity in South Africa. Our 5G base grew by a significant 143% year-on-year, to reach 44.2 million customers. The number of 5G capable devices on our network increased to 1 804. We plan to add 750 additional 5G sites in FY2024, to reach 32% 5G population coverage.

	Population coverage		Network sites	
	2023	2022	2023	2022
3G	99.4%	99.9%	14 686	14 631
4G	98.5%	97.9%	14 534	13 991
5G	17.9%	0.0%	1 543	624

**PG** For more details on our coverage and smartphone penetration related to Where we operate, see **Page 04**.

### Advancing rural coverage

✔ We are focused on scaling within our existing footprint and see particularly exciting partnership opportunities in rural connectivity where we have ambitious aspirations to accelerate deep rural access. We have made good inroads on innovative new financing models for rural base stations and aim to unlock the benefits through these partnerships in the near future.

In South Africa the number of rural network sites reached 2 892 (FY2022: 2 783).

✔ We continue to focus on providing rural coverage in our International markets as this plays an important role in connecting customers across the African continent. We have reached 4 104 rural sites across our International markets over a four-year period.

In FY2023, the DRC accelerated 4G capacity expansion to cater for extra traffic in Kinshasa on 268 sites and in Kivu on 65 sites; new rollout of 2G-3G-4G live on 52 sites; and new 2G-3G rural coverage in 52 villages.

5G was launched in Tanzania in FY2022, and 231 sites have been deployed in FY2023 which contribute to the growth of SMEs across the country.

**PG** For more information on our super-apps refer to intellectual capital on **Page 76**.

**ESG** ESG report



DRC Rural Coverage



SA Rural coverage

### Increasing our network coverage in our international markets

✔ In the International business we continue to focus on accelerating 4G coverage, in line with our Tech2025 strategic goal. We are, however, proud of the 5G launch in Tanzania and Kenya which drives business connectivity.

Our efforts to increase coverage and offer competitive products and services has grown our data customers by 6.2% to reach 22.5 million (FY2022: 21.2 million).

	Network sites	
	2023	2022
2G	8 819	8 487
3G	7 169	6 832
4G – Tanzania	2 353	2 122
4G – Mozambique	1 970	1 749
4G – Lesotho	255	226
4G – DRC	1 165	1 018
5G – Tanzania	231	63

**PG** For more details on our population coverage in our international markets, see **Where we operate on Page 04**.

✔ Vodacom's partner, AST SpaceMobile is building the first space-based mobile broadband network accessible directly by standard mobile phones. AST SpaceMobile's BlueWalker 3 satellite underwent basic functionality testing in 2022, prior to a formal trial in the second quarter of 2023, in partnership with Vodacom and Safaricom in Kenya.

After successful completion of the trial, AST SpaceMobile will scale up their satellite deployments in partnership with Vodacom to provide ubiquitous communications to 4G devices across African and beyond. This capability will enable Vodacom to provide coverage in rural areas where it is challenging to provide connectivity through traditional terrestrial communications solutions.

## Manufactured capital continued

The value we create, preserve and erode continued



## Investing in the resilience of our network to retain leadership

Ensuring network continuity is critical to our market leadership position. Across our OpCos we face various challenges to network resilience including the availability of grid-based power, theft and vandalism and extreme weather events. We have accelerated technology-related operating expenditure and capital investment to manage these challenges and keep our customers connected.

### Maintaining technology resilience

⊖ Our technology resilience programme ensures all technical recovery plans are periodically reviewed and maintained as needed. All critical systems are tested to provide auditable proof of recovery capabilities, while also ensuring the right plans – including georesilient architectures and capabilities – are in place to meet the prescribed recovery time and recovery point objectives.

⊖ In South Africa, we aim to provide reliable connectivity in the face of increased frequency and duration of loadshedding. We invested R4.0 billion in our **Energiser project** over the past three years, which provides backup power to drive improved network availability during loadshedding. We consistently achieved network availability between 94% to 99% ahead of competition during periods of heightened loadshedding when grid-based power availability fell to 60%.

### Digital inclusion driven by innovative handset financing

To drive digital inclusion through device penetration, Vodacom facilitates access to affordable smart devices. We bring entry smart devices to our customers through partnerships with device manufacturers and distributors, device subsidies for network locked devices, device financing, device affordability programmes with OTT partners and data bundle attachment with 5G smartphone offers.

✔ In South Africa, smartphone penetration is at 64.5%, and across the International business, smartphone penetration increased to 32.9%.

✔ Thanks to partnerships with open-market players, the DRC has connected more than 500 000 smartphones over the last two years, driving the smartphone penetration to 19%. In Tanzania, we have connected an additional 1 million smartphones, driving penetration from 30% to 35%.

✔ We continued the subsidisation model for new 4G devices in Lesotho. Our OpCo worked closely with the trade partners to sell 4G devices. This, combined with more 4G coverage and significant upgrades in high-capacity areas, resulted in 4G device penetration increasing 11%, reaching total smartphone penetration of 66.3%.

## Accelerating our digital services infrastructure to become the enterprise digital partner of choice

Providing enterprises with digital services they need requires increased manufactured capital capacity. Increasing our digital services infrastructure capacity through our data centres and SD-WAN connections supports us in becoming digital partner of choice for enterprises.

Increases in our built capacity and service offering has increased our cloud-based revenue from R388.8 million in FY2022 to R462.4 million in FY2023. Enterprise customers opting for a hybrid cloud technology strategy represent 71% of our customer base. Customers using the Vodacom Enterprise solution represent 29% of our customer base.

### Increasing capacity in cloud and hosting services

Enterprise customers increasingly use hybrid cloud technology strategies, including multicloud deployment models to take advantage of the scalability and flexibility of the cloud-based technologies offer. We accelerate business connectivity through cloud and hosting services in South Africa through our seven data centres, covering an area of 7 000 m<sup>2</sup>. In FY2023, we grew our data centre footprint by 19%. Our other OpCos provide cloud and hosting services through 23 data centres.

For details on the products and services that leverage cloud capabilities, see intellectual capital from **Page 81**.

### Increasing our SD-WAN connection capacity

SD-WAN offers intelligent connectivity, along with high-speed dedicated or broadband connection, with greater efficiencies and control, through a management portal that provides complete network visibility. We were the first African TelCo to attain the MEF 3.0 SD-WAN certification. SD-WAN connections for the year increased to 14 971 from 7 854 in FY2022.

## Enhancing our retail and agent presence to support our digital ecosystem

Our retail presence and the presence of our agents across our footprint are the closest point of contact our manufactured capital has to our customers. The experience Vodacom branded stores and M-Pesa merchants create, play an important role in supporting world-class loyalty and customer experience.

frictionless transactions. Customer experience is the central focus of the store's modular, flexible, digitally inclusive, and environmentally friendly design. The Store 2.0 model aims to meet the needs of individual consumers, enterprises and SMEs, providing access to core and accelerator products and services. Learnings from this rollout will inform our future retail transformation plan in the short to medium-term.

### Transforming our retail presence

In FY2023, we opened three new retail stores in South Africa, two in Gauteng and one in KwaZulu-Natal, that represent our interpretation of the store of the future. **Store 2.0** is a co-created future-ready store, that bridges the gap between physical and digital retail. Our brick-and-mortar stores are complimented by technology, creating empowered customer experiences and engagements through seamless, paperless and

### Supporting M-Pesa agents to scale financial and digital services

M-Pesa and Vodafone Cash provides financial and digital services to 55.8 million customers and 803 000 merchants in Kenya, Tanzania, the DRC, Mozambique, Lesotho and Egypt through 552 612 agents (FY2022: 510 000).