



## **MAKEDONSKI TELEKOM AD – SKOPJE**

Address: Kej 13 Noemvri 6, 1000 Skopje, R. North Macedonia

### ANNUAL REPORT on the Operations of Makedonski Telekom AD - Skopje in 2022

This Annual Report on Operation refers to Makedonski Telekom AD - Skopje (hereinafter referred to as: “MKT”).

The Macedonian economy is struggling due to the high inflation which remained the main challenge throughout the whole year. Although fiscal and monetary actions are in place in order to offset the challenges posed by the geo-economic crisis, the growing dependency on energy imports and the structural economic weaknesses, the high inflation rate is eroding the purchasing power and business confidence.

2022 was a challenging year for MKT as well, in terms of the higher costs, especially for electricity. The higher revenue resulted in higher Net margin, which however was not sufficient to cover the negative impact of the electricity price increase. Higher revenues were mostly generated in the mobile segment where the positive trend is coming from the post-paid services, followed by a higher subscriber base and a higher revenue per subscriber. The fixed revenues are higher, driven by the higher revenues from fixed services (broadband and TV), partially offset by the lower interconnection revenues. To sustain the positive performance recorded in 2022, MKT intends to further leverage the integrated offers by creating additional value (“more 4 more” approach) and ensure the service revenue growth, strengthen the position in ICT market as a result of an accelerated demand for digitization, continue with the penetration of the next generation networks, and keep the market position as a premium provider.

MKT registered a customer base growth in all three focus segments – post-paid, BB internet and TV customers. At the end of 2022, MKT had 225 thousand stable fixed line voice accesses. The number of total broadband (BB) subscribers increased to 203 thousand at the end of 2022, marking a 3% year-over-year increase. The number of IPTV customers at the end of 2022 reached 148 thousand customers, marking a 1.2% increase from the end of 2021. The number of Fibre to the Home (FTTH) customers reached 99 thousand at the end of 2022, marking a 15.1% increase from the end of 2021.

MKT had 1,268 thousand mobile subscribers at the end of 2022, or a 4.3% increase compared to 2021. The mobile market penetration in the Republic of North Macedonia is 126%. As a result of the market saturation, MKT continuously focuses on retaining the customers in order to protect the market share.

MKT has built a substantial advantage on the market in terms of FMC penetration. MAGENTA 1 continued to be MKT's main product, offered both in the consumer and in the business segment. The positive value generation from converged households, simplification of the product propositions and the digital customer experience were the main guiding directions in 2022.

Focus is constantly put on the migration to the next generation integrated gigabit networks (FTTH and 5G) and the dedication to deliver best usage experience. In that direction, 5G was commercially launched in February 2022, and by the end of October 2022, 100% of the radio network is swapped which means that 27 cities are covered with 5G.

MKT is working on providing a simplified and digital customer journey, a superior digital service and taking an active role in the society aimed at driving digitization and allowing every citizen to enjoy its benefits.

MKT has demonstrated its continuous and responsible work to the society within the ESG agenda (Environment, Society and Government), for prevention of climate changes and efficient utilization of resources. The company managed to reduce the CO2 emissions and the energy consumption.

Despite the challenges of a dynamic market and the increasing competition, MKT managed to maintain the position of number 1 telco brand in Macedonia, as confirmed by regular customer perception researches in 2022.

### Board of directors' remuneration

Presented below are the available remuneration data about the Board of directors (BoD) members of MKT, related to the applicable period of 2022\*.

a) Data about the remunerations in MKT and in other companies if the respective member is also a member of the management bodies of other companies (salary, salary remunerations, remunerations for membership, bonus, insurances and other rights)

Name and surname (applicable period)	Company where the member is a member of the managing body	Salary	Salary remuneration	Remunerations for membership	Bonus	Insurances	Other rights
Zoran Kitanov	Makedonski Telekom AD – Skopje (Non-Executive member and President of the Board of Directors)	0	0	MKD 372,000 (net)	0	0	None
Sadula Duraki	Makedonski Telekom AD –Skopje (Non-Executive member and Vice President of the Board of Directors)	0	0	MKD 93,000 (net)	0	0	None
Andreas Maierhofer	Makedonski Telekom AD -Skopje (Non-Executive member of the Board of Directors)	0	0	0	0	0	None
	T-Mobile Poland (President of the Management Board of T-Mobile Polska)	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations
Diana Annamária Várkonyi	Makedonski Telekom AD -Skopje (Non-Executive member of the Board of Directors)	0	0	0	0	0	None
	Telekom New Media Supervisory Board member	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Lubor Zatkó	Makedonski Telekom AD -Skopje (Non-Executive member of the Board of Directors)	0	0	0	0	0	None
	Magyar Telekom Nyrt.	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements

							requirements
Borce Siljanoski	Makedonski Telekom AD - Skopje (Non-Executive member of the Board of Directors)	0	0	0	0	0	None
	Magenta Telecom Austria	0	0	0	0	0	None
Vladimir Ivanovski	Makedonski Telekom AD - Skopje (Non-Executive member of the Board of Directors)	0	0	0	0	0	None
	T-Systems Magyarország Zrt.	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed
Nina Angelovska	Makedonski Telekom AD - Skopje (Non-Executive member of the Board of Directors with)	0	0	MKD 62,000 (net)	0	0	None
	Macedonian E-Commerce Association	MKD 84,939 January-October 2022 MKD 98,000 November-December 2022			0	0	None
Bardul Nasuf	Makedonski Telekom AD - Skopje (Non-Executive member of the Board of Directors with)	0	0	MKD 62,000 (net)	0	0	None
Peter Veil	Makedonski Telekom AD - Skopje (Independent member of the Board of Directors)	0	0	0	0	0	None
Martin Renner	Makedonski Telekom AD - Skopje (Independent member of the Board of Directors)	0	0	0	0	0	None
	Slovak Telekom, a.s.	0	0	0	0	0	None
Shkodrane Darlishta	Makedonski Telekom AD - Skopje (Independent member of the Board of Directors)	0	0	MKD 62,000 (net)	0	0	None
Akjif Mediu	Makedonski Telekom AD - Skopje (Independent member of the Board of Directors)	0	0	MKD 62,000 (net)	0	0	None

b) Data about the employment if the member has established a labour relation with other employers (name of employer, activity, salary amount, salary remunerations, bonus, insurances and other rights).

Name and surname (applicable period)	Name of the employer	Activity of the employer	Salary amount	Salary remunerations	Bonus	Insurances	Other rights
Nikola Ljushev	None	None	None	None	None	None	None
Zoran Kitanov	K - Power Skopje	Wholesale trade	MKD 30,000	None	None	None	None
Sadula Duraki	None	None	None	None	None	None	None

Andreas Maierhofer	T-Mobile Poland	Telecommunications	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations	This may not be disclosed due to applicable requirements in the parts of the remunerations
Diana Annamária Várkonyi	Magyar Telekom Plc..	Telecommunications	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Lubor Zatzko	Magyar Telekom Nyrt.	Telecommunications	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Borce Siljanoski	Deutsche Telekom AG	Telecommunications	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Vladimir Ivanovski	Magyar Telekom Nyrt.	Telecommunications	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed	This info may not be disclosed
Nina Angelovska	University of Tourism and Management	Education	MKD 30,035	None	None	None	None
Bardul Nasufi	Municipality of Struga	Public Institution	MKD 42,839	None	None	None	None
Peter Veil	Deutsche Telekom AG	Telecommunications	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Martin Renner	Deutsche Telekom AG	Telecommunications	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements	This may not be disclosed due to applicable requirements
Shkodrane Darlisha	Public Institution in the field of healthcare	Public Institution	MKD 40,000	None	None	None	None
Akjif Mediu	None	None	None	None	None	None	None

*\* Data for remuneration and membership in a management body in other companies and data for employment are presented in scope, layout and content as given by the respective member of the BoD and MKT has not made any verification of the accuracy and completeness of the data.*

In addition, the compensation of the key management of MKT, including taxation charges and contributions, is presented below:

<i>In thousands of denars</i>	2022
Short-term employee benefits (including taxation)	71,094
Contributions to the state pension system on short-term employee benefits	10,964
Other state contributions on short-term employee benefits	4,345
Termination benefits	12,941
Long-term incentive programs	44,487
Other payments	1,884
<b>Total</b>	<b>145,715</b>

Further details on MKT's financial performance, the operating and accounting policies, as well as other relevant disclosures, including details about the investigation into certain consultancy contracts, are given in the MKT financial statements for the year ended 31 December 2022.

### Information on participation of the members of the Board of Directors of MKT on the meetings held in 2022

The Board of Directors of MKT held 9 meetings in the 2022, out of which 4 regular meetings and 5 extraordinary meetings. Information on the participation of the members of the Board of Directors of MKT on the meetings held in 2022 is given below:

<b>Name and surname</b>	<b>Position</b>	<b>Participation</b>
Zoran Kitanov	Non-Executive member and BoD President	9 meetings
Sadula Duraki	Non-Executive member BoD Vice President	7 meetings
Nikola Ljushev	Executive BoD member	9 meetings
Nina Angelovska	Non-Executive BoD member	8 meetings
Bardul Nasufi	Non-Executive BoD member	9 meetings
Andreas Maierhofer	Non-Executive BoD member	6 meetings
Diana Annamária Várkonyi	Non-Executive BoD member	7 meetings
Borce Siljanoski	Non-Executive BoD member	6 meetings
Vladimir Ivanovski	Non-Executive BoD member	8 meetings
Lubor Zatko	Non-Executive BoD member	7 meetings
Peter Veil	Independent BoD member	8 meetings
Martin Renner	Independent BoD member	9 meetings
Shkodrane Darlishta	Independent BoD member	8 meetings
Akjif Mediu	Independent BoD member	9 meetings

### Transaction with an Interested Party

Given below are the details of the transaction concluded with an interested party in 2022.

With the Resolution of the Board of Directors of MKT adopted at its regular meeting held on 15.12.2021, the continuation of the Framework Cooperation and Service Agreement for Fix Access Shared Service Centre with Magyar Telekom, as a transaction with an interested party was approved in view of the fact that Magyar Telekom is the sole shareholder of Stonebridge Communications AD, a shareholder which owns 56.67% of the total number of voting shares issued by MKT. The Annex for continuation of the Agreement was concluded on 27.04.2022 and refers to 2022 until 31.12.2022, inclusive and it is with the value of EUR 59,000.

### Auditor

The Shareholders' Assembly of MKT, at its meeting, held on 6 September 2022 adopted a Resolution on the appointment of an authorized auditor for auditing the financial statements for the year 2022. The appointed auditor was Deloitte DOO Skopje.

MKT does not use any other services from Deloitte DOO Skopje except for audit of financial statements.

## Regulation and Pricing

The Law on Electronic Communications - "LEC" of North Macedonia was enacted in March 2014 as primary legislation, followed by rulebooks adopted as secondary legislation in order to ensure alignment with the EU Framework Directives 2009.

On 19 December 2014, amendments of the LEC were enacted. One of the most important changes is implemented in Article 75-a, which regulates the prices of international roaming. In accordance with this Article, the Agency for Electronic Communications ("the Agency") has the right, with a Decision, to determine the maximum prices for the services which are offered to the roaming users from countries with which the Republic of North Macedonia has concluded agreements on the reduction of the prices of roaming services in public mobile communications networks.

In March 2019, Article 75-a was changed in order to enable the extension of the RLAH regulation. On 5 April 2019, six Western Balkan countries signed an agreement aimed at gradually abolishing the retail roaming surcharges by 1 July 2021. The Western Balkan regional roaming rules were inspired by the EU Roaming Regulation. In particular, the agreement includes the "Roam Like at Home" principle: from 1 July 2021, the roaming services within the region should be provided at domestic retail prices without surcharges for international roaming. The agreement applies only on the territories of the Western Balkan countries and has no impact on the users in the European Union. The Western Balkan countries comprise Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia.

In July 2019, the LEC was changed once again, and Article 29-a was added in order to enable the financing of the Operational-Technical Agency. With this regulation, the Agency is obliged to transfer part of its funds to finance the activity of the Operational-Technical Agency, as follows:

- 50% of the total revenue generated by the Agency for the preceding calendar year from the annual fees paid by the operators for market surveillance, set out in the Agency's annual performance report for the previous calendar year, adopted by the Commission of the Agency, and
- 10% of the total revenue generated by the Agency for the previous calendar year from the revenues from the annual fees for radio frequency utilization by the holders of authorizations for radiofrequency utilization, set out in the Agency's annual report for the previous calendar year, adopted by the Commission of the Agency.

The Agency is obliged to pay the amounts to the Operational-Technical Agency no later than April 15 of the current year.

New articles 71-a 71-b, 71-c, 71-d and 71-e were added requiring the establishment of a National Broadband Competence Office as an expert and advisory body to support the investment in Broadband Networks.

In April 2021, amendments of LEC were enacted with new articles, from 166-a to 166-d, concerning the security of electronic communication networks and control and monitoring by the relevant institutions. A Rulebook was enacted in April 2022 in order to be able to implement the LEC provisions.

From 1 January 2022, MKT was once again designated as a Universal Service (US) provider for a period of 5 years, for fixed telephony services and Internet of 12 Mbit/s, and providing service for disabled end-users.

In April 2019, the Ministry of Information Society and Administration issued the National Broadband Strategy which sets the following targets:

- By the end of 2023, at least one major city should be covered with 5G signal;
- By the end of 2025, the regional highways and state highways defined by the Agency should be covered by a continuous 5G signal;
- By the end of 2027, all urban areas will be covered by a continuous 5G signal;
- By the end of 2029, everyone will have access to 5G internet with a minimum internet speed of 100 Mbps;
- By the end of 2029, at least 50% of the total number of subscriber agreements of households across the whole country should have internet access of at least 100 Mbps;

- By the end of 2029, all households will have affordable access to a network that provides download speeds of at least 100 Mbps with the possibility of upgrading to a gigabit speed;
- By the end of 2029, all public institutions (schools, universities, research centres and other educational institutions, health institutions, ministries, courts, local governments and other public authorities and bodies) should have symmetric access to the Internet of at least 1 Gb/s.

### **Regulation of Fixed Line Business**

MKT is a significant market power (SMP) operator on the wholesale markets of fixed telephony networks and services, including the market of access to the networks for data transmission and leased lines. MKT, as an SMP operator, has the obligation to enable its subscribers to access publicly available telephone services of any interconnected operator with an officially signed interconnection contract.

In 2017, both relevant retail markets for fixed telephony - 1. Access to the public telephone network at a fixed location and 2. Publicly available telephone services at a fixed location - were deregulated. Consequently, MKT is no longer an SMP and it has no ex-ante regulations for the retail fixed services.

According to the bylaws, MKT has an obligation to publish reference offers for the wholesale products for interconnection, Unbundling Local Loop (ULL), Local Bit-Stream Access (BSA), Reference Access Offer for providing access to physical infrastructure and use of specific network facilities and wholesale terminating segments of leased lines.

The Rulebook on the emergency number E 112 was enacted on 27 October 2015 (Official Gazette No. 184/2015). An update of the rulebook was enacted in 2021 and the Crisis Management Centre (CUK) started the service in 2022.

### **Regulated Wholesale Prices**

In May 2017, the Agency adopted a Decision for the designation of MKT as an SMP operator on wholesale markets, local and central access on a fixed location, relevant markets, 3a and 3b. With the same market analysis, A1 Macedonia (formerly known as one.Vip) was designated as an SMP operator for the first time, with the same regulatory obligations as MKT. A1 Macedonia is obliged to offer wholesale broadband services on DOCSIS technology. With the analysis in 2022, the previous decisions were confirmed without any changes.

In the middle of 2019, the NRA implemented ERT testing (margin squeeze methodology) to the NGA based broadband wholesale services supplied by the two dominant operators (MKT and A1 Macedonia). The developed ERT model will test the economic replicability of the retail bundles including broadband services with access speed higher than 30 Mb/s.

### **Regulation of the Mobile Business**

MKT has radiofrequency usage rights for the following radiofrequencies for public mobile communications systems:

- 2 x 12.5 MHz in the 900 MHz band, validity period: 8 September 2008 – 8 September 2028 (20 years)
- 2 x 10 MHz in the 1800 MHz band, validity period: 9 June 2009 – 9 June 2029 (20 years)
- 2 x 15 MHz 2100 MHz band, validity period: 17 December 2008 – 17 December 2028 (20 years)
- 2 x 15 MHz 2100 MHz band, license validity until 2028, new
- 2 x 10 MHz in the 800 MHz band, validity period: 1 December 2013 – 30 November 2033 (20 years)
- 2 x 15 MHz in the 1800 MHz band, validity period: 1 December 2013 – 30 November 2033 (20 years)
- 2 x 10 MHz in the 700 MHz band, validity period: 11 July 2022 – 10 July 2037 (15 years) new
- 100 MHz in the 3.7-3.8 MHz band, validity period: 11 July 2022 – 10 July 2037 (15 years) new

The competitor A1 Macedonia has frequency usage rights for the following radiofrequencies for public mobile communications systems:

- 2 x 12.5 MHz in the 900 MHz band
- 2 x 10 MHz in the 2100 MHz band

- 2x 10 MHz in the 2100 MHz band, new
- 2 x 10 MHz in the 800 MHz band
- 2 x 15 MHz in the 1800 MHz band
- 2 x 10 MHz in the 800 MHz band
- 2 x 15 MHz in the 1800 MHz band
- 2 x 10 MHz in the 700 MHz band, validity period: 11 July 2022 – 10 July 2037 (15 years) new
- 100 MHz in the 3.7-3.8 MHz band, validity period: 11 July 2022 – 10 July 2037 (15 years) new

The duration of two licences positioned in the lower parts of the bands previously owned by A1 Macedonia was until 2017, 10 MHz from 900 MHz band and 10 MHz from 1800 MHz band, and they expired on 23 March 2017. Based on a request from A1 for licence prolongation, the Agency adopted Resolution No. 0804-974 dated 2 November 2016 not to prolong these two licences. Their resolution was based on the efficient and effective spectrum usage and the necessity for realising radiofrequencies for the entrance of a third mobile operator on the market in order to foster competition. At the moment, these radiofrequencies are not allocated and they are not available for sale to the existing operators. 2 x 15 MHz in the 2100 MHz band is prolonged until 2028.

The retail services provided by the mobile network operators in the Republic of North Macedonia currently are not subject to ex-ante price regulation.

MKT is an SMP Operator on the wholesale market for voice call termination services in mobile communications networks, whereby several obligations are imposed: interconnection and access, non-discrimination in interconnection and access, accounting separation and price control and cost accounting.

In 2020, the Agency conducted new market analyses on the relevant market for mobile access and origination. The regulatory remedies imposed by the Agency are as follows: joint dominance of A1 Macedonia and MKT, the same remedies for both operators, mobile access obligation for all MVNO hybrid types (including Reseller), a cost based price for Full MVNO and retail minus (-35%) for the Reseller, an obligation for access to MMS services and mobile data based on technology neutrality (including 4G access). In December 2021, the Agency approved new decreased wholesale prices for mobile data and SMS for MVNO.

An auction procedure concluded in August 2013 awarded the whole 790 – 862 MHz band together with the unassigned spectrum in the 1740 – 1880 MHz band for Long Term Evolution (LTE) technology in a public tender. Each of the 3 Macedonian mobile operators acquired an LTE radiofrequency license of 2x10 MHz (in the 790 – 862 MHz band) and 2x15 MHz (in the 1740 – 1880 MHz band). Each license was acquired for a one-off fee of EUR 10.3 million (MKD 634,011 thousand). MKT will retain the license for 20 years, until 30 November 2033, with an extension option for up to 20 years in accordance with the LEC.

5G tender was held in 2022 and, as a result, spectrum was sold in a total amount of 2x20 MHz on 700 MHz and 228.5 MHz in 3.x GHz band.

## **Competition**

The competition in the telecommunications business is well-developed in all segments. Two main integrated players that offer a full portfolio of fixed and mobile services shape the telecommunications market in North Macedonia: MKT and A1 (subsidiary of Telekom Austria Group).

There are four MVNOs on the mobile market with very low market shares.

The fixed market is fragmented, with more than 50 providers of TV and BB services, most of them with a regional coverage.

The product portfolio of all operators is driven by bundle products. The cable operators are bundling their TV offers with Internet and fixed voice services. As the overall market is price sensitive, the price perception plays a significant role in the customers' choice and thus the cable operators' offers are seen as more competitive than MKT's.



A1 Macedonia, as an integrated operator, offers comprehensive service portfolio - mobile and fixed voice, mobile and fixed broadband Internet, TV and ICT solutions. The main focus is on mobile post-paid, bundled fix as well as bundled convergent offers.

Telekabel is the biggest cable provider among around 30 active cable operators, with a strong presence in the regions where MKT has a low market share. It is also present on the mobile market as a MVNO, offering post-paid services. By offering all fixed and mobile bundled services, it became the third fully integrated player on the market.

Telekom Serbia (TS) entered the market in Q4 2021 under the regional brand Mtel, initially starting with satellite TV. Mobile offers were launched a year later, in Q4 2022, as a MVNO.

As at 31 December 2022, MKT had an estimated retail fixed broadband Internet market share of 46%, a TV market share of 34% and retail fixed voice market share of 63%, (source: internal best estimates for market development based on the official Telekom Austria report Q3 2022 and the AEC Q2 2022 report). In the mobile market, the market share of MKT is estimated to 49% (source: internal best estimates based on the official Telekom Austria report Q3 2022 and the AEC Q2 2022 report).\*

\*All market shares are based on the product logic of Telekom Austria, reporting 4G routers in mobile.

## **Marketing and Sales**

The long-expected recovery of all the regular operational activities that were impeded by the pandemic, brought normalization in the beginning of 2022, but that did not last too long. The war in Ukraine, combined with the rising inflation, (especially on the energy prices), brought new challenges in the world economy, affecting also the operations in the telecommunications industry, and consequently, the operation of MKT.

### **First 5G operator in Macedonia and Largest Fiber Network**

In the beginning of 2022 (February), MKT introduced the most significant novelty in the telecommunications market in a period of several years, in the form of the launch of the new 5G network, accompanied with the appropriate campaign "Unlimited data in M1/Mobile M".

With this move, MKT once again reinforced its position as an innovation leader in the market, owner of the most advanced network and best in class customer satisfaction.

In September, as a continuation of the moves for further improvement of the network speeds in both the fixed and the mobile network, the campaign "Gigabit speeds for mobile and fixed fiber customers" was introduced, offering internet speeds available via 5G and/or fiber network of above 1GB/s, with which MKT became the first operator to offer connectivity on both fixed/mobile parts above 1 GB/s.

### **Digital Customer Experience & Digital Transformation**

In 2022, MKT further continued the development and enrichment of its own digital channels, offering superior customer experience, better benefits, faster activation, and 24/7 availability, whether in terms of tariff migration, contract prolongation or activation of an additional package/extra benefits for the end customer.

In 2022, MKT improved the experience with the Telekom MK application using the chatbot bubble which shows on the overview screen as a handy tool for support of the app users when accessing the digital channels.

In order to emphasize the benefits for the customers on the digital channels, MKT has also introduced the new Engagement and Loyalty platform which provides not only MKT benefits, but also activation of discounts and benefits from 3<sup>rd</sup> party partners, as a reward to the end customers for their loyalty.

In 2022, in the Telekom MK application, a completely new customer journey for native contract prolongation was introduced, which is a continuation of the provision of native flows in the application as the most used digital channel with self-care and

sales aspects.

In 2022, as part of the strategy for improving the customer experience and increasing the satisfaction on the digital channels, MKT has redesigned the overview of the Telekom online store with not only better look & feel, but also with more intuitive flow for acquisition of post-paid and prepaid services.

## **TV**

The TV content also had several improvement aspects throughout the year. Eurosport, Discovery channel, local Gley streaming platform and 27 regional channels were introduced as part of the TV offers of MKT.

## **Customer program**

In Q4 2022, MKT introduced its new program in order to reward the customers with benefits (discounts) offered via 3rd party partners, thereby further increasing the customer satisfaction and building sustainable long-term relations.

## **Environmental protection and corporate responsibility**

In March 2022, with the aim of contributing to the raising of wider ecological awareness, and reduction of electronic waste, MKT introduced its program "Recycle for a new smartphone" that offers certain benefits to its customers (in terms of discounts) if they bring an old and unusable mobile phone to the Telekom PoS. Such phones were collected and handed to the authorised collective handler for further processing and proper disposal.

In the second half of 2022, this program was branded under the DT brand "Green Magenta".

By the end of 2022, MKT maintained its customer base growth in all major segments: Postpaid, Magenta 1, Internet and TV, thus continuing the successful growth and dedication to provide best in class service for its own customers.

## **Business Customers**

In the business segment, MKT proceeded with activities aimed at turning the Covid 19 and global economic crisis into an accelerator of its growth story - Digital Transformation of Society and Businesses.

While maintaining its strong position in the digitization of society and the businesses, MKT B2B played a significant role helping the institutions and businesses to transform, consolidate and successfully run the business in the times of crisis.

MKT B2B continued its full support in bridging the crisis, further leveraging the power of its broadband internet to all fixed and mobile customers, offering higher speeds and unlimited mobile data.

A special focus was put on bringing the digital tools and services closer to the customers through continuous campaigns and dedicated propositions, thus raising the awareness of the digital way of working as an efficient method for business growth and overcoming the constraints placed by crisis. As a result, the digital service portfolio had a constant customer growth, especially in Office 365, security and online services.

Magenta 1 Business remained MKT's key proposition in the B2B segment, upgraded with new Cloud services and providing more benefits for more value.

The lifting of the movement restrictions and the ability to travel abroad had a positive impact on the usage of roaming services in the B2B segment. The commercially available roaming package was also enriched with more benefits and it is now enabling activation through digital channels, thus providing greater customer value.

Aiming to be a leading force in the Digitalization of Society, MKT implemented several smart city projects among which the most significant is the one for the capital – the City of Skopje. MKT as the main integrator made an execution of digital solutions in several key state institutions in 2022.

2022 was marked as a year of innovative technologies in the highly saturated data services market, which comprised the onboarding of several customers on SDWAN solutions, while establishing MKT as the leading SDWAN provider.

Promoting the digital channels and self-service tools continued to be one of the highest priorities in 2022 for the B2B segment. Various activities led to an improved Digital Customer Journey and an increased Telekom App penetration, reaching 59% of the eligible B2B customer base by the end of the year. Increasing the B2B customers' satisfaction was another goal reached in 2022, which was clearly reflected in an increase of the TRIM index in Q3 2022 by 24-point difference compared to the main competitor and maintaining the number one position in B2B DT EU.

### **The Most Popular Telco Brand in Macedonia**

2022 was a crucial moment for Telekom as a brand as MKT became the first telco provider in Macedonia to introduce 5G services. MKT made the most of this opportunity to demonstrate our leadership in the digital and technological sphere by using an extensive communication campaign that both informed the public of the advantages of 5G and reinforced the image of the company in the public as that of a tech pioneer.

2022 also saw the introduction of the new, simplified iconic T logo on the Macedonian market. In addition to the other brand novelties, MKT also started using the new T-Business competence designator within our business communication to reinforce our position as the most preferred telco service provider for businesses.

All of these actions, and more, worked towards the final goal – that of maintaining MKT's position as the most preferred and best-loved telco brand in North Macedonia.

### **Best Quality Service**

In 2022, according to our regular customer satisfaction surveys, MKT managed to remain the number one operator in customer satisfaction in mobile, fixed and convergent services, thus continuing the trend of the previous years.

To enhance the customer orientation and strengthen our regional presence, customer facing touchpoints were organized per region as a united frontline. The points of sales such as own shops, partners shops and D2D, together with the field technical services, were merged into one team per region with a goal to win the customers' hearts and grow. The Points of Sales (PoS) (own and partners') continued to follow the latest trends in providing the best customer experience, where the customers can explore the offered products and services with the support of our sales agents in order to choose the best offer for their household. The push sales channels like Door to Door (D2D) and telesales remained in the focus with a significant contribution to the overall sales results. Customer technical services (installation and fault repair) were provided in a timely manner, to the satisfaction of our customers.

MKT are adamant about providing efficient and 24x7 customer support. MKT provide support for the customers' inquiries (either for information or for problem resolution) via different channels. The traditional support for calls is still dominant, but it is shifting to the digital and written channels, including live chats on the web, social media (Facebook, Tweeter, Instagram) and the Telekom App - it is all aimed at being closer to our customers on the channels preferred by them. We continued to develop the Chatbot possibilities that we introduced in 2021, in order to ensure faster, automated and accurate response. The customers are also able to conduct self-diagnostics and troubleshooting for their services.

Last year, MKT implemented a new, state-of-the-art tool for collecting feedback from our customers and measuring the Net Promoter score – with a view to understand what their opinion is about the quality of our services, the products that they use and the brand in general, with the main purpose of a continuous improvement in all directions that reflects in improving customer experience.

### **Research and Development**

#### **ICT**

MKT continues with its determination and its work to be an innovation and technology leader on the market. Among the main focuses, as a continuation from the previous years, are the projects in the area of the Smart City, as well as the big Cloud

projects.

In 2022, the contract for Smart Water Metering for Municipalities was signed with GIZ, for joint development of a system for smart metering for municipalities. There will be three test municipalities in 2023, with the idea for all of them to join on the platform. The system will provide the municipalities with accurate information on the water consumption, and easy integration with their existing billing systems. It will also enable them to detect water losses and leaks, for the purposes of providing better water supply network and services to their citizens.

MKT has also developed an in-house SEMM system for Smart Energy Metering and Monitoring. The R&D of the Controller and the software to support the system is in the stage of field testing, after the successful prototyping, development and laboratory testing. All the tests were successful and now it is in live testing in two municipalities. It will enable the customers to optimize their electricity consumption and control the consumption with no or minimal impact on the services that they are providing.

The main activities in the SI area were focused on the development of a private cloud solution for the health fund, in the area of digitization of e-health and as a part of the wider strategy for the e-health vertical, where the contract was signed in December 2022, with "go live" planned for 03.2023.

The competitive pressure in conjunction with the saturated Telco market, the COVID 19 and the Energy Prices challenges, the complexity of the business environment with multiple and more sophisticated customer segments, multiple vendors and complex service offerings, the fast changes in the technology with new technology paradigm targeting one universal IP network and Cloud-based service delivery platform, as well as changes in the regulations, are only part of the challenges that MKT will face in the next few years.

## **Network Technology**

MKT is aiming to keep its technology leadership position and ensure growth through service improvement and innovation by a continuous development of its infrastructure. Despite the COVID and energy crises, MKT continued its massive expansion into fixed and mobile communications in 2022.

In terms of fixed-network expansion, the focus was on fibre optics. By the end of 2022, the fiber team increased the fiber reach to a total of 274,000 FTTH accesses passed, which means that around 32.6% of the flats already have the option of booking a fibre-optic connection. Regarding the VDSL rollout, there are more than 204,000 VDSL CO accesses passed and approx. 30,000 VDSL FTTC accesses passed in the fixed network. Deployment of Hybrid Access and LTE box solutions were used where fixed BB is unavailable or with a low quality, thus improving the customer experience through higher QoS. At the end of 2022, the number of LTE box users was more than 11,600 and there were approx. 3,000 hybrid users.

During 2022, the Cu2F project continued with:

- focused migrations on specific products and
- focused migrations in designated geographical areas

The activities resulted in processing half of the copper lines from the original project scope and overachieving the target for successful migrations with controlled churn rate. 2 out of 7 areas in the project scope were prepared for the final copper dismantling by the end of Q1.

Much of the development activities in mobile communications were devoted to RAN and MW modernization for the introduction of the 5G technology. 5G was commercially launched in February 2022. At the end of October 2022, 100% of the radio network was swapped to Ericsson. Currently, 27 cities are covered with 5G. The majority of the population in the urban areas is able to use 5G services. It is available to 60% of the people in North Macedonia. The LTE network also continued to grow in 2022. More than 99.9% of the total sites provided LTE services and 70.5% of all BTSs are connected via optic. The data volume via 4G is also increasing month by month. In order to provide a more efficient spectrum usage and optimization of the complex 4RATs (2G/3G/4G/5G) mobile network, the activities for the retirement of 3G technology were boosted during 2022. The whole project is planned to be completed in H1 of 2023, which will result in the implementation of a new NT production model based on virtualized, cloudified and disaggregated RAN.

In the core domain, the emphasis was placed on the voice network modernization. The project for SW Upgrade of vIMS is in progress and it will be completed in Q1 of 2023. The implementation of a solution for routing of VoLTE Emergency Calls via the IMS network without using CS fall-back started in Q3 of 2022 and it is planned to be finished at the beginning of the next year. During H2 of 2022, new virtual Interconnect/Trunking Session Border Controllers (SBCs) were implemented. The migration of all peering interconnections and fix IMS SIP trunk subscribers from the existing fix IMS SBCs towards new I/TSBC nodes is in progress. In the ePC domain, the PCRF node has been upgraded and virtualized. The SW upgrade of the EPG node is in progress as well.

The growth of BB access and the continuous traffic increase were supported with the further development of the IP core and transport network as a cornerstone for all services. A capacity extension of the transport network was performed in order to cope with the increased traffic demand. The network was able to handle the data volume at all times without any problems. The data volume in the fixed network increased by approx. 2% and the mobile traffic increased by approx. 35%.

MKT's TV Strategy vision is to continue to be on the #1 TV provider position on the Macedonian market, by providing the best TV service and most relevant content, while maintaining the price premium justified with the most relevant value for the customer. In that regard, during 2022 the emphasis was placed on the deployment of the new cloud IPTV/OTT integrated platform which will be commercially launched during Q1 of 2023. The Head End modernization project was completed and, at the end of 2022, a total of 100 TV channels were offered in HD quality over 2.5 MBps. During the first half of 2022, the project for replacement of the existing messaging services was finished. The migration was successfully completed and the SMS, MMS, USSD, IPSMGW and VM services were put in production on the new platform.

## Information Technology

In IT, 2022 was marked with continuous improvements of the operational model established in the previous two years – outsourcing of the operations of the legacy systems & in-house development of new systems and applications, as bases for the digital transformation of the core customer journeys. The Agile way of software development is defined as a standard way of work, resulting in faster delivery, significant decrease in time to market YoY and increase of the number of releases.

- More Agile driven projects were executed in 2022 compared to 2021, including one of the main Legacy applications in the CRM domain, the Salary Incentive App, which started the process of decommissioning the legacy apps and implementation of new applications and systems according to the MIRA architecture. This process is set to speed up in 2023, so that one of the main company goals are achieved – digitization.
- Improvement of the process for execution of business demands in the outsourced legacy systems in the CRM and Billing domain, resulting with faster implementation and delivery of new tariffs and promotions
- Significant decrease in the time to market and increase in the number of releases.
- Upskilling of the employees in the dedicated cross-functional team, unifying IT, commercial and operational knowledge for an improved and flexible delivery.
- The further strengthening of the new culture made it possible for MKT to become a more competitive employer in the IT area
- Progress in the Data domain, by speeding up the implementation of the Digital Enablement Platform and the Data Lakes concept, by means of which several streams are implemented in parallel.

Further activities are ongoing and they will continue in an intensified manner, which will fulfil the plan and enable the realization of the strategic focuses.

Nikola Ljushev

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Chief Executive Officer  
Makedonski Telekom AD – Skopje

Proofreading by LingvaEkspert



### **Statement on compliance with the Corporate Governance Code**

In accordance with the Macedonian Stock Exchange Listing rules (Article 42 a), the Board of Directors gives the following Statement:

The Board of Directors of Makedonski Telekom AD - Skopje, hereby states that, in its operations, Makedonski Telekom AD - Skopje adheres to the Corporate Governance Code for joint stock companies listed on the Macedonian Stock Exchange AD Skopje, published on the Stock Exchange's website at [www.mse.mk](http://www.mse.mk).

Makedonski Telekom AD - Skopje adheres to the principles and best practices of corporate governance prescribed by the Code according to the 'comply or explain' approach by fulfilling questionnaires, the form and content of which are prescribed with the Code.

By this Statement it is confirmed that the questionnaires will be published on SEI-NET and the website of Makedonski Telekom AD - Skopje, and that the answers contained therein are correct and true and accurately show the application of the principles and best practices of corporate governance by Makedonski Telekom AD - Skopje as prescribed by the Corporate Governance Code.

On behalf of Makedonski Telekom AD - Skopje

Chief Executive Officer  
Nikola Ljushev

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## Statement on the Application of the Corporate Governance Code

Makedonski Telekom AD – Skopje (MKT) is a company listed on the official market of the Macedonian Stock Exchange AD Skopje, in the sub-segment "mandatory listing".

For the purpose of adequate compliance with Article 384-a of the Law on Trade Companies, MKT hereby makes this statement whereby it confirms that it applies the principles of good corporate governance in accordance with the obligations defined in the Law on Trade Companies.

The corporate governance, as well as the ethical and business behaviour of the management and the employees in MKT, are guaranteed with internal acts that are adopted by the Board of Directors (BoD) of MKT, as follows:

1. Code of Conduct of MKT
2. Financial Code of Ethics of MKT;
3. Manual for the MKT Corporate Compliance Program;
4. Directive of MKT on the introduction of fraud prevention principles;
5. Directive of MKT on the compliance with the anti-corruption principles;

The Company has developed comprehensive Compliance Management System and adopt a set of internal acts that set high requirements and standards for the ethical and business behavior of the managers and the employees of the Company, including the members of the BoD. The elements of the Compliance program are available on Company's web site including Code of Conduct and Code of Ethics of MKT.

On behalf of Makedonski Telekom AD - Skopje

Chief Executive Officer  
Nikola Ljushev

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