

#### MAKEDONSKI TELEKOM AD - SKOPJE

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# ANNUAL REPORT on the operations of Makedonski Telekom AD - Skopje in 2015

On 13 February 2006, Magyar Telekom Plc., the controlling owner of the Company, (via Stonebridge Communications AD - Skopje, majority shareholder of the Company), announced that it was investigating certain contracts entered into by another subsidiary of Magyar Telekom Plc. to determine whether the contracts were entered into in violation of Magyar Telekom Plc. policy or applicable law or regulation. Magyar Telekom's Audit Committee retained White & Case, as its independent legal counsel to conduct the internal investigation. Subsequent to this, on 19 February 2007, the Board of Directors of the Company, based on the recommendation of the Audit Committee of the Company and the Audit Committee of Magyar Telekom Plc., adopted a resolution to conduct an independent internal investigation regarding certain contracts in Macedonia

Based on publicly available information, as well as information obtained from Magyar Telekom and as previously disclosed, Magyar Telekom's Audit Committee conducted an internal investigation regarding certain contracts relating to the activities of Magyar Telekom and/or its affiliates in Montenegro and Macedonia that totaled more than EUR 31 million. In particular, the internal investigation examined whether Magyar Telekom and/or its Montenegrin and Macedonian affiliates had made payments prohibited by U.S. laws or regulations, including the U.S. Foreign Corrupt Practices Act (the "FCPA"). The Company has previously disclosed the results of the internal investigation.

Magyar Telekom's Audit Committee informed the U.S. Department of Justice (the "DOJ") and the U.S. Securities and Exchange Commission (the "SEC") of the internal investigation. The DOJ and the SEC commenced investigations into the activities that were the subject of the internal investigation. On 29 December 2011, Magyar Telekom announced that it had entered into final settlements with the DOJ and the SEC to resolve the DOJ's and the SEC's investigations relating to Magyar Telekom. The settlements concluded the DOJ's and the SEC's investigations. Magyar Telekom disclosed the key terms of the settlements with the DOJ and the SEC on 29 December 2011. In particular, Magyar Telekom disclosed that it had entered into a two-year deferred prosecution agreement (the "DPA") with the DOJ.

The DPA expired on 5 January 2014, and further to the DOJ's request filed in accordance with the DPA, the U.S. District Court for the Eastern District of Virginia dismissed the charges against Magyar Telekom on 5 February 2014.

In relation to the local investigation by the state authorities in Macedonia and further to the previously disclosed information in the Financial Statements of the Company for the preceding years, the basic court has sent an invitation for a representative of MKT for presence on the hearing scheduled for 25 February 2016.

We have not become aware of any information as a result of a request from any regulators or other external parties, other than the previously disclosed, from which we have concluded that the financial statements may be misstated, including from the effects of a possible illegal act.

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

On 31 October 2013 an Accession Agreement has been concluded with T-Mobile Macedonia (hereinafter referred to as: "TMMK") as an Accessing company to MKT as an Acquiring Company. The Accession Agreement has been changed with the Annex thereof concluded on 20 April 2015. TMMK as fully owned subsidiary of the Company has

been consolidated until 2014 inclusive.

In accordance with the Accession Agreement and the Annex thereof, and pursuant to the provisions from the Law on Trade Companies, 31 December 2014 is determined as a date from which all transactions of TMMK, from the accounting point of view shall be considered as they are effectuated on behalf of MKT. Implicitly, as of 1 January 2015 the bookkeeping for MKT and TMMK will be keep only by MKT.

In accordance with the Accession Agreement and the Annex thereof, which were adopted and confirmed by the Shareholders Assemblies of MKT and TMMK on the meetings held on 17 June 2015, the business activities of TMMK stopped as of 30 June 2015, when this company has been deleted from the Central Register. With the deletion, TMMK no longer exists as a legal entity without a liquidation procedure to be conducted.

With cessation of TMMK, the assets and liabilities of TMMK were transferred to MKT by the way of universal transfer of the entire assets and liabilities.

MKT is a joint stock company incorporated and domiciled in the Republic of Macedonia (RM) for the provision of telecommunications services. The MKT's immediate parent company is AD Stonebridge Communications – Skopje, solely owned by Magyar Telekom Plc., registered in Hungary. AD Stonebridge Communications – Skopje was under voluntary liquidation by the end of 2013 and from January 2014 its status has changed and it is no longer under liquidation procedure. The ultimate parent company is Deutsche Telekom AG (DT), registered in the Federal Republic of Germany.

MKT is an integrated telco operator primary offering fixed line and mobile services. MKT is leading mobile service provider, dedicated to the provision of up-to-date technologies and advanced service offerings, commensurate to the highest technological and service standards. MKT is also leading fixed line service provider of traditional telecommunications services and content services within the scope of the fixed line network, broadband services and integrated solutions, including TV over Internet Protocol (IPTV).

MKT's objectives for the forthcoming years comprise being a leading provider of technology in Macedonia and providing quality services with attractive prices in order to be prepared for the competition.

In January 2014, MKT successfully completed the All IP Transformation Project and the last customer on the public switched telephone network (PSTN) was migrated to IP Multimedia Subsystem (IMS) platform. The IMS platform enables the use of different advanced and innovative services in the fixed telephony.

In 2015, the mobile voice revenues contributed with 36.3% to the total revenues, while 19.2% of the total revenues of the MKT were generated from fixed line voice services. The fixed line internet and data services revenues contributed with 14.6%, while the mobile non-voice services revenues contributed with 10.9% to the total revenues. The revenues from IPTV contributed with 4.9% to the total revenues.

The fixed line voice revenues still mark a downward movement, mainly due to the decreased number of fixed-line customers and the decrease of the outgoing traffic. IPTV revenues have grown mainly due to the growing IPTV subscriber base. The mobile voice revenues decrease is driven by the lower voice retail revenues as the higher outgoing minutes could not offset the lower subscription fees as a result of new promotions and offers reflecting the strong competition, as well as lower voice incoming revenues as result of the lower International to mobile minutes.

At the end of 2015, MKT had 226,501 voice access fixed lines compared to 242,789 at the end of 2014. The number of total DSL access increased to 195,014 at the end of 2015, compared to 190,451 at the end of 2014. The number of IPTV customers at the end of 2015 reached 103,422 customers (including 3 Play, IPTV only and 2 MAX) marking 5% increase from the end of 2014. The number of Fibre to the Home (FTTH) customers reached 33,103 at the end of 2015.

MKT had mobile subscribers of 1,229,655 at the end of 2015, compared to 1,197,242 at the end of 2014. The mobile market penetration in Macedonia is 103.7%, which shows the trend of individuals owning multiple SIM cards. As a result of the market saturation, MKT especially focuses on retaining the customers in order to protect the market share.

The Macedonian mobile market was characterized by highly competitive campaigns and offers in 2015. Due to the increased competitiveness and in order to prevent the churn and encourage the usage, MKT launched various campaigns, price plans and additional services specially designed to meet the subscribers' needs, with a focus on value instead of price. These offers are targeting different customer segments. In 2015, MKT introduced several products that differentiate MKT on the mobile market and provide additional value for the customers. The establishment of a single Telekom brand announced the introduction of new product concept, which is fully in line with the global strategy of the Deutsche Telekom Group as a telecommunications leader in Europe. MAGENTA products, as a DT strategy, highlighted the 2015 as a year of holistic household approach offering integrated products and services to maximize household base, secure revenue and bring profitability.

MKT is continuously working on creating a market demand for mobile Internet and stimulating mobile data usage via device/data price plans.

The Macedonian mobile market, influenced by the global trends, is moving to a much broader and more interactive communications market, encompassing voice, mobile Internet and 3G/4G streaming services. Further roll-out of mobile broadband technology, improvement of customer management and billing processes and investment in value added services are planned in order to ensure market competitiveness.

Below are presented the available remuneration data for the BoD members of MKT with active mandates on 31 December 2015\*, related to applicable period of 2015.

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

Name and Surname (applicable period) Michael Frank	Company where is a member of the managing body Cronogorski Telekom AD	Salary 0	Salary remunerations	Remunerations for membership	Bonus 0	Insurances 0	Other rights  None
Walter Goldenits	Deutsche Telekom Pan-	This may not be disclosed	This may not be disclosed	This may not be disclosed	This may not be disclosed	This may not be disclosed	This may not be disclosed
Goldenits	Net Hungary Kft.	due to applicable requirement	due to applicable requirements				
Attila Keszeg	immmr GmbH, Germany (member of Advisory Board)	0	0	0	0	0	None
	PanNet, Germany (member of BoD)	0	0	0	0	0	None
Susanne Krogmann	Crnogorski Telekom a.d., Podgorica (member of BoD)	0	0	0	0	0	None
	T-Mobile Czech Republic a.s. (member of Supervisory Board)	0	0	0	0	0	None
Nebojsa Stajkovic (15 April- 30 June 2015)	T-Mobile Macedonia AD Skopje	0	0	MKD 157,067	0	0	None

Andreas	T-Mobile	0	0	MKD 744,000	0	0	None
Maierhofer	Macedonia AD						
(1 January - 30	Skopje						
June 2015)							

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 employer	Activity of employer	Salary amount	Salary remunerations	Bonus	Insurances	Other rights
Frank Pölcz	T-Systems Hungary Ltd.	ICT solutions service provider	This may not be disclosed due to applicable requirements				
Michael Frank	Magyar Telekom Nyrt.	Telecommunic ations	This may not be disclosed due to applicable requirements				
Peter Zsom	Deutsche Telekom AG	Telecommunic ations	This may not be disclosed due to applicable requirements				
Andrea Sághy	Magyar Telekom Nyrt.	Telecommunic ations	This may not be disclosed due to applicable requirements				
Walter Goldenits	Magyar Telekom Nyrt.	Telecommunic ations	This may not be disclosed due to applicable requirements				
Attila Keszeg	Deutsche Telekom AG	Telecommunic ations	This may not be disclosed due to applicable requirements				
Susanne Krogmann	Deutsche Telekom AG, Bonn	Telecommunic ations	This may not be disclosed due to applicable requirements				
Aleksandar Stojkov (1 January 2015 – 31 December 2015)	Faculty of Law "lustinianus Primus" Skopje	High Education	MKD 738,762 (net)	MKD 845,840 (net)	None	None	None
Panche Kralev (15 April 2015 – 30 June 2015)	Government of Republic of Macedonia		MKD 152,500 (net)	None	None	None	None
Nazim Bushi (1 January 2015 – 31 December 2015)	APV Motivi Skopje	Agency for temporary employments	MKD 288,000	None	None	None	None
Nebojsa Stajkovic	Ministry of Interior of		MKD 371,183	MKD 28,401	None	None	None

(15 April 2015 - 31 December	Republic of Macedonia						
2015)							
Vladimir	Solun i Ivan	Tourism and	MKD 329,698	MKD 8,770	None	None	None
Zdravev	DOOEL	hospitality					
(8 October							
2015 - 31							
December							
2015)							

<sup>\*</sup> Those data are presented in scope, layout and content given by the respective member of 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 the Company, including taxation charges and contributions, is presented below:

In thousands of denars	2015
Short-term employee benefits (including taxation)	129,180
State contributions on short-term employee benefits	17,297
Long-term incentive programs	18,359
Total	164,836

The remuneration of the members of the Company's Board of Directors, which amounted to MKD 10,629 thousand, is included in Short-term employee benefits.

Further details on the MKT's financial performance, operating and accounting policies as well as other relevant disclosures are given in the MKT Financial statements for the year ended 31 December 2015.

## **Regulation and Pricing**

The Macedonian law concerning the electronic communications (Law on Electronic Communications - "LEC") was enacted on 5 March 2005. Thus, by means of certain transitional provisions, the country's telecommunications regulations were harmonized with the European Union (EU) regulatory framework. Furthermore, a number of strict obligations for the existing operators were stipulated. In December 2013, a public debate was opened for a new draft LEC in order for the LEC to be aligned with the EU Framework Directives 2009. New law was enacted in March 2014 as primary legislation, as well as rulebooks as secondary legislation.

On 19 December 2014, amendments of LEC were enacted. One of the most important changes is implemented in Article 75-a, which regulates the prices of international roaming.

According this article, the Agency for Electronic Communications ("the Agency") has the right, with a Decision, to determine the maximal prices for services which are offered to roaming users from countries with which the Republic of Macedonia has concluded agreements for reduction of prices of roaming services in public mobile communications networks (Bosnia and Herzegovina, Montenegro and Serbia) on reciprocal base, which cannot be higher than the prices of the same services in the EU. In a period of 3 years, starting from 2015, the prices will be reduced to the maximum determined.

On 6 November 2015 in Official Gazette of RoM, No. 193, amendments of ECL were enacted. Changes affect misdemeanour provisions.

On 29 June 2011 MKT was designated as a Universal Service (US) provider for fixed telephony services, public payphones and equivalent access for disabled end-users for a five-year period starting from 1 January 2012. In 2013 a Universal Service Obligation (USO) fund was established, in which all telecommunications operators with annual turnover above EUR 100 thousand in Macedonia are participating.

On 25 December 2015, MKT received a Resolution of the Agency for determination of net cost for provision of universal service for 2014.

The services encompassed by the US for which MKT has received reimbursement from the USO fund are:

- Access to public telephone services at a defined fixed geographic location;
- Reasonable number of public pay phones;
- Ensuring conditions for equivalent access to and use of publicly available telephone services for disabled end-users.

## **Regulation of Fixed Line Business**

MKT is Significant market power (SMP) operator on the market of fixed line voice telephony networks and services, including the market of access to the networks for data transmission and leased lines. MKT, as 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.

The obligations according to the performed analysis in 2014 on the relevant markets include the current obligations as well as new obligations for regulation of fibre based products and virtual unbundling local access (VULA) on Market 8 - Broadband market (broadband services based on optics), Market 1 - Access to public telephone networks at a fixed location for residential and business customers on all networks - technology neutral, deregulation on Market 10 - Transmission segments of the LL and deregulation of Wholesale Line Rental (WLR).

According to the new 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 access to ducts and dark fibre (RAO) and wholesale terminating segments of leased lines. Initial Fibre to the "x" (FTTx) regulation was introduced in the second quarter of 2011 with the obligation for Reference Access Offer (RAO) for ducts and dark fibre imposed on MKT by the Agency. As of 1 April 2015 MKT introduced VULA service and optic bit-stream access services as part of its referent wholesale offer.

The Number Portability (NP) procedures are an obligation that arises from the LEC and the Number Portability Rulebook for all operators in Macedonia. The deadlines for porting are two days in a fixed network and one day in a mobile network. A beep signal is also introduced in the networks of MKT and TMMK, which informs the customers that their call is made towards a ported number. All call query method is obligation due to IP migration of all operators on domestic market.

On 15 July 2014 the Agency introduced obligation for all operators with cable network infrastructure (including MKT) to build its network underground and to place its existing aerial networks underground by the end of 2020 in cities with above 15,000 citizens. Additionally all fixed and mobile operators are obliged for Digital agenda targets to provide broadband services with minimum speed of 30 Mb/s for 100% of household's network coverage and 100 Mb/s for 50% of household's network coverage by the end of 2020.

On 11 November 2015 the Agency published final document for market analysis on relevant retail Market 3 – Minimal set of leased lines. MKT is released from SMP obligation on this market and this market is no longer included in list of relevant regulated markets by the Agency.

Rulebook for emergency number E 112 was enacted on 27 October 2015 (Official Gazette No. 184/2015). Even thou obligations for operators are defined in the rulebook, date for starting the service is not set. It will mainly depend on preparedness of the Centre for crisis management as responsible body for implementation of the service on government side.

#### Regulated Retail Prices

Under an obligations arising from Article 91 of the LEC (retail price regulation), followed with the changes in November 2014 of the Recommendation for retail regulation, the Agency specified the manner and procedure for regulation of the retail prices for fixed voice telephony networks and services of the operator with significant market power on the relevant retail markets. MKT is an operator with SMP status on the relevant retail Market 1 – Access to

the public telephone network at a fixed location and Market 2 – Publically available telephone services at a fixed location. The prices for retail products offered on these two markets are subject to regulation by the Agency. The regulation of the retail prices is ex-ante, meaning that the Agency has to approve each price introduction, price change on every product or promotion prior to its being launched in retail. The ex-ante regulation is based on price squeeze methodology.

## **Regulated Wholesale Prices**

MKT has a cost-based price obligation for the Regulated wholesale services, using LRIC. The results from the Bottom - up LRIC costing model are implemented as of 1 April 2011.

As of 1 November 2011, MKT stopped offering PSTN and ISDN services for its customers as well as for its wholesale partners and all newly committed services are based on Internet Protocol (IP) technology. In line with the PSTN migration of the MKT network, the Agency approved the proposed modifications of the WLR Reference Offer and BSA Offer of MKT applicable as of 1 January 2012. MATERIO was changed on MKT's initiative from 1 May 2012, and lower fixed termination rates (for origination, termination and transit) for 25% were approved by the Agency. The IP MATERIO (Internet Protocol Reference Interconnection Offer of MKT) was submitted for approval to the Agency in October 2013 on MKT's initiative, in line with the conclusions of the market analyses for submission of MATERIO changes with description and conditions for IP interconnection. The Agency approved the IP MATERIO on 27 December 2013, the changes being effective from 1 January 2014.

The new measures in line with MKT's SMP obligation on wholesale markets for fixed call origination (Market 4), termination (Market 5) and transit (Market 6) from the final document include: implementation of IP interconnection by the end of 2016, at the latest, for fixed and mobile operators, transitional period for IP interconnection for alternative fixed and mobile operators up to three years, submission of updated MATERIO with IP IC description (service and fees) and conditions by 31 October 2013, at the latest. The other measures for Market 4, 5 and 6 are the same as before (interconnection and access, access to specific network facilities, carrier selection (CS) and carrier pre-selection (CPS) transparency, non discrimination, accounting separation, price control and cost accounting).

In 2014 analyses were performed in accordance with the annual working program of the Agency for 2014. The ones that affect MKT's operations are the analyses on Market 8 – Broadband market, Market 1 – Access to public telephone networks at a fixed location for residential and business customers, Market 9 Terminating segments and 10 – Transmission segments of Leased Lines (LL).

The final document for the Broadband market (Market 8) analysis was published on 1 August 2014. For the first time the Agency imposed a regulation for the access to broadband services over optical access network. All existing obligations for the copper network remain unchanged.

New regulated services are: Bit Stream Access over Next Generation Access, Virtual Unbundled Local Access, Service Level Agreement, Service Level Guaranty (BSA over NGA, VULA, SLA, SLG), Equivalence of inputs and additional parameters for efficient monitoring of provisioning wholesale access are imposed (KPIs, service level agreements and guarantees). No cost orientation obligation for optic products, only margin squeeze tests will be implemented.

On 30 December 2014 the Agency adopted a Decision for designation of MKT for SMP on Market 8 - Access to broadband services based on copper pair and broadband services fully or partly based on optic including the following services:

- Point of access on IP level
- Point of access on Ethernet level, Virtual unbundling local access
- Bitstream access which MKT provides for its own needs based partly or fully on optics

The third analysis of Market 9 and 10 – Transmission and termination segments of Leased Lines (LL) and Market 7 – Physical access to network infrastructure was finished in November 2014. As a result of the analysis, on Market 9

and 10 the transmission segments of the LL were deregulated and on Market 7 regulations of fibre-based products of MKT were included. On 30 December 2014 the Agency adopted a Decision for designation of MKT for SMP on Market 9 – Terminating segments of leased lines in the geographical area of the Republic of Macedonia.

The final document on the second market analysis on the relevant retail Market 1 – Access to public telephone networks at a fixed location for residential and business customers including all types of networks- technology neutral was published on 7 October 2014. The Agency regulated fibre-based products of MKT with margin squeeze tests which are already implemented for copper-based product regulation. The decision for designation of MKT for SMP on Market 1 was adopted on 30 December 2014.

### Regulation of Mobile Business

In July 2015, Competition Authority approved VIP and ONE merger of their business in Macedonia consisted of mobile, fixed, internet and transmission of audiovisual content services, in the new entity ONE.Vip. The merger was approved with following conditions:

- Obligation to enable access to applicants as Full MVNO on a wholesale basis
- Obligation to enable access to applicants as MVNO (resale) on a wholesale basis
- Obligation to offer the spectrum for sale
- Obligation to offer Redundant locations for sale
- Obligation to offer the current "Boom TV packages" of ONE on the basis of a resale

After the merger between MKT and TMMK all radiofrequency licenses awarded and used by TMMK were transferred to MKT. 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 2018 (10 years)
- 2 x 10 MHz in the 1800 MHz band, validity period: 9 June 2009 9 June 2019 (10 years)
- 2 x 15 MHz 2100 MHz band, validity period: 17 December 2008 17 December 2018 (10 years)
- 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)

Based on a company decision, in 2014 TMMK returned 5 MHz of the spectrum it owned in the 2100 MHz band. The 5 MHz spectrum assigned for Time Division Duplex (TDD) operation mode had not been used since the assignment in 2008 and was not planned to be used in the future either.

The competitor ONE.Vip 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
- 2 x 10 MHz in the 800 MHz band
- 2 x 15 MHz in the 1800 MHz band
- 2 x 10 MHz in the 900 MHz band
- 2 x 10 MHz in the 1800 MHz band
- 2 x 10 MHz in the 800 MHz band
- 2 x 15 MHz in the 1800 MHz band

Thus, the spectrum for public mobile communications in the 800 MHz, 900 MHz and 1800 MHz bands is fully assigned to the 2 mobile operators. There is a remaining available spectrum in the 2100 MHz band, while the 2600 MHz band is not assigned for public mobile services at all.

The retail services provided by the mobile network operators in Macedonia are currently not subject to price regulation.

Since 2007, TMMK and ONE have been designated with SMP status on the wholesale market for voice call termination services in mobile communications networks, whereby several obligations were imposed on them, such as: interconnection and access, non-discrimination in interconnection and access, accounting separation and price

control and cost accounting.

TMMK's first RIO was approved by the Agency in July 2008. Based on the second round analysis of wholesale call termination services in public mobile communications networks on 30 July 2010, TMMK received a Decision for changing the RIO by which the Mobile Termination Rate (MTR) was defined with a glide path decrease in a timeframe of four years (until 2013). In September 2011, the price for the national MTR was decreased to 3.1 MKD/min. and was planned to continue decreasing by 0.1 MKD/min. each year, down to 2.9 MKD/min. by September 2013. At the same time, the Agency regulated the MTRs for ONE and VIP (VIP was designated with SMP on this market in the second round analysis) with a four year glide path. In May 2012, the Agency made a revision of the calculation of MTR of all three mobile operators and imposed new glide path. As from 1 June 2012 until 31 August 2013, TMMK's MTRs were set at 3.0 MKD/min., while ONE's and VIP's MTRs were set at 4.0 MKD/min. MTR symmetry to 1.2 MKD/min. calculated using Bottom-up LRIC+ were applied from 1 November 2013 (based on a new Agency Decision adopted in August 2013), and a further decrease to 0.9 MKD/min. calculated using Bottom-up pure LRIC was applied on 1 September 2014.

After the first analysis of the wholesale SMS termination market in 2011, all 3 mobile operators were designated with SMP status. In 2013 the Agency conducted a second round analysis on this market and imposed new regulated prices – symmetrical for all 3 operators and 75% lower than the previous ones. The prices became effective on 1 January 2014.

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). TMMK 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.

### Audiovisual and Media Regulation

In May 2013, the Macedonian Parliament adopted a Law on Film Production, amended in January 2014, imposing obligations for payment of annual fee by all cable operators (retransmission) and operators that provide Internet services. The fees are defined as follows:

- 1% from the revenue of cable operators which are operating with TV broadcasting program services
- 1 % from the revenue of the entities that provide Internet services
- 2% from the revenue of the legal entities which are operating in the distribution, rental and sale of movies

The above-mentioned fees are applicable as of 2014, calculated on the level of the related revenues from the previous year.

The Law on Audio and Audiovisual Media Services entered into force on 3 January 2014. The Agency for Audio and Audiovisual Media Services, the legal successor of the Broadcasting Council, has the right and obligation to conduct program supervision of the program packages that are retransmitted by the operators of public electronic communications networks.

MKT, as a provider of audio or audiovisual media service on demand, has editorial responsibility regarding the selection or the content of the service. It is obliged to keep the audiovisual media service on demand unchanged at least 30 days after its being made available to the users.

Additional obligations imposed by the law and affecting MKT are:

- If a program is subtitled in a language different from the language used originally when the program was produced, it has to be subtitled in Macedonian or in the language of the community that is not a majority, but is spoken by at least 20% of the population in the Republic of Macedonia, except for teleshopping and advertising programs.
- Annual fee for the surveillance carried out by the Agency for Audio and Audiovisual Media, in the amount

- of 0.5% of the total revenues earned by the retransmission and 0.5% of the total revenues earned for ondemand activity, has to be paid to the Agency for Audio and Audiovisual Media.
- Local program services can be transmitted within their service area and public broadcasting services funded by the broadcasting fee have to be transmitted and free of charge.
- In its subscription agreements, MKT has to specify the list of program services which are currently retransmitting in its program package.
- The internal television channel output, i.e. the signal of that channel has to be recorded fully and without interruption and the recording has to be available at least 30 days after broadcasting.
- MKT is obliged to keep the catalogue and the content of the audiovisual media service on demand for at least 30 days after its being made available to the users.
- Obligation for promotion of European audiovisual works.
- MKT is obliged to deliver the output signal continuously to the location for collecting signals for monitoring purposes.

## Macedonia and the European Union

The Republic of Macedonia signed the Stabilization and Association Agreement with the EU and its Member States on 9 April 2001. The Macedonian Parliament ratified the Agreement on 12 April 2001, reaffirming the strategic interest and the political commitment to the integration with the EU. The Stabilization and Association Agreement was ratified and it has been in force since 1 April 2004.

On 17 December 2005, the EU decided to grant the Republic of Macedonia an EU candidate status.

Following the candidate status, the EU must set a date for the start of the negotiations regarding the full accession, encompassing all aspects of the EU membership, including trade, environment, competition and health. Macedonia, as a candidate country, should harmonize its legislation with the EU.

On 14 October 2009, the European Commission issued the 2009 Progress Report. Macedonia received a recommendation from the European Commission for the opening of the accession negotiations. The country made significant progress and substantially addressed the key reform priorities, known as eight plus one benchmarks.

Based on the Progress Report issued in November 2015, there is a good level of preparation in the field of information society and media. In the past year, some progress was made. In the coming year, the country should in particular:

- ensure proper implementation of the newly adopted legislation on electronic communications and audiovisual media services;
- strengthen the independence and capacity of the audiovisual media regulator and the public service broadcaster.

The EU supports the good functioning of the internal market for electronic communications, electronic commerce and audio-visual services. The rules protect consumers and support universal availability of modern services.

#### Competition

The competition in the telecommunications business is well-developed in almost all segments. Several main players shape the telecommunications market in Macedonia.

Significant changes on the market and movements for market consolidation marked the whole year 2015.

On 2 October 2015, Vip Operator, a subsidiary of Telekom Austria Group, was merged with Telekom Slovenije's subsidiary ONE, both operating in the Republic of Macedonia. Telekom Austria Group holds 55% and has sole control over the newly created entity ONE.Vip, whereas Telekom Slovenije Group holds 45%. Furthermore, the share purchase agreement also includes call and put options for the exit of Telekom Slovenije Group within three years of the closing of the merger.

Previously, in the first half of 2015, Telekom Austria Group acquired 100% of eight cable operators in Macedonia through its subsidiary Blizoo, which became part of Telekom Austria in July 2014.

The fourth mobile virtual network operator (MVNO) Albafone ceased the operations in June 2015.

Balkan lower roaming fees were agreed by the regulators of Macedonia, Serbia, Montenegro and Bosnia and Hercegovina. New, lower roaming fees were applied by all three mobile operators as of July 2015.

Telekom Slovenia was offering various services under the brand name ONE: mobile and fixed voice, mobile and fixed broadband internet and TV.

The entry fees of ONE post-paid mobile offers were set at a very aggressive low level until November 2015, when they launched new portfolio and removed the very price aggressive offers. In prepaid they continued with their lowest priced offer on the market under the Dzabest brand. In 2015 ONE's market share was stable, 25.71% (source: Report for electronic communications development Q2 2015, the Agency).

In the fixed segment, ONE.Vip offers low price triple play bundles (fix voice/internet/TV). However, customer base in all fixed line services shows decrease in 2015 (source: Report for electronic communications development Q2 2015, the Agency).

The mobile operator VIP entered the fixed market by acquiring the CaTV operator Blizoo in July 2014. Further, they acquired eight regional CaTV operators in 2015. No changes in the strategy or marketing were made in the period after the acquisition. Regional operators continued operation under their former brands until the end of the year 2015.

In the mobile segment VIP continued to increase the contract ratio, which reached 54.2% in Q3 2015 (source: VIP Q3 2015 report). The pricing policy remained stable during whole 2015, with increased internet traffic during campaign periods. They have maintained a stable market share to 27.38% in Q2 2015 (source: Report for electronic communications development Q2 2015 the Agency).

VIP launched FMC products in the beginning of 2015, consisting of VIP mobile services and Blizoo fixed line services.

Two mobile operators include 4G/LTE products in their offers.

The cable operators also have a significant role in the telecommunications market and, as providers of cable television as their main service they are well-established on the Macedonian market. Most of them offer internet broadband services and fixed voice services. Telekabel and Blizoo (part of VIP as of August 2014, and enlarged with the 8 regional operators acquired in 2015) are the biggest cable providers among over 70 active cable operators. Blizoo offers Hybrid Fibre Coaxial (HFC) services – optic near your home with very high data rate for internet services and digital television.

The product portfolio of all operators is driven by bundle products. The cable operators are bundling their TV offer with internet and fixed voice services. The fixed voice service of the cable operators is usually perceived as a value added service as the cable operators are charging low access fee or presenting the fixed voice service as free of charge and including also free traffic in their own network bundled in the offer. As the overall market is price sensitive, the price perception plays a major role in the customers' choice and thus the cable operators' offers are seen as more competitive than MKT's in terms of prices.

The trend of NP continued to increase in 2015, for both mobile and fixed numbers. By the end of Q2 2015 there were 161,759 mobile and 158,346 fixed ported numbers in total (source: Report for electronic communications development Q2 2015, the Agency).

As at 31 December 2015 MKT has a retail fixed voice market share of 61.5%, retail fixed broadband internet market share of 43% and TV market share of 24% (source: internal best estimates). In the second quarter of 2015 the market share of MKT was 46.9% (source: Report for electronic communications development Q2 2015, the Agency). The Agency uses the market share calculation method based on the total number of active SIM cards which were used in the previous three months.

#### Marketing and Sales

Telekom as single brand was introduced following the legal merger of the two companies MKT and TMMK into one entity. Under the Telekom brand, MKT offered its whole service portfolio. The establishment of a single Telekom brand announces the introduction of new product concept and approach, fixed and mobile convergence.

MKT was focused on the retention of the existing customers and the up-sales to bundled converged services, as well as on the acquiring of new customers on the fixed and mobile market, for both residential and business segment. As year of service, in 2015 several activities for continuous improvement of customer experience were conducted.

Major shift in approach towards integrated offers was done in second half of the year. Magenta 1 was introduced as bundled converged fixed-mobile product both in residential and business segment.

The key focus this year was to offer fixed and mobile convergent services that will fully capture the needs of the whole family and household. Thus, new Magenta 1 product portfolio was launched, consisting of 2 post-paid SIMs, fixed voice, Internet and MaxTV. The key characteristic of Magenta 1 is that it offers seamless connectivity among networks, providing unlimited communication, fastest internet and best TV on every device (Smartphone, PC, TV), anywhere and at any time. In order to meet Magenta 1 customer needs, the Family budget concept was introduced. It gives the opportunity for the household to receive a budget that can be used for purchasing handsets, tablets and TV sets for the family with flexibility in terms of time and usage. Magenta 1 provides the best customer experience from the moment of getting information about the product until its final realization.

Customer retention and satisfaction as a main strategic direction continued as well in 2015. Marketing activities based on customer needs and habits are performed in order to build strong customer relations and provide the best customer experience. Value based approach was introduced, focusing on ensuring customer service excellence for the most valuable customers.

Therefore, several post-paid tariff promotions were introduced and communicated on the market, providing more value by enrichment with additional data in the tariff and other benefits. Higher customer satisfaction was achieved by offering 4G mobile network access for the mid-end post-paid tariff. Loop – digital album and Mobile Max TV, which are both unique innovations on the Macedonian telecommunication market, were offered as benefit in the tariffs.

For fix customers several novelties and promotions were introduced. Exclusive content like movie TV channels M1 and M1 Gold, VoD service Pickbox, also the most famous TV channels from Balkan region were introduced for Max TV customers. Sport content continued to be key differentiator from competition.MKT continues to care and award the customer's loyalty through the biggest Loyalty program Moj Klub.

In the prepaid segment, the focus was on sustaining the base of active customers via several promotions and offers. A new tariff Cool+ was launched, with price characteristics that provide possibility for longer talks by the prepaid customers. Additionally, the focus remained on offers that stimulate voucher reloads, such as top-up based winning games and bonus traffic upon top up promotions. Special attention was put to seasonal visitors during the summer period.

MKT has launched Magenta 1 Business in October 2015 as unique offer that enhance our position ahead the competitors. Magenta 1 Business product as a continuation of Business 360 product, is not just an integrated Business solution but represents a fully new offer concept, created and adjusted for the dynamic trends. It includes fix and mobile services with unlimited calls to all national networks, LTE in all mobile options, broadband connectivity, superior Cloud services and possibility to buy Max TV service as soft bundle option. The product gives

the Customer a unique possibility to procure integrated services and to build up individual offer according to their needs.

New Mobile Business portfolio was launched in October 2015 offering higher data volumes and LTE access in all tariff options. For the first time, higher subscriptions tariffs were enriched with free bundled roaming minutes for some Balkan countries.

MKT repositioned the complete broadband portfolio for Business customers (Office Complete, MaxADSL Pro & MaxOptic Pro). The main enhancements were in terms of portfolio simplification and enriching the package content with more favourable pricing.

Managed security and cyber security are the utmost trends in our industry. MKT is active player on this market not only as custom solution provider, but also when robust coverage on the topic is need. Second year in a row MKT is providing cloud security solution for all state schools and dormitories.

MKT is highly committed to bootstrap digital society, by enabling digital players to lean on our platform worry free. The offering on Hosting solutions (Web hosting and Data centre hosting) has been improved in order to be affordable simplified and forthcoming for every segment.

With competitors rolling out high-speed networks, mainly based on DOCSIS 3.0, the continued rollout of FTTH is of strategic importance for MKT. In 2015, MKT continued with FTTH rollout and monetization of the FTTH network, through the up-sell, cross-sell and acquisition of new customers. MKT ended the year covering over 20% of the households in the country. Several campaigns were introduced to increase the FTTH customer base, by focusing on high-speed Internet, TV and convergent services meeting the needs of the whole family.

Several communication campaigns were launched in 2015 to accompany the movements in the portfolios and to increase the awareness of the benefits provided with the services/ products as well as building in the image of best Telekom operator.

In 2015 "the Best" story began with campaign for the best network supported by the results from marketing research for overall perception.

The introduction of Telekom brand happened in September 2015, after the ceasing off the two product brands, T-Mobile and T-Home. Since then, all communication was run from one brand towards the entire customer base. In order to strongly position the single brand, big image campaign was rolled out for introduction of the new and invigorated brand Telekom and to announce the new great things to come for the customers, with focus put on offering integrated services from one place. For the purposes better brand positioning and building strong relation with the newly introduced brand, customer engagement activities were conducted, among which a big public event hosted by MKT in the centre of the capital.

Integrated marketing communication strategy using available and adequate channels (TV, radio, print, out-of-home advertising) was used to achieve high-impact reach to all target groups. However, in 2015 the bigger focus and exploit was on digital communication as fast developing communication trend with targeted digital campaigns to generate higher reach. Having the focus on digital, social media was the pushed channel for interaction and engagement with the customers by delivering relevant and authentic content in line with the brand promise "Life is for sharing". This approach aims at enhancing brand likeability and acceptance, and strengthening the relation with brand in the era of digital communication.

In the business sector, the communication focus was set on strengthening the image of MKT as an innovative operator offering integrated communication services combining communication and innovative services in one package and reliable partner for building long-term partnership.

MKT has developed different sales channels in order to serve the customers from different segments. Direct sales channels comprise: own retail network, telesales, on-line sales channel, technicians, direct sales agents, account managers (for Institutional, Key Accounts and Large Accounts) and a multichannel logic in the sales and service of the SOHO (Small-Office-Home-Office) segment. The indirect sales channel is based on indirect master dealers with

their own network of shops, partner shops and kiosks. An external company engaged in 2014 continues with telesales activities (proactive retention and loyalty activities were also introduced).

The main sales channels are the MKT's shops. There are 36 shops as at 31 December 2015. In 2015, the own shop network was refreshed with refurbishing of 16 shops with implementation of partner stages. All shops are offering the complete mobile and fix product portfolio under the same conditions and with the same customer service level. As of 21 September 2015 the shops are formally functioning as shops of one company – MKT. Since 2015 was the year of service in MKT, all the employees in the shops were focused on improvement of the service in the shops. In that direction, waiting time was halved from the beginning of 2015. Starting from 21 September 2015, main sales focus was Magenta 1 and until the end of 2015 10,000 Magenta 1 packages were sold. The biggest portion of Magenta 1 sales transactions were done over shops.

Partners' presentation in own shops continues in 2015 with implementation of new content on m-Walls and Window Digits. New partners stages in the refurbished shops were used for the same purpose.

Sales activities that include home delivery via telesales were used in 2015 for retention of fixed and mobile subscribers.

E-business has provided new, consolidated web site for all fix and mobile customers. We further developed new features for improvement of online sales channel and increased transactions through web shop, as well as introduced Smartphone Help mobile application for our Android users. We introduced Live chat and offered better way to help our customers through direct contact with Customer support personnel on our website.

Another channel of the distribution network of MKT is the dealers' cooperation. As at 31 December 2015, the network consisted of 5 master dealers with 61 shops as MKT partners. The majority of the MKT master dealers' shops are offering the full MKT portfolio. In more than 40 master dealer's shops bill payment was introduced in 2015. In addition, prepaid vouchers are also available in 4,015 kiosks. More than 2,000 kiosks are performing top-up over MKT's processing centre.

A part of the MKT product portfolio (e.g. telephone sets, TV sets, computers, printers, network equipment and home appliances) is available to the customers using payment by instalments through their telephone bill.

#### Research and Development

Competitive pressure in conjunction with saturated Telco market, complexity of business environment with multiple and more sophisticated customer segments, multiple vendors and complex service offerings, fast changes in the technology with new technology paradigm targeting for 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.

In order to keep sustainable business and major revenue streams in very complex telecommunication environment, as well as proactively influence to market trends with new business opportunities, MKT is aiming to keep technology leadership position and ensure growth through service improvement and innovation by continuous development of its infrastructure.

Development of infrastructure and investment in Technology should encompass the following objectives/trends: broadband performance, integrated service delivery platforms, efficiency and quality leadership, self-service enablers, cloud concept and "virtual" infrastructure, cost efficiency, flexibility and responsiveness – reduced time-to-market, as well as competence development.

During 2015, we have made significant steps towards achievement of our goals with development of telecommunication network, service platforms and supporting systems.

In order to ensure high quality Broad Band (BB) performance, BB market and technology leadership, MKT is continuously investing in fix and mobile access development. At the end of 2015, more than 121,000 homes passed

installed capacity or 21% households coverage with FTTH was reached. Significant improvement was also done in LTE rollout, reaching 45% territory coverage and 70% population coverage.

Alongside extensive mobile BB access rollout, during 2015, high focus was set on the network quality, which is confirmed by P3 "Best in Test" certificate which represents an internationally recognized acknowledgement for quality of mobile network, as well as well as by the National Report for Network Quality Parameters prepared by the Agency. Demonstration of technology leadership with fastest LTE network was presented with LTE Advanced Pilot. The maximum achieved throughput is 220 Mbit/s out of 225 Mbit/s theoretical maximum.

The growth of BB access and continuous traffic increase are supported with further development of IP Core and transport network as cornerstone of all services. In 2015, a "Strategic Program for IP Core & Transport Network Modernization" was started, which includes modernization, reorganization and extension of all IP Core Network elements, Transport and Aggregation systems. It consists of five domains:

- Terastream Core Network (Multiprotocol Label Switching Backbone, Internet Gateway Switches)
- NG Transport Network (Dense Wavelength Division Multiplexing)
- Internet Broadband Gateway (Broadband Remote Access Server)
- Unified Service Platform Network (Network infrastructure in mobile network and IP Multimedia Subsystem (IMS) backbone network, IPTV Switches)
- HA Aggregation Network (IP Routers/Switches, Coarse Wavelength Division Multiplexing network)

The project will continue in the next midterm period.

During 2015, Google Global Cache solution was implemented in MKT that will provide optimization of internet traffic on the International links and therefore assure Internet service quality and links cost optimization.

The increased traffic is also supported with the modernization of the backhole solutions for mobile base stations trough fibre connections.

In terms of Service Platforms, during 2015, full IMS Geo redundancy solution was implemented and upgrade of existing IPTV Platform started in the second half of the year. Beside this, new Automatic Device Configuration solution is implemented and Integration of Policy and Charging Rules Function (PCRF) System with Online Charging System is done which allows implementation of different packages for mobile prepaid customers. Also, during 2015 Starhome platform for Roaming Steering and Intelligent Border Roaming (IBR) services was fully modernized.

In order to provide higher efficiency, better flexibility and fast response in the provisioning, fault clearance and other processes in technology domain, we continued with further development of strategic Operations Support Systems (OSS) enablers. During 2015 we worked on a several projects in this domain. Some of them are: New Generation OSS, Broad Band Service Assurance (BBSA), Trouble Ticketing (TT) extension and pilot for Geo Location System. Finalization of the projects is expected next year.

Based on the most advanced network infrastructure and service platforms, MKT continues with its determination and its work to be innovation leader on the market. This year, we made a great success in the area of "Smart Cities", by successful implementation of the Automatic vehicle location and Smart ticketing system for the public transport providers in the City of Skopje. Apart of the benefits that this system brings to the public transport providers, we strongly believe that it will upgrade the customer experience and quality of service in the public transport, leading to the increase of its use.

Further, leveraging on the best network technologies, being the cornerstone for the managed services, we are focused on directing the customer towards using fully managed services through our connectivity. Following our strong determination on this, this year we enriched our managed service portfolio with new product - Cisco Meraki, enabling customers for building up its own corporate network infrastructure without initial investments.

Under the motto - INNOVATION SYNERGIES - WIN WITH PARTNERS, we designed partnership eco-system for both SI and public cloud areas, covering:

- Technology partnerships synergize with DT group membership in Cisco, EMC, Microsoft, Citrix, Oracle etc.
- DELIVERY Partnership with local and international companies for large scale System Integration and public cloud products

As a result of such technology partnerships, this year we became Cisco Gold certified partner, which is proof for our competences in the areas of enterprise networks, collaborations, network securities and Data Centre technologies.

Concerning the DELIVERY partnership, we launched several Cloud products on the markets, offering new tools and opportunities to our customers, for enhancing of their way of doing business.

Besides partnering with existing players in some areas, internal growth and delivery by own resources are our further focus as well.

In addition, we need to drive full force exploring of new markets and possibilities for growth and development, in the field of finance, health, agriculture, smart metering, connected home etc.

## Information technology

Following the decision for legal merge of MKT and TMMK, we have implemented the Common SAP solution based on a "single legal entity" concept i.e. one company code in SAP system in line with legal accession of the TMMK to MKT. Consolidated SAP, ensured implementation of legal and tax requirements related to the legal accession of the TMMK to MKT and alignment of master data and business process on SAP side.

In 2015 we started a project for Consolidation of the MKT and TMMK Data Warehouse and Business Intelligence (DWH/BI) systems in one system. The new system will strengthen the company's possibilities for advanced analytics and data driven decisions to respond quickly to market changes, and it will also allow a reduction of the operating costs through achieving synergies in the operations of the existing two solutions.

A project for replacement of existing Interactive Voice Response (IVR) and Call Centre Solutions, with new consolidated IVR and Call Centre system that will bring together the core capabilities of customer service, collections, blended interaction and workforce optimization in a unified enterprise-class solution stack was started in 2015. The new system will dynamically adjust to business conditions, improves productivity and increases customer satisfaction by providing a rich, consistent customer experience across multiple channels.

In order to sustain as technology leader on the ICT market and to be ready for new market challenges, MKT is continuously working on transformation, focusing on converged services and improvement of customer experience. As part of this strategy, in the process of implementation is consolidated solution for OSS Fulfilment, Inventory, OSP and Workforce based on Net Cracker technology planned to be completed by mid of 2016. Following the ICT strategy, we have developed and implemented the cloud product named HR4Me, for managing Human Resources, as part of B2B portfolio. This solution is extending the offering in the B2B segment for automation of customer's ERP processed.

Project for redesign of the existing Customer Care system was started that will bring flexibility and bigger potential for serving customer needs in the front end points. Customer creation, Customer 360 degrees overview, product definition, order capture and order processing will be performed based on processes standardised for the Telecom world industries. Fix and mobile convergence regarding CRM aspects will bring new possibilities for the business.

Consolidation of the two Fraud Management systems after the legal merge (one for fix customers and one for mobile customers) was initiated. The new instance of the Fraud Management system is implemented. In 2016 the

two customer databases will be merged, as well as the business rules. After finishing the project there will be only one Fraud Management system in MKT IT infrastructure.

Project for consolidation of the business critical revenue management systems Net Cracker's Raiting&Billing Manager 5.3 and Ericson's BSCS iX R2 in one billing system is also ongoing in 2015. The purpose is to have all lines of business consolidated in a single billing system with the current functionality. Expected benefits are:

- OPEX reduction: Support contract with one supplier will be terminated. OPEX related to database, hardware etc., can be reduced.
- Utilization of IT resources will be much better for operations and development activities.
- Future CAPEX reduction for upgrades of the systems, because only one system will be in production.
- Convergent customer database gives opportunities for new bundle services (fix-mobile convergence).
- The IT security standards have been improved by implementing several security relevant systems that decrease the operational risks and improve customer and personal data protection.

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