



Cyfrowy Polsat IR Newsletter

17 – 31 December 2018



N E T I A

Rzeczpospolita

17 December 2018

More and more mobile shopaholics. Poland is the leader

by Michał Duszczyk

MasterCard has published a report on the popularity of shopping in the Internet using smartphones. According to the authors, such form of shopping is increasingly popular in Poland, with one out ten respondents declaring that they buy online using a smartphone only.

Nearly one out of every two (45%) Polish e-consumers shops mobile once a week or more often. It is only the Germans and the British who are ahead of us in this category (48%).

According to consumers, one of major benefits of "one-click" payments is their convenience and speed. As indicated by the survey, over 1.8 million payment cards have been saved on mobile phones in Poland. Mobile proximity payments are considered convenient by 36% of card holders in Poland, with 39% of them considering such payments as fast and 37% considering them to be safe.

Telko.in

19 December 2018

Investments into the gigabit network require stable environment

by Ł. D.

Polish Chamber of Electronic Communication (PIKE) has just published a report entitled "Future of investments in gigabit networks," where it draws attention to the lack, in Poland, of the state-of-the-art, fixed-line telecommunication infrastructure whose roll-out requires major capital expenditures.

According to the report's authors, the current restrictive regulations could discourage investors from developing the networks and the infrastructure, which could in turn reduce Poland's chances of accomplishing the targets of the Digital Agenda for Europe 2025, whose assumptions include assurance of 200 Mbps downlink data transfer rates for all households in the European Union during the coming six years.

The authors also indicate that Poland is characterized by very high saturation of mobile Internet access services, with relatively low saturation of fixed-line access.

The report's authors also raise the issue of necessity of assuring a stable regulatory environment and of adjusting the regulatory measures relative to a player's size and market position.

The report refers to the draft decisions regulating access to the technical ductwork and passive infrastructure inside buildings, that the Office of Electronic Communications has prepared. The proposed decisions are protested against by the CATV industry. According to the report's authors, the contemplated regulation of CATV networks is unfavorable as it will discourage operators from investing.

Telko.in
20 December 2018

Cyfrowy Polsat Group's LTE800 network has gone out

by Tomasz Świderek

According to the information published by Telko portal, on 18 December 2018 Cyfrowy Polsat Group shut down last of its LTE network transceivers operating in the 800 MHz band. Disappearance of the signal from the LTE 800 network was registered by the maniacs of mobile network monitoring, the so-called BTS Hunters.

Cyfrowy Polsat Group is in the process of refarming its 900 MHz band which it earlier used for 2G and 3G services and which will now be used also for offering the LTE services. At present LTE900 service is available from over 5,600 base stations.

Bankier.pl
27 December 2018

Play terminated the National Roaming Agreement with Polkomtel

By epo/ gor/

In its press release, Play informed about the termination of the National Roaming Agreement with Polkomtel, subject to 12-month termination notice.

The operator explains its decision by a policy of its own network's development. Furthermore, the telecom's needs with respect to national roaming in the years 2020 – 2021 will be secured by the agreements concluded with T-Mobile and Orange Polska.

Press release

21 December 2018

Cyfrowy Polsat Group is implementing LTE TDD in the 2600 MHz frequency band

Cyfrowy Polsat Group is the first operator in Poland to implement, in its LTE Plus Advanced network, the TDD technology which operates in the 2600 MHz frequency band. This means that the company will offer Internet access to its customers while using a total of 95 MHz of radio spectrum in various LTE carrier frequencies. The implementation of the TDD technology is primarily intended to increase network capacity in specific locations as well as to offer even better Internet access to customers. Several dozen LTE TDD stations are currently on-air all over the country.

TDD (Time Division Duplex) and FDD (Frequency Division Duplex) are the two different methods of implementation of LTE data transmission. The difference consists in the way the spectrum is used for transmitting data to and from a customer: the FDD technology uses two, permanently separated, parts of the bandwidth to transmit data in both directions simultaneously, while the TDD technology uses one, common chunk of the bandwidth for alternating, in time, the transmission of the data in the uplink and downlink directions. Also, slightly different parts of the frequency bands are used for the needs of the TDD and FDD technologies, which has enabled Cyfrowy Polsat Group to offer access to the Internet based on the 60 MHz of spectrum that it holds in the 2600 MHz band (while using the 20 MHz FDD carrier and the 2x20 MHz TDD carriers). Similarly as in the case of other LTE carrier frequencies, the new resources can be also aggregated with other FDD carriers.

Just like any other innovation, the implementation of the TDD technology in LTE Plus Advanced network requires relevant hardware that will support the technology on the customer's end. And here comes a good news for the customers using the ODU-IDU 300 Home Internet offering – the devices they use also support the LTE TDD technology seamlessly! Also many smartphone users will be able to enjoy the new technology without a problem since the growing trend among leading hardware manufacturers is to add the ability to support the LTE TDD 2600 MHz technology to the devices they offer.

Cyfrowy Polsat shares



| Data | Maximum price (PLN) | Minimum price (PLN) | Closing price (PLN) | Change (%) | Turnover (mPLN) |
|------------|---------------------|---------------------|---------------------|------------|-----------------|
| 2018-12-17 | 22.98 | 22.54 | 22.68 | -0.44 | 6.57 |
| 2018-12-18 | 23.14 | 22.64 | 23.08 | 1.76 | 15.29 |
| 2018-12-19 | 23.80 | 23.06 | 23.50 | 1.82 | 24.32 |
| 2018-12-20 | 23.60 | 23.06 | 23.46 | -0.17 | 12.60 |
| 2018-12-21 | 23.46 | 22.16 | 22.64 | -3.50 | 24.51 |
| 2018-12-24 | - | - | - | - | - |
| 2018-12-25 | - | - | - | - | - |
| 2018-12-26 | - | - | - | - | - |
| 2018-12-27 | 22.90 | 22.28 | 22.42 | -0.97 | 4.27 |
| 2018-12-28 | 22.86 | 22.52 | 22.56 | 0.00 | 3.40 |
| 2018-12-31 | - | - | - | - | - |



Investor's calendar



1 – 3 April 2018

Raiffeisen Centrobank's Investor Conference, Zürs 2019

