Warsaw, December 17, 2021

Konrad Księżopolski, Head of Research, Haitong Bank

Haitong Bank in a report from December 14 (08:00) updates recommendations for Polish TMT companies:

- **BUY** for R22 (FV PLN 73.1)
- **BUY** for Ten Square Games (FV PLN 458)
- **BUY** for LiveChat (FV PLN 150)
- **BUY** for Vercom (FV PLN 61.6)
- **BUY** for Orange Polska (FV PLN 8.8)
- **NEUTRAL** for Wirtualna Polska (FV PLN 16.6)
- **NEUTRAL** for Asseco Poland (FV PLN 92.7)
- **NEUTRAL** for Comarch (FV PLN 233)
- **NEUTRAL** for Cyfrowy Polsat (FV PLN 34.9)

**Valuation Methodology**

**CYFROWY POLSAT** - We value Cyfrowy Polsat using a DCF and peer multiples. Using a DCF we arrive at PLN 36.1/sh while our peer valuation yields PLN 33.8/sh. Our final fair value is PLN 34.9/sh, implying 0% potential upside.

**ORANGE POLSKA** - We value Orange Polska using a DCF and peer multiples where DCF and peers have a 50% weight each. As Orange Polska does not pay dividends, we stopped valuing the stock using the DDM method. Using a DCF, we derive a fair value of PLN 8.9 and using peers of PLN 8.7. Combined, our fair value is PLN 8.8, implying 12% upside potential to the current share price.

**ASSECO POLAND** - We value Asseco Poland using two methods: DCF and peer multiples. Our final fair value is an average of these two methods (each with a 50% weighting). Using DCF we arrive at PLN 86.7/sh while our peer valuation yields PLN 98.7/sh. Our final fair value is PLN 92.7/sh, implying 8% upside.

**COMARCH** - We value Comarch using two methods: DCF and peer multiples. Our final fair value is an average of these two methods (each with a 50% weighting). Using DCF we arrive at PLN 218/sh while our peer valuation yields PLN 247/sh. Our final fair value is PLN 233/sh, implying 8% potential upside.

**LIVE CHAT** – We value Live Chat using a DCF while we show peers for illustrative purposes. Using a DCF we arrive at PLN 150/sh, implying 25% potential upside.

**R22** – We value R22 Group using two methods: DCF (Sum of the Parts), EV/EBITDA where each method has an equal weight of 50%. Using the EV/EBITDA method we arrive at PLN 60.4/sh. Using DCF SOTP method we arrive at PLN 85.9/sh. We value R22 Group at PLN 1,123m or PLN 73.1/share, which implies 42% upside potential.

**VERCOM** – We value Vercom using three methods: DCF, EV/EBITDA and P/E. The DCF valuation method points to PLN 64/sh; the P/E to PLN 55/sh while EV/EBITDA points to PLN 65.9/sh. Our final value is PLN 61.6/sh which gives 28% upside potential.

**TEN SQUARE GAMES** – We value TSG using three valuation methods: DCF, EV/EBIT and P/E where each method has an equal weight. Using DCF, we value TSG at PLN 551/share, P/E at PLN 498/share and using EV/EBIT at PLN 407/share. Our final fair value is PLN 486/share and implies 38% upside.

**WIRTUALNA POLSKA** - We value Wirtualna Polska using two valuation methods: DCF and peer valuation. The final fair value is an average of those two methods where each method has an equal 50% stake. Under the DCF we derive a fair value of PLN 146.1/sh while using the peer valuation we derive PLN 167.1/sh. Our final value points to PLN 156.6/sh, which gives 8% upside potential.
Risks to Fair Value

CYFROWY POLSAT

**Downside risks:**
- Weaker than expected delivery on capex and EBITDA synergies on Netia and Interia.pl acquisition.
- Higher than expected increase in costs to Cellnex Value dilutive acquisitions
- Weaker than expected monetization of UEFA TV content.
- Weaker than expected performance of SmartDOM offer.
- Weaker than expected net adds due to increasing market competition
- ARPU and margin dilution from bundling offer and price pressure on the market.
- Weaker than expected performance of the TV ad market.
- Erosion of Polsat TV audience share.
- Weaker than expected macro situation that could cut TV ad budgets.

**Upside risks:**
- Higher than expected growth of CPS client base and ARPU,
- Higher than expected growth of TV ad market,
- Unexpected value accretive M&As

ORANGE POLSKA

Weak net adds in FTTx segment as a result of increased competition.
Price war on convergent market following Play-UPC Polska deal
Price pressure in mobile broadband offer.
Price pressure in B2B market.
Competitive offer from CableTV and CPS/NET putting pressure on OPL’s client base in dense areas.
ARPU erosion in the mobile voice segment.
Acceleration of net adds erosion in fixed-voice and fixed-data.
Stronger than expected impact on Opex from rising costs like eg. Energy

ASSECO POLAND

**Downside risks:**
- Fierce competition in IT contracts.
- Global recession and cut in IT budgets
- Salary pressure from low unemployment and the accumulation of IT contracts in the new EU budget.
- Unexpected fines and provisions on ongoing contracts.
- Delay in IT spending related to the new EU budget.
- A lower than expected growth rate at Formula Systems.
- Visibly lower than expected dividend forecasts.
- Cash flow deterioration.

**Upside risks:**
- Higher than expected backlog dynamic especially in margin accretive public segment
- Value accretive acquisitions
- Costs savings
- Higher than expected dividends

COMARCH

Delay in launch of new EU budget related to change in the Government.
Unfavorable court decision on ARIMR fine - in 2014 the Agriculture Agency (ARIMR) levied a PLN 32.5m fine on delays on the OFSA contract, while the total value of the 36-month contract is PLN 29m gross. Comarch does not agree with the fine and has made only a PLN2.3m provision for it.
Slowdown in IT market and unsuccessful global expansion.
Value destructive acquisitions.
A weak euro has a negative impact on revenue and profitability.
Stronger than expected salary pressure

LIVE CHAT

Live Chat settles ARPU revenues in USD while incurring part of COGS and OPEX in PLN like rentals, headcount costs, and equipment costs. Hence, Live Chat’s P&L is exposed to USDPLN fluctuations.
Increasing competition in the Live Chat market, especially from freemium and bundled providers. The Live Chat market, like many dotcom businesses, typically has low entry barriers which triggers competition. Live Chat has proved already that it can successfully build a client base and slightly increase ARPU without pressure on the profitability side.

Salary pressure: Like IT businesses, Live Chat can experience salary pressure risk, especially from talented software developers. Live Chat is less exposed to this risk as it has a very efficient SaaS business model where sales are automated. Live Chat currently employs ca. 130 people and plans further hires.

Risk of third-party providers: Live Chat is using third-party providers on data server space for its Live Chat application and also uses third-party providers to settle cash payments for the Live Chat app. If any of those providers fail to provide their service well, it can result in a bad customer experience and affect churn and future net adds.

R22

M&A execution risk: The increase in the number of customers is to take place both through organic growth and through acquisitions. The possibility of acquiring potential targets or not being able to obtain them at a price regarded by R22 as attractive may have a negative impact on R22’s future assets and financial position as well as its market position.

Risk of changes in the rules of domain registration in Poland: One of the activities of R22 Group is hosting, among others, and sales of domain names. Internet domains sold by H88 entities are registered by the NASK, which is a state research institute supervised by the Ministry of Digitalization. NASK acts as a national register of Internet names in the .pl domain, ie. pl, org.pl, info.pl, com.pl, net.pl, regional domains like waw.pl, and gov.pl domains, is an active member of the CENTR (Council of European National Top-Level Domain Registries) and works closely with the organization that coordinates the Internet Corporation for Assigned Names and Numbers (ICANN). Possible legislative changes, leading to a change in the entity conducting the national Internet name register or change of the registration rules could adversely affect the future financial situation of R22 as well as its market position.

The risk of changing the rules of transferring Internet domains between entities in Poland: An important issue relating to how the Internet domain market works is the ability to transfer domains between hosting companies. In R22’s opinion, the existing practice is unfavorable for domain owners because it is based on the need to generate special requests and to obtain permission to change the domain controller from its hosting company. Implementing regulations to facilitate the transfer of domains based on the model of the telecommunications market would significantly change the hosting market, which would, on the one hand, involve the risk of exposing some of H88’s customers to competition. On the other hand, it would give R22 the opportunity to acquire some of its competitors. Liberalising the market in terms of domain transferability could have a negative impact on the business, development prospects, financial position or performance of the R22 Group.

Risks associated with activity in the telecommunications market in Poland: The telecommunications market in Poland is characterized by strong competition and relative fragmentation of the entities operating in it, which translates into low - against other European Union countries - prices of access to telecommunications services. In addition, the market is clearly seeing a fixed-to-mobile substitution trend with the displacement of fixed services by mobile services. After the 800/2600MHz spectrum auction, all mobile operators are investing in an LTE network rollout and are starting to offer LTE mobile data packages as an alternative for low quality fixed-internet. At the same time, we should see increased investment in fixed-line networks as some operators upgrade their networks to NGA (Next generation Access) technology. This can result in increased competition in the market and risk of client erosion or ARPU pressure.

The risk associated with the possibility of introducing payments for frequencies needed to offer the Internet by radio: The R22 Group operates in the telecommunications market via the Oxylion Group. One of the activities is the provision of the Internet by radio, which is provided via frequency bands that do not incur state fees, or concession fees. However, there is a risk of introducing concession fees or other public law fees, like the charges for using frequencies used by mobile telephony, which could have a negative impact on the business, its development prospects, financial situation or group results.

Risk of operating costs of the Omnichannel Communication segment: The R22 Group conducts multi-channel communications with the use of electronic channels (omnichannel communication). One of its elements is the mass mailing of SMS messages via telecom operators, provided by the Vercom Group. On January 31st, 2017, the Telco Regulator (UKE) decided to liberalise wholesale prices of SMS in the wholesale market from May 2017, i.e., transactions between telecommunications operators. Earlier the price was regulated and was PLN 0.05 per message. Despite the fact that R22 has not recorded any significant changes in wholesale purchase
prices since then, as a result of market liberalization SMS prices may fluctuate, both lower and higher than previously, which may adversely affect its business, development prospects, financial situation or results.

Risk of losing competitive position in the market: Due to the relatively short period of operation of the areas in which R22 operates (especially Vercom), they may undergo significant and dynamic changes as well as significant changes in competition also coming from consolidation processes in all of R22’s markets.

Risk of loss of customers: Increasing competition in R22 markets, technological development and consolidation processes can lead to intensified competition resulting in the client base reduction of R2 Group.

Risk related to the failure of equipment and IT systems: R22’s business is based on modern IT and telecommunication systems, including external and internal servers. R22 clients expect properly-functioning equipment and computer hardware which may break, resulting in a worsening client perception of R22 services and ultimately the client leaving.

Risk of cyber-attacks: Given its management of IT infrastructure, especially servers belonging to the R22 Group and its clients (own servers), the business activities of R22 are exposed to attacks by cybercriminals. The two most serious types of potential attacks include attacks aimed at damaging infrastructure and so-called DDoS attacks, which is to block the servers, with very large, artificially loaded traffic. Despite the systematic improvement and modernisation of the solutions used, it cannot be ruled out that they will prove insufficient in the future, which may adversely affect R22’s results and financial position.

Risk related to the use of Oxylion Group infrastructure by other R22 entities: H88 Group and Vercom Group use infrastructure under the control of Oxylion Group. If R22 decides to cease providing services related to Internet access or data transmission for any reason, including possible disposal of some or all of the assets that make up the Oxylion Group, the conditions of access to the Internet and the data transmission service may deteriorate for other entities of R22 Group and may increase the costs of these services.

Risk related to the large-scale processing of personal data: As part of its day-to-day operations, R22 Group processes large amounts of personal data which must be carried out in a manner consistent with the provisions concerning the protection of personal data in force in Poland. There is a risk that despite the application of technical and organizational measures to protect the processing of personal data, there will be a breach of legal obligations by any entity of the R22 Group in this regard, in particular the disclosure of personal data to unauthorized persons. In case of a breach of legal regulations related to the protection of personal data, in particular the disclosure of personal data in an unlawful manner, R22 Group may be exposed to criminal or administrative sanctions and this may have a negative impact on R22’s business, development prospects, financial position or results.

Risks associated with the operation of search engines on the Internet: Many brands of R22 Group acquire customers through Internet marketing mechanisms. In particular, they are included in the search results, primarily in Google Search, which provides over 90% of searches in Poland. This means any change in search algorithms used by Google may affect the visibility of the Issuer’s brand pages in search results and, consequently, affect the way it reaches potential customers.

Risk related to the macroeconomic environment: Changes in the macroeconomic environment, including economic growth, inflation, unemployment and interest rates, can affect R22’s ability to create value. This in particular concerns the activities of the Vercom Group, whose services are more prone to the economic downturn than those offered by the H88 Group and the Oxylion Group.

Risk related to cost increases: Prices of services offered are calculated on the basis of the analysis of variable costs and fixed costs, including, in particular, the costs of leasing telecommunications infrastructure and the costs of purchasing telecommunications services. Due to the construction of some contracts with clients that do not allow for an increase in the remuneration for services provided by companies within the R22 Group over the life of the contract, significant changes in unit variable costs (some or all) or loss of control over fixed costs may have a negative impact on activity, development prospects, financial position or results of the R22 Group.

The risk of changes in the law: Frequently changing legislation, which entails a change in their interpretation, significantly impedes business operations and significantly limits the predictability of financial results. Particularly important are the provisions that shape the tax system, which are frequently modified.

VERCOM
Increase in the cost of purchasing SMS messages and access to e-mail systems Vercom buys SMS in bulk from telecommunications operators and international SMS traffic aggregators. Based on the price changes observed in the period 2018-2020, and the fact that the average prices of telecommunications services in Poland (including SMS prices) are lower than the average prices in the European Union, there is a risk of an increase in SMS prices and, consequently, a decrease in the gross profit margin on Vercom sales in the next few years.
Vercom pays fees for the possibility of sending emails to some e-mail operators whose prices may also rise in the future, hampering the gross margin.

Restricting the sending of email and push messages. Sending e-mail messages on a scale implemented by Vercom is possible in cooperation with e-mail operators. The sending of push messages generated by applications on mobile devices is possible only in cooperation with providers of mobile operating systems. It cannot be ruled out that due to changes in the regulations, policies or other internal regulations of e-mail operators or mobile operating system providers, who are also administrators of platforms offering access to applications generating email and push messages, as well as due to arbitrary, unjustified public decisions, the sending of an email or push message will be temporarily or permanently limited in certain ranges/locations.

Additionally, there is a risk that selected e-mail operators will block the IP address classes used by Vercom, which would result in the inability to deliver some of the e-mail messages sent. It cannot be ruled out that mobile operating system vendors could take measures to limit the sending of push messages or introduce new software release rules. Such actions may be undertaken by e-mail operators or suppliers of mobile operating systems in order to implement their business priorities, without taking into account the possible consequences for Vercom.

Significant customers risk. In 2020, significant clients (generating at least 1% of Vercom revenues) amounted to 18. Potential significant permanent limitation of cooperation or termination of existing cooperations with significant customers could lead to a reduction in the volumes of messages sent.

Acquisitions execution risk. Vercom’s strategy includes selective acquisitions of companies with similar profiles of operations in Poland and abroad and companies with technology that fit into Vercom’s development plans or are complementary to the services currently provided. There is a risk that execution of acquisitions fail due to incorrect assessment of the ability to generate profits by the acquired entity, incorrect analysis of the product offer or technological solutions of the acquired entity, inconsistent with the assumptions effects of the integration of the acquired entity with Vercom, departure of some clients of the acquired entity, departure of selected members of key personnel or entire teams of the acquired entity, limited cooperation with the suppliers of the acquired entity.

Risk of maintaining competitive position on the market. Vercom’s products are based on modern technological solutions. Due to the rapid development of technology, Vercom may face risks related to the emergence of new technological solutions or service delivery models that will adversely affect the competitiveness of the services offered so far, in particular due to the potential impossibility or significant delay in implementing new communication channels, including as a result of the lack of access to such channels (restrictions imposed by software owners or channel managers), the inability to develop or implement software for the use of new channels (limitations in technological knowledge, resources or access to technology) or the inability to adapt the functionality of new channels to expectations of customers.

Human resources risk. Vercom products are based on advanced software hence its product offer and quality of products depend on highly qualified experts, engineers and programmers specializing in narrow areas of technology. Departure of key employees may negatively affect Vercom’s competitive position.

Risk related to failure of devices and IT systems. Vercom operations are based on modern IT and telecommunications systems, including proprietary servers located in external server rooms and links with mobile telephony and e-mail operators. The occurrence of any system failure may have a negative impact on the Group’s development prospects, financial standing or results.

The risk of cyber attacks and processing of personal data. Vercom’s activities are exposed to attacks by cybercriminals like gaining unauthorized access to data and the so-called DDoS attacks.

Vercom processes, to a large extent, personal data provided by its clients, who use it to send messages via Vercom’s infrastructure. The processing of such large sets of personal data must be carried out in a manner consistent with the provisions on the protection of personal data, in particular the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016. Breaching the regulations may expose Vercom to administrative fines.
The impact of the macroeconomic environment. Due to the fact that 75% of Vercom’s revenues are exposed to ecommerce, its business activity operations may be sensitive to European or global unfavorable changes in the macroeconomic environment, in particular to an increase in the unemployment rate, a decline in purchasing power, a decline in propensity to consume and a deterioration in the consumer confidence index (consumer optimism). These phenomena may adversely affect the propensity to consume, and thus the number of transactions in the e-commerce sector, which would negatively affect the number of messages sent via Vercom Platforms.

Tax risk related to IP Box relief. Vercom benefits from preferential taxation of income obtained from the sale of products or services produced on the basis of intellectual property law – IP Box relief. A taxpayer who meets the conditions set out in the provisions on the IP Box relief can apply for a tax rate of 5%. Changes in tax regulations in Poland and cancelling IP Box tax relief would negatively affect Vercom’s effective tax rate and thus its future earnings.

Risk of liability for credit from R22. The loan agreement of the R22 group companies, including Vercom, includes specific provisions that provide for the liability of other borrowers (including Vercom and some subsidiaries that have joined debt under separate declarations) for non-performance or improper performance of obligations arising from the above-mentioned agreement in the event of breach of the loan agreement by one of the borrowers. Vercom and other subsidiaries are jointly and severally liable for all liabilities under the loan agreement and other financing documents, including security documents. The above means that if the funds allocated to the payment of amounts due, for which a given entity is primarily responsible, are insufficient, the missing amount will be paid by other borrowers, which may also apply to Vercom.

TEN SQUARE GAMES
Macro risks: TSG produces and sells entertainment goods whose consumption is related to the economic strength of households or individuals. Changes in macroeconomic factors in the global market, such as the GDP growth rate, household income and expenditure levels and remuneration levels can have an impact on TSG’s revenues.

FX risks: TSG incurs significant personnel costs and expenses related to the production of games in PLN, while a significant part of revenues is generated in foreign currencies.

Competition risk: Free-to-Play (F2P) and the mobile game market have relatively low entry barriers for new entities and easy access to global distribution of new products which results in considerable competition in the market.

Dependence on key distributors: Over 50% of TSG’s revenue is generated by games that are distributed by Google, Facebook and Apple through their digital distribution platforms or online portals. A possible change in Google, Facebook and Apple policies regarding the acceptance of products for distribution would require TSG to adapt existing or future products, which may be difficult to achieve in the short term and generate additional high costs. The reliability of the IT systems of distributors, which allows effective sales of TSG products, is also important as failure can lead to disadvantageous situations like: (1) lack of access to the game for existing players; (2) lack of micropayments by players using a given game; (3) inability of potential new players to download the game.

Workforce risk: Personnel are TSG’s key asset. The lack of a qualified workforce and higher-than-expected salary pressure may negatively affect the achievement of TSG’s strategic goals and its financial results.

Key personnel risk: The competence and know-how of key employees, in particular those who form the management team, as well as management and game designers, are very important for TSG’s operations. The departure of people from these groups may result in TSG losing knowledge and experience in the field of professional game design.

Technology risks: (1) TSG uses the Unity 3D engine in the process of game production, periodically purchasing a subscription with access to this technology. There is a risk that fees may increase to a level negatively affecting the profitability of produced games. (2) There is a risk that new technology appears to which TSG will not be able to adapt quickly, thus it may negatively impact its competitive market position. A new technology
risk occurs mostly in Evergreen and Legacy types, characterized by a longer and demanding process of game production.

Delays in game production: Game production is a complex and multistage process, dependent not only on the human factor and the implementation of the next stages of work on the game, but also on technical factors. Failure to meet the planned production schedule may delay the game's release, which in turn may have a negative impact on the sales level of the product and prevent TSG from achieving the expected financial results.

WIRTUALNA POLSKA
Macroeconomic situation – the advertising market is highly correlated to GDP. Correlation analysis of historical data shows that the overall Polish ad market grows when GDP grows at least 3% pa.

Growth of internet ad market and e-commerce market – A change in the global economy affecting Polish GDP, the unemployment rate and average salary could also affect the growth rates of the online ad and e-commerce market, which is strongly correlated to general consumption trends.

Competition – both online advertising and e-commerce are very competitive markets as the direct competitors of WPL Group are strong global and local brands such as Google, Facebook, Onet.pl, Gazeta.pl Group, Interia Group

Unsuccessful acquisitions – WPL Group’s growth is currently boosted by acquisitions. There is a risk that some acquisitions may be unsuccessful in terms of overpayment or wrongly chosen business profile.

Development of ad blocking applications, which are usually part of web browser software or anti-virus software. Their further and faster development can negatively affect the online ad market as a marketing tool and result in a decrease in ad budgets of advertisers.

Weak performance of WPL TV channel – after restructuring measures WPL’s TV channel has started to improve its TV audience share and EBITDA numbers.

IMPORTANT DISCLOSURES

Please find updated IMPORTANT DISCLOSURES at: http://www.haitongib.com/en/what-we-do/research