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## COMMERCIAL (BUSINESS) PARKS IN THE LANDSIDE AREAS – RESEARCH AND POLEMICAL APPROACH

### Abstract

According to the forecasts of the development of air traffic in Europe by 2030, it will be doubled. Along with the dynamic development of the industry, branch and its infrastructure, the area around airports is becoming a place of concentration of diversified commercial activity-economic, investment, business, cultural etc. The vicinity of airports, airport-related zones, especially in the immediate vicinity, are convenient roundabouts are convenient locations for commercial (business) parks due to high availability of air transport, supply of land for investment and infrastructure investment for these areas. They are managed from the level of airports as part of their non-aeronautical activities or by entities independent of the airport. The strength of these locations is demonstrated by the activities of airport managers, investors and local government officials whose goal is to attract foreign companies (users of modern real estate in so-called airport towns). The aim of the article is to analyze the development processes of these functional space structures, including those related to the Gdańsk Lech Walesa Airport. The research process uses the methodology developed by ACI (Airport Council International), and some results and opinions are the effect of in-depth studies and author's experience.

**Keywords:** airport, landside areas, commercial (business) parks

**JEL:** O1

## Introduction – airports and their economic activity

The definitions of airports and their markets are published in the literature and have become established, which frees the authors of the study from discussions in this area. However, the main purpose of the publication is to identify issues related to the economic activity of airports as branch infrastructure facilities, strongly affecting the growth of the economic potential of their surroundings.

The air services market reorients itself based on strong, modern, systematically increased production and development potential. There are over 500 commercial airports in Europe that provide passengers with travel services in intercontinental, European and regional connections. According to the Airports Council International (ACI) in 2016 global industry revenues exceeded USD 161 billion ([www.ryneklotniczy.pl](http://www.ryneklotniczy.pl)). According to IATA, in 2018 airlines generated approximately USD 834 billion and employment of 2.8 million people in the industry multiplied 3.4% of global GDP (IATA, 2019). According to the data of the Civil Aviation Office, the number of passengers served at Polish airports in 2020 will amount to approximately 39 million (ULC, 2019), which means a significant share of branches in the modern management system, with airports aspiring to achieve spectacular successes and strengthen market positions.

The increase in air mobility, served passengers and the volume of goods result from activities directly or indirectly related to the functioning of air transport. Based on many years of authors' research and experience active airports are the centers of diffusion of global know-how and shaping of contemporary socio-economic relations. As nodes of concentration of population flows and investment locations in their traditional and modern functions, they are highly-development business centers, strengthening the competitiveness of contemporary space development structures, including urbanized areas. The commercial attractiveness of airports and their surroundings is most often demonstrated by joint actions of airport managers and representatives of local governments, whose aim is to attract investors, including foreign capital, to developing airport (business) cities with new jobs and prestigious activities. The effect of the development of such tendencies are the model structures of commercial development, Airport City, Aerotropolis and other urban forms, synergizing dynamically the development of near-metropolitan, urban and regional zones.

Differentiation of aviation activities (aeronautical services) and non-aeronautical services (commercial services) is the basis for airports to diversify sources of economic benefits, including financial resources for further development and increase of competitiveness on the markets. It is estimated that revenues from non-aeronautical activities reach 40–60% of annual total revenues. According to ACI, about one third of non-aeronautical revenues from airports reach from commercial activity, about 20% – from parking services and about 15% from real estate transactions. This phenomenon is diversified due to the geographical location of airports and the specific purchasing behavior of the population, e.g. in the Middle East they reach approximately 50% of revenues from commercial activities, while in North America – revenues from parking and car rental services. Calculated for one passenger, revenues from air operations account for USD 10.15,

non-aeronautical activity USD 7.12, while total costs per capita – USD 13.55 (ACI, 2018). In Europe, non-aeronautical revenues are estimated at over 50%, differentiated for individual airports. With the average value of non-aeronautical revenues per capita per passenger at the end of the first decade of 2010, it amounted to EUR 12.15 with the world average of EUR 8.06 (Czernicki, Skoczny, 2010). Benefits for airports (apart from the basic function of air traffic service) condition their development in the so-called “attractive public utility centers with a runway” with a clear dominance of high-quality commercial activities (commercial, service, gastronomy-hotel and recreation with housing zones). Some of the big airports such as Singapore-Changi, Seoul-Incheon, Doha Hamad in Qatar, Nagoya Chubu Centrair in Japan and others, already at the stage of their designing took into account the location of economically active landside areas, including business parks. As a result, modern airports from branch points and transport nodes evolve towards multifunctional economic facilities, primarily predestined for air traffic services, while in the second-stimulating the development of other spatial structures surrounding them, including large-area, modern commercial parks (zones). Hence, in the rankings of particularly attractive airports, in addition to safety, service quality, check-in, multi-directional transfers, luggage service, standards for disabled people, families with children, clean terminals and passenger rooms, the so-called non-aeronautical near-airport parameters are taken into account. They should be interpreted as facilities addressed to business passengers—a wide range of retail, catering and transport services, including parking, entertainment, recreation and entertainment ([businessinsider.com.pl](http://businessinsider.com.pl); [www.aci.com](http://www.aci.com); [www.forbes.pl](http://www.forbes.pl)). In the surroundings of modern airports, business-justified public utility areas with complexes of technologically intelligent facilities are developing, interactively affecting the development dynamics of all entities – airports and other entities, their markets, urban and regional areas. Market research confirms the advisability of investing in the vicinity of airports in commercial / business, science and technology parks, modern industrial and transport-forwarding-logistics centers. In addition, the periphery of landside areas is the preferred location for the zones of modern housing with smart home solutions, surrounded by sensory parks. The assumed socio-economic benefits for users of these areas should determine the decisions regarding their commercial use. According to M.G. Morrison, the intensity of competition between entities providing aeronautical services is directly proportional to the motivation to maximize profit by developing and improving the offer of commercial services (Morrison, 2009). This is an obvious approach to the analyzed problem. Such facilities and activities determine the functioning and development of airports, as well as desirable objectives of the vicinity of the landside areas and economically consolidated complexes necessary in the structures of commercial parks.

Commercial/business parks (business towns) are large spatial, urban compositions of modern facilities with convenient transport accessibility and high value of total usability (Mazurek-Łopacińska, Sobocińska, 2014). The market-oriented status is a commercially oriented market offer, rental offer of office, conference, trade and exhibition spaces along with hotel facilities, leisure and recreation facilities, storage, restaurant, recreation, commercial and service facilities, including transport

services. These are special offers of a strictly business nature, different from conventional facilities in other locations, with the possibility of flexible combinations and adjustment to specific expectations and preferences of tenants / users.

A special advantage of commercial parks is the practice of sharing elements of transport, communication, information, energy and water management infrastructure, primarily created for the needs of airports. The presented development tendencies of commercial parks also occur in some Polish airports. The aim of the study is to present issues related to the location and functioning of selected commercial (business) parks around airports, including their functional and development interdependencies. The dynamic development of these functional space management structures should be a matter of particular interest and the subject of further research.

## 1. Theory and methodology

If the problems of spatial development, including the share of transport and airports, are reflected in numerous scientific publications, legal acts and documents, issues concerning landside areas have not been adequately developed. However, there are definitely no scientific studies on commercial / business parks. In Poland, such spatial and economic structures are in various conceptual and development phases. Their localization places are generally prestigious, economically attractive areas including transport, logistics centers. The issues most exposed are of interest to urban planners, architects, geographers, sociologists, lawyers, representatives of some technical sciences and politicians, much less often economists, and the publication output in this area is still insufficient. The substantive attractiveness and importance of these issues leads to targeted scientific research and the announcement of their results. It seems that Polish literature on the impact of airports on the development of airport-related commercial parks and their synergies is insufficient. This is due to the lack of spectacular experience in this area and that is why they should be an important research problem. Following the example of the experience of European and global airports and their economic and market benefits, Polish airports are implementing activities in this area, and some of them have already been formally initiated.

The precursor of research and publications on the interactions of the development of air transport and spatial structures, mainly settlement, was the American sociologist W.F. Ogburn. He pointed to the developmental correlations of air transport and major cities (Ogburn, 1959). The cause and effect aspects of the development of air transport and spatial structures, including the impact of air transport and its infrastructure on the development of metropolitan agglomerations and world cities were described by J.H. Schulze (1959).

Problems related to landside areas appeared in publications from the beginning of the 21st century. The concept of Airport City and Aerotropolis was presented in the USA, the country with the strongest air transport market in the world (Kasarda, Lindsay, 2011). In the last decade, there were studies by authors and practitioners from countries where the idea of developing Airport Cities

finds a wide application dimension (China, Korea, the United Kingdom, Germany, the Netherlands, Sweden).

In Poland, the issue of development of landside areas is still relatively new and little attention is paid to it in the literature. It is also the result of the lack of established pragmatics, a small scope of theoretical research and, until recently, the lack of the possibility of translocation of foreign experience. Noteworthy are the publications of science representatives (Stangel, 2014; Wróbel, 2012; Ruciński, 1968, 1971, 2008; Marciszewska, 2010) and scientists from the University of Warsaw and Economics in Poznan and others. There are also available Airport Cities reports and projects developed for Polish airports by architects, engineers and urban planners serving strictly commercial purposes. However, this topic is increasingly gaining on research attractiveness, as evidenced by contributing scientific studies and protectionism of the effective development of landside areas.

The choice of the problem of the interdependent development of airports and commercial parks in the landside areas – the main topic of the study presented results from the rapid pace of development of both structures and limited interest in the process. That is why many decisions about the management of landside areas in Poland are taking place intuitively, and their effects are not always subject to correct, reliable analysis and evaluations. Often, there are no unambiguous legal interpretations, which means that investments in these areas, despite the assumed changes in its usefulness, cause devaluation of the value of space, often public, as a category of the common good. On the basis of such assumptions, an attempt was made to present selected issues constituting the desired development of functional landside areas and the creation of commercial parks. Many individualized variables influence the development of commercial parks around airports. This is confirmed by numerous analyzes carried out for organizations that have achieved spectacular results in this respect and can be a model for Polish airports. In the author's research, an attempt was made to analyze the impact of aviation and airport infrastructure on the development and management of spatial structures in its surroundings. The research process uses the methodology developed by ACI (Airport Council International), with some of the results and opinions being the result of in-depth studies and author's experience. Statistical data was used, which made it possible to attempt their generalized identification of the issues raised. Detailed reference was made to the main variables characteristic for the airport in Gdańsk.

In primary research, the trends of development of commercial parks in the landside areas in Poland used the method of participant observation and direct interview with the managing airports. Field and study studies of available literature were also carried out. The achievements of the author's involvement in shaping the "Polish aviation reality" in assessing the developmental links of airports with their market surroundings turned out to be particularly intentional. In addition, the official and backstage discussions had a significant impact on the substantive content of the study. Many views related to the subject matter were polarized in the scientific bodies and pragmatists. Detailed considerations regarding the Gdańsk Lech Walesa Airport is the result of choosing a qualitative method of case studies, deepened by participant observation and professional experience in managing this enterprise.

## 2. Determinants of the concentration of commercial activities in the landside areas – research approach

Contemporary areas of space development around airports (airport towns, business towns), located in the areas of their impact, constitute a new thematisation of the urban commercial space and development tendencies of urban and regional development structures in the 21st century (Lorens, 2007; Rzeńca, 2016). Sometimes they are perceived as location or investor niches. In current regional development strategies, active landside areas are clearly perceived in terms of key, modern factors for shaping space, competitiveness and territorial promotion. They are a reflection of the degree of innovation, modernity, economic dynamism and entrepreneurship, high standard of management and life of residents. Examples of such investments pioneer developed in the USA are observed on all continents, which is a global development trend of the phenomenon.

In this part of the article the authors attempted to identify the determinants of concentration of commercial activity around airports. The research goal was to present possible variables determining its successful development.

Initially, the locations of commercial areas were exclusively large airports with significant development potential generated by aviation activity. With the development of branches and the increase in the mobility of the air population, the economic calculation of the benefits of near-aircraft location and non-aeronautical use of their surroundings quickly became the reason for their development in the vicinity of smaller airports. In this case, the investment logic was due to the high communication accessibility, the prestige of the location and a slight distance from the city center. Developmental conditions differ in relation to individual airports (<https://www.rynekinfrastruktury.pl>).

In the second decade of the 21st century, the business model of “dual market” is developing rapidly – the model of airports and landside areas as integrated commercial complexes generating unique added value. In the model concept of J. Kasarda, commercial areas and airport development are adopted by the following structures: Airport City, Aerotropolis, Airport Corridor, Airport Region and Airea (Schlack, 2010; Schaafsma et al., 2012; Stangel, 2014).

Landside areas are located on land owned by airports, public organizations or private individuals. Their economic activity is related to the activity of aeronautical (technical, related to service or potential use the airport, aimed at wider cooperation with the airport (Güller, 2003; Stangel, 2014).

Locational aspirations in these areas are revealed by entities:

- providing air services,
- often using air services,
- satisfying the additional needs of passengers and employees of the two specified groups of entities,
- interested in using infrastructure-equipped areas, not necessarily interested in air services (Kasarda, 2009). In this aspect, please indicate:
  - R & D industry (science and technology parks, conference and educational centers),

- industrial activities (special economic zones, industrial parks),
- strictly commercial activity (Flex-Tech business and office complexes,
- service activities (TSL industry and car parks, hotel and catering, shopping centers (duty free, wholesale, retail), insurance and banking services, bonded warehouses, etc.),
- settlement.

The immediate surroundings of airports predestine the location of entities providing publicly available commercial services – parking, hotels, catering, automotive, office, industrial, logistics, consulting, etc., whose aim is to achieve economic effects from a privileged place and business connections. Entities operating in commercial airports areas undertake activities coordinated or uncoordinated with the functioning of air transport. Empirical studies also confirm the randomness of some locations, violating the principles of planned and comprehensive development of these areas, making it difficult to achieve the assumed effects due to the targeted location and development of landside areas. They also affirm the strong concentration tendencies of heterogeneous business initiatives in the form of commercial parks.

In the first place, intentional location decisions are taken by entities related to the operation or use of air transport, attractive due to reliability, security and the need for quick, business contacts with suppliers, customers, other partners, possible only thanks to branch availability. In the second place, attractive shopping centers, industrial centers, hotels, recreational and entertainment parks and other accompanying facilities attractive for the sphere of business, trade, tourism and other service activities are created.

The location of airports, often on the outskirts of settlement centers or in a greater distance from them, indicates the priority of the approach to the process of improving connections, correlated with airports and landside areas, including commercial parks. Infrastructural investments improving the accessibility of airports (road, rail and unconventional connections) are of key importance, while increasing the commercial (also residential) attractiveness of the facilities located at airports [www.dtz.com]. These are essential conditions, highly determining potential successes of economic activity, concentrated in the landside areas (Laplace et al., 2004). Effective use of modern infrastructure, reduction of congestion and external costs of transport, and the increase of social mobility and shaping the territorial conditions of competition at the beginning of the third decade of the 21st century are served by modern solutions integrating inter-branch transport activities and increasing the availability of landside areas (commercial parks).

### **3. Commercial parks – location and economic benefits – research approach**

Commercial parks or commercial centers are complexes of diversified destinations, located on large spaces, in places well communicated with urban centers, often in the landside areas. They can be single office buildings or spatially extended business districts with rentable areas, modern production facilities, trade and exhibition

and trade, hotel and catering facilities with conference and warehouse facilities, multiplexes, service outlets including transport, parking, service and vehicle rental. They offer numerous facilities within a combination of personalized utilities. They are managed by developers, capital groups, consortia, offices and real estate agencies, real estate agents or airports as part of non-aeronautical activities. Commercial areas are located in terminals as integral structures of Airport Cities, which despite their systematic expansion do not meet the expectations of potential customers due to:

- high availability of services in the air side area for departing, transit passengers, arriving,
- limited availability in the landside areas.

Hence, managers of commercial buildings interested in business and market expansion launch rental of utilitarian real estate outside of terminals, in separated and open commercial parks. They are available to air transport users, to persons visiting airports, to employees and clients of entities from the surrounding, closer and further residential areas interested in the services offered.

In strictly business aspects, it is necessary to affirm the creation or intentional expansion of generally accessible commercial parks modelled on model ones, commercial and service structures, including in Cairo, managed by Schiphol Real Estate, which initially managed the development of a commercial area exclusively around Schiphol in Amsterdam, and now – real estate at large airports and transport hubs on an international scale, in Australian ports – Brisbane, Perth, Adelaide, Canberra with factory stores outlets, Dutch Eindhoven (Flight Forum) or a large commercial park at Duesseldorf Airport City (Porsche car show, Siemens headquarters, conference centers, trade fair centers, etc. in strictly urban development of space with strong development dynamics).

Economic activity in landside areas / commercial parks entails a security risk by generating the costs of its protection, which is usually ensured by common, 24-hour monitoring of complexes and insurance offered by insurance agencies located in them.

Location advantages are a source of benefits for everyone interested in commercial parks. They result from specific infrastructural and market conditions and the concentration of the business environment, including:

- unique location conditions;
- proximity to the airport and time savings for entities frequently using air transport,
- recognition and identification of objects thanks to the possibility of logotype display in places visible from the air terminal,
- previously exhibited convenient transport connections, including access to workplaces from various parts of cities or distant towns in the region,
- high availability of the hotel base – competition between hotel facilities located in commercial fleet parks influences the attractiveness of offers for clients,
- availability of parking spaces / parking lots,
- a friendly business environment-low-rise buildings (including due to restrictions on the height of buildings around airports, located among greenery conducive to relaxation during working hours).



In addition, the tenants of facilities in commercial fleet markets are favored by:

- reduction of operating costs compared to locations in city centers, including direct costs of use of real estate (rents, maintenance charges) and indirect costs, resulting e.g. from the necessity to use hotel and catering services, etc.
- an increased number of potential customers – passengers, airport employees or other entities operating in the area around the destination,
- more advantageous offer for the accessibility (transport) of commercial service facilities with diversified industry specificity,
- synergy of commercial interdependencies within the location (<http://bpcc.org.pl/pl/publikacje/adres-lotnisko>).

Research and financial analyzes of these entities indicate a special maximization of location advantages, while the analysis of the effects of development activities confirm the legitimacy of the development trend in the landside areas. A reflection of the development trends of commercial space rental and property management in commercial parks is the example of Schiphol Airport in Amsterdam, whose organizational structure separated the department of real estate investment and the management of their rental. In this regard, the airport takes a competitive position with respect to, for example, real estate offices or agencies. Such tendencies are manifest in other, also Polish airports, including in Gdańsk.

Commercial parks synergize particularly strongly with other economic activities, as evidenced by the increase in the supply of modern space to invest in these areas. In Poland, they are mainly interesting for Western investors (domination of companies with German capital) with a small share of domestic companies. They represent centers of business services, outsourcing, IT and the banking sector. The inflow of entities with foreign capital is conducive to the growth of innovation in these areas (modern technologies, new products, implementation of modern services, unconventional management methods, environmental protection systems). It is also worth pointing out to social innovations, i.e. the predispositions of individuals or entire teams to depart from current categories, goals, perceptions, styles, customs, etc. [Griffin, 2004]. Such trends are conducive to employment growth in entities operating in commercial parks for the benefit of cities and regions and their territorial competition.

#### **4. Commercial parks in Poland – development determinants – selected examples, polemical approach**

The most important determinant of the development of commercial parks in Poland is the increase in the importance of airports on the contemporary air services market and as places of business concentration. The essence of these structures is the economic multifunctionality in urban spaces.

In 2018, around 46 million passengers were served at Polish airports (an increase of about 15% compared to the previous year) with the domination of the activity of airports in Warsaw and Modlin (20.8 million passengers). Subsequently, the regional airports in Kraków (6.77 million passengers – 16% more than in 2017),

Gdańsk (4.98 million – an increase by 8.0% more than in 2017) and Katowice (4.84 million – an increase of 24.4 compared to 2017). Then, there are airports in Wrocław, Poznań, Szczecin, Lublin, Bydgoszcz, Łódź, Rzeszów, Olsztyn and Zielona Góra; no passenger was served in Radom. From the air traffic projection of the Civil Aviation Office, stabilization of demand for air services results, which by 2035 will reach PLN 94,462 passengers (ULC, 2018).

On the air cargo market, Poland is not very significant, servicing only about 1% of the market, for which the minimum level of business profitability is estimated at 20,000 tons of freight serviced on an annual basis. In 2018 such conditions were met only by Warsaw Chopin Airport (about 70,000 tons of cargo handled), placing in the second hundreds of the European airports serving air cargo. Katowice (18,000 tons) and Gdańsk (4,400 tons) were on the other position, while other Polish airports did not reach the required profitability threshold. However, it should be assumed that the increase in operational aviation activity is a positive premise for the increase in production activity in the landside areas/commercial parks of Polish ports. It also entitles to aspire in difficult market competition with some German airports – e.g. Frankfurt, Munich, Leipzig, Berlin, Hamburg, Dusseldorf in service of air cargo transport ([www.ulc.gov.pl](http://www.ulc.gov.pl)). The research shows that this idea is close to the entities located at the airport's commercial parks, assuming market expansion. This direction sets the framework for joint development synergy.

The landside areas, including commercial parks around Polish airports, are in a limited development phase and, following the example of beneficial practices in their neighbourhood, various forms of economic / commercial activity are being undertaken. The process of deliberate transformation in this area is observed in Warsaw, Katowice, Kraków, Wrocław, Rzeszów, Goleniów, and Gdańsk. The development of commercial activities around airports in Poznań, Bydgoszcz and Świdnik is gaining momentum considering local conditions.

From among Polish airports, Warsaw Chopin Airport has been showing the greatest ability to attract airport investments until recently. Its location attractiveness was the city's capital functions, access to international air connections, quality of transport infrastructure and good communication with the A-2 motorway. In the immediate vicinity of the passenger terminal, in the area of 22.5 ha (owned by Przedsiębiorstwo Państwowe "Porty Lotnicze"), Airport City is developing. In addition, 10.6 ha of field reserves with limited development potential remain due to the near-use housing development and environmental conditions. An important element of the commercial park is the main business center of Warsaw in Służewiec Przemysłowy, well connected with the airport. In high-standard office buildings on advantageous conditions, office space is offered at much lower rental fees than their prices in the central part of the city. Unfortunately, the dynamic growth of air traffic is a strong barrier to the further development of a commercial park in Warsaw, which undoubtedly determined the construction of the Central Communication Port in Baranów, more than 40 km from Warsaw, rich in commercial reserves for commercial use.

Most of the regional airports in Poland, together with the local government authorities, developed development strategies for the surrounding areas. At Katowice Airport in Pyrzowice, investment projects of the Airport City type are planned until 2025 (expansion of the passenger terminal, cargo city, aviation and airport

infrastructure). In the landside area, it is the construction of the Maxy hotel (Marriot brand) and comprehensive transport and logistics investments (new road system, extension of the S1 expressway to the airport, parking lots, large-area facilities) [[www.rynek.lotniczy.pl](http://www.rynek.lotniczy.pl)]. The development of the landside area and the economic subarea are planned and on the airport land (14 ha) there will be facilities typical for commercial parks (office, warehouse, transport solutions, etc.) and new jobs for 1,000 people in 2020. It is worth noting that Katowice Airport is the largest employer in the region for over 3,000 employees ([www.wyborcza.pl](http://www.wyborcza.pl)).

The development concept of the Krakow-Balice airport landside area investments correlated with the development of the airport and the city are planned and a 10 ha area is earmarked for commercial use. The Balice Airport Park is developing in the area of the New Administrative Center (NCA – 5.5 ha). At Airport City Balice Street, in the Hilton Garden Inn Krakow Airport operates 24-hour business, conference center and fitness center. In 2018, the construction of another Best Western Balice Airport hotel was started with the opening planned for the end of 2019 conference rooms, large-area parking lots, etc. An administrative center, shopping, service, office, exhibition and trade centers are also planned. The main advantage of these facilities are communication conditions – air, road and rail [<http://nca.malopolska.pl>]. There will be conference rooms, large-area parking lots, etc. An administrative center, shopping, service, office, exhibition and trade centers are also planned. The main advantage of these facilities are communication conditions – air, road and rail (<http://nca.malopolska.pl>).

Around the international airport and Gdansk Lech Walesa Airport a modern business district on the world-class level – the Baltic Business Center – BCB Business Park is developing. It is a modern commercial park, located a short distance from the airport in Gdańsk with an area of 11 ha (see Figure 1), with low buildings, adapted to the requirements of the Restricted Use Zones.



Figure 1. Visualization of the commercial park at the Gdańsk Lech Walesa Airport  
Source: (<https://www.trojmiasto.pl>)

90,000 m<sup>2</sup> of office space were allocated to a commercial park for rent in six modern A-class buildings (each with an area of approximately 9,250 m<sup>2</sup>, including approx. 5,000 m<sup>2</sup> in a build-to-suite convention, tailored to the individual requirements of users). Moreover service and commercial buildings and a recreational and logistic-warehouse building were designed (<http://business-park.bcb.com.pl/oferta/> (access: 12/03/2019)). In 2019, companies from the IT, architecture, construction, ship design and related offshore industry operate in this area. Each of the buildings includes:

- lounges with modern reception desks and waiting rooms for clients,
- service and food points,
- modern system solutions for air conditioning, ventilation, raised floors, CCTV industrial television, SSP signalling devices,
- structural cabling,
- high-speed elevators.

In addition, tenants use a lot of high standard underground and above-ground car parks (more than 300 parking spaces are planned for each of the six planned office buildings), flexible business solutions and ideas friendly for bikers (special lockers for accessories, showers, special parking places) and disabled people. The unquestionable advantage of BCB is the unconventional aesthetics of the place with a large number of green areas, meeting the criteria for this type of real estate. A particularly appreciated location advantage is the high communication availability, which has been articulated in research by representatives of German business. The 11 ha complex includes a conference and exhibition center, service and commercial center, a four-star hotel. Complexity and location in the immediate vicinity of the international airport are the undoubted advantages of this place. It is worth noting that the development of this park is not only interesting for business users and the airport. The community of nearby districts and towns is also interested, for which the commercial park is a place of work and leisure (e.g. an integration picnic under the slogan "XXL Childhood"). In August 2019 it was announced that the construction of Gdańsk Airport City was started. It will be a complex of seven buildings-mainly office buildings with a service, catering and hotel function. It will be a commercial and business project with the idea of selling usable space to partners. Its implementation, with an estimated value of approximately PLN 1 billion, will last several years. This is a good start to the development of the Gdańsk airport in its non-aviation function. This statement is justified by the analysis of the benefits of this title in other ports and numerous direct observations of the authors of the development of commercial zones at airports. Until now, representatives of the Airport named after Fryderyk Chopin in Warsaw – ended up on plans. Similar "airport districts" were implemented only in Western Europe. The reference point for Gdańsk is the facilities at the airports in Dusseldorf, Munich, Frankfurt, Paris, and Manchester. The only difference is that all these ports are several times larger than Gdańsk airport and handle 20 to 50 million passengers annually. In Gdańsk, 5 million passengers will be served this year. In addition, there are many benefits to the city and the region. These include, in addition to the increase in the attractiveness of the airport in Gdansk, an increase in widely interpreted market competitiveness.

Other airports in Poland-Wrocław-Strachowice, Rzeszów-Jasionka, Poznań-Ławica and other also aspire to create modern, functional landside areas and commercial parks. This is a desirable development trend for structures that determine the prestige, importance and power of synergy in these areas.

## Conclusions

The dynamic growth of the market of air services and related infrastructure in the vicinity of airports is conducive to the development of commercial investments. Commercial / business parks stimulate the creation of modern economic structures, the emergence of unique relations in the vicinity of airports. They also activate airports as part of non-aeronautical activities, referring to global trends in this area. The advantages of the location of commercial facilities around airports contribute to the development of unconventional investments and connections, increased airport glamor, associated with them neighbourhoods and business centers, cities and regions. Empirical studies confirm a strong development trend of these functional space development structures.

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