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DCT GDAŃSK – HISTORY, DEVELOPMENT AND OPERATION OF THE LARGEST AND MOST MODERN MARITIME CONTAINER TERMINAL IN POLAND**Keywords:** DCT Gdańsk, maritime container terminal, history**THE ORIGINS OF DCT GDAŃSK**

The idea of creating a deep-sea container terminal in Gdańsk was developed in the late 1990s and was associated with the growing potential of deep-sea trade routes of the Baltic Sea. In the second half of 2000, the Port of Gdańsk Authority SA announced a tender which was won by the British consortium of James Sutcliffe. Negotiations with the investor were completed in May 2002, and a preliminary agreement was signed in the autumn of 2003. The final notarial lease agreement was not concluded until 27 January 2004.¹ To implement the project, a new company was created – Deepwater Container Terminal Gdańsk SA. Its main tasks included designing, constructing and operating a deep-water container terminal in Gdańsk, which was to become the largest facility of this type in the Baltic. The premises of the so-called Northern Port (approx. 30 ha) were leased to the British investor for 30 years (with the option of extension for another 30 years).²

1 The activities of anti-corruption agencies and the prosecutor's office stiffened the negotiating position of Polish decision-makers. The proceedings were prolonged due to the fact that the continuity of power in the discussed period was maintained only in the local government. Magdalena Adamowicz, "Głębokowodny terminal kontenerowy DCT w Gdańsku. Geneza i realizacja inwestycji", *Contemporary Economy* 7 (2016): 93.

2 *Rusza budowa terminalu kontenerowego DCT w Porcie Gdańskim*, Port Gdańsk, accessed 09.01.2019, <https://www.portgdansk.pl/wydarzenia/rusza-budowa-terminalu-kontenerowego-dct>.

The construction of the terminal began on 25 October 2005 and was completed at the beginning of 2007. The cost of the first stage of construction was estimated at EUR 150 million. During the implementation of the project, an Australian investor was secured, as a result of which the GIF II fund (Macquarie Group) took over shares from the British consortium and acquired 99.99% of DCT Gdańsk SA shares.³

As a result of the works, the complete infrastructure of the deep-water container terminal was built, along with an access road with a road junction and a manoeuvring yard for cars, its own double-track rail siding, a fully equipped transshipment berth and a ramp for Ro-Ro loading/unloading of ships, as well as an administrative building and a warehouse. At the beginning, it was planned that the terminal's annual handling capacity would amount to 500,000 TEU,⁴ and the target capacity – 1,000,000 TEU. However, as soon as at the end of 2013, this capacity amounted to 1,250,000 TEU, and five years later – 3,000,000 TEU (see Table 1).

Table 1. DCT Gdańsk specification in 2007, 2013 and 2018

	2007	2013	2018
Annual handling capacity (in million TEU)	0.5	1.25	3
Quay length (m)	650	650	1300
Maximum quay depth (m)	16.5	16.5	17
Number of STS cranes* (pcs)	3	5	11
Number of RTG cranes* (pcs)	5	16	35
Size of the rail siding (number of tracks)	2	2	4

Explanations: STS – Ship to Shore crane; RTG – Rubber Tyred Gantry.

Source: own study

DEVELOPMENT OF THE GDAŃSK TERMINAL

The terminal began its operational activity on 1 June 2007, when it received its first ship – Götaland with a capacity of 822 TEU. The official opening ceremony took place four months later, i.e. on 3 October 2007. In the first years of operation, DCT specialised in servicing smaller feeder vessels, gaining important operational experience. The Gdańsk terminal significantly strengthened its competitive position at the beginning

3 Adamowicz, "Głębokowodny terminal", 94.

4 TEU (Twenty-foot Equivalent Unit) is a unit of capacity equivalent to the volume of a 20-foot-long container.

of 2010, acquiring the Danish shipping company Maersk Line as its new customer and becoming the only Polish deep-water terminal handling container vessels with a capacity of 8,000 TEU.⁵ Moreover, according to data from Ocean Shipping Consultants Ltd., transporting a container from Shanghai via Gdańsk to Warsaw in the discussed period cost approx. 28% less than via Rotterdam and approx. 20% less than via Hamburg. Since Gdańsk is located closer to the eastern markets than both of these European ports, DCT also provided savings of over 10% on shipping lines to other Baltic ports in comparison to Rotterdam, while in relation to Hamburg, these savings amounted to even 15%.⁶

The option of a direct connection to Asia significantly contributed to the development of DCT. When in the following years the terminal began handling E-class container ships with a capacity of 15,500 TEU belonging to Maersk Line (2011), Triple-E vessels⁷ with over 18,000 20-foot containers on board (2013), and ships of the MSC company (2016⁸), the Gdańsk company joined the prestigious group of deep-water container ports in Northern Europe which handle the largest vessels in the world on a weekly basis.

In turn in 2012, as part of an agreement between the global operator Maersk Line with Procont sp. z o. o. and Schavemaker Cargo sp. z o. o., dedicated rail connections were opened, operated by “Maersk Amber Express”, from the DCT container port terminal to Kąty Wrocławskie, and as part of the agreement between CTL Logistics sp. z o. o. and Euroterminal Sławków, a similar connection was opened, operated by “Maersk

5 With the arrival of Maersk Taikung in Gdańsk on 4 January 2010, the first direct weekly service to Asia was launched. From that moment, container handling in Gdańsk began to increase rapidly. *Dru-gie nabrzeże kontenerowe DCT Gdańsk (T2) uruchomione*, Logistyka a Jakość, accessed 10.01.2019, http://laj.pl/transport/3301/drugie_nabrzeze_kontenerowe_dct_gdansk_t2_uruchomione/.

6 *Konkurencyjność polskich portów kontenerowych*, Morza i Oceany, accessed 13.01.2019, <http://morza-ioceany.pl/porty-morskie/port-gdansk/87-konkurencyjnosc-polskich-portow-kontenerowych.html>; *DCT testuje nowe suwnice STS*, DCT Gdańsk, accessed 01.10.2013, <http://dctgdansk.pl/pl/dct-tests-its-new-sts-cranes/>.

7 Triple E-class container ships are one of the largest vessels in the world. Their length reaches 396 m, width 59 m, and the maximum draft is 14.5 m. They can therefore enter the Baltic Sea, since the limit for vessels passing through the Danish straits (the Great Belt) is a draft of 14.5 m. Cf.: Grzegorz Rutkowski, “Ocena głębokości północnego toru podejściowego do portu Świnoujście od pozycji gazociągu Nord Stream do terminalu LNG w aspekcie obsługi jednostek o maksymalnych gabarytach – metoda rozbudowana”, *Zeszyty Naukowe AM w Gdyni* 77 (2012): 50.

8 On 2 June 2016, one of the largest container ships in the world, MSC Maya, with the capacity of 19,224 TEU, called at the Sea Port of Gdańsk. *W cieniu stalowego olbrzyma – MSC Maya największym kontenerowcem w historii DCT*, Nasz Bałtyk, accessed 09.01.2019, <https://www.naszbaaltyk.com/wszystkie-kategorie/baltyckie-fotografie/2747-w-cieniu-stalowego-olbrzyma-msc-maya-najwiekszym-kontenerowcem-w-historii-dct.html>.

Baltic Express”, from DCT to the terminal in Sławków.⁹ In addition, in October of the same year, the international company Goodman began the construction of Pomorskie Centrum Logistyczne (PCL, Pomeranian Logistics Centre)¹⁰ on a 110 ha plot of land located at the back of DCT with a total area of buildings of 53,000 m².

On 21 May 2014, DCT opened an extended rail siding, increasing its annual handling capacity to 700,000 TEU. The total value of the project was over PLN 10 million, and 4 million of that was provided by co-financing from the European Union (EU). The extension of the siding included adding two new tracks with a length of 621 m each, constructing a storage yard along the siding and constructing three railway crossings. In the second half of 2014, key decisions were also made regarding the creation of the second deep-water berth in Gdańsk – the T2 terminal. Its construction began in May 2015 and was completed in October 2016. The 650-metre long T2 berth was equipped with five modern STS cranes, the largest in the Baltic Sea, enabling the handling of ships with a capacity of over 22,000 TEU, thanks to which DCT Gdańsk’s annual handling potential doubled from 1.5 to 3 million TEU. The first ship moored on T2 on 7 October 2016, but the official opening of the berth took place later – on 24 October. The construction of the T2 berth was completed in accordance with the schedule and within the planned budget. The funds for the project came from the company’s own resources, as well as loans granted by a consortium of Polish and foreign banks with the active participation of DCT Gdańsk SA shareholders.¹¹

In the meantime, in August 2016, the Gdańsk terminal initiated cooperation with Alliance G6.¹² In turn, after the opening of the T2 berth, in 2017, DCT began cooperation with the newly created OCEAN Alliance,¹³ gaining another direct connection from the Far East with the use of vessels with a capacity of up to 21.5 thousand TEU.¹⁴

9 Andrzej S. Grzelakowski, “Rozwój rynku przewozów intermodalnych w Polsce i jego wpływ na portowy rynek kontenerowy”, *Logistyka* 2 (2014): 20–21.

10 *Ruszyła budowa Pomorskiego Centrum Logistycznego*, *Biznes i Nauka*, accessed 10.01.2019, <https://www.gdansk.pl/biznes/ruszylo-budowa-pomorskiego-centrum-logistycznego,a,26366>.

11 *Historia*, DCT Gdańsk, accessed 21.01.2019, <https://dctgdansk.pl/pl/about-dct/history/>.

12 The G6 Alliance is formed by APL shipping lines (a container operator that belongs to the Neptune Orient Line from Singapore), German Hapag-Lloyd, Korean HMM (Hyundai Merchant Marine), Japanese MOL (Mitsui O.S.K. Lines), NYK (Nippon Yusen Kaisha) and Chinese OOCL (Orient Overseas Container Line). Piotr Stefaniak, *Alians G6 podtrzymuje stałe połączenie z Gdańskiem*, *Logistyka.wnp.pl*, accessed: 15.01.2019, https://logistyka.wnp.pl/alians-g6-podtrzymuje-stale-polaczenie-z-gdanskim,274903_1_0_0.html.

13 The alliance includes the aforementioned APL and OOCL, as well as the French CMA CGM, Chinese COSCO Shipping and Taiwanese Evergreen. *Nowe alianse armatorskie w 2017*, *Nautiquis*, accessed 15.01.2019, <https://www.nautiquis.pl/nowe-alianse-armatorskie-w-2017,129,pl.html>.

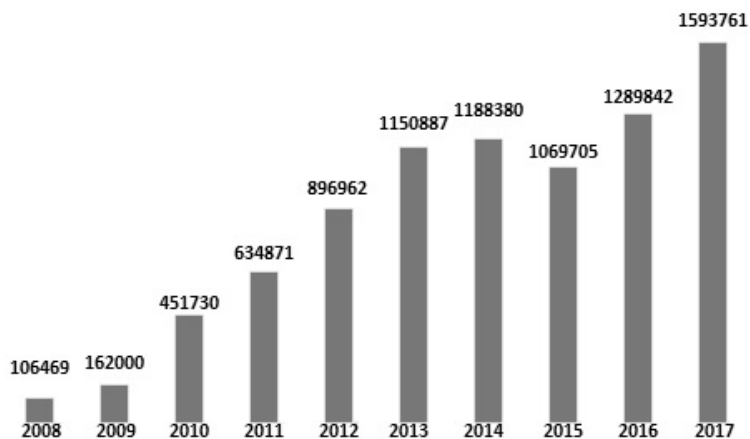
14 *DCT Gdańsk potroi moce przeładunkowe dzięki rozbudowanej bocznicy*, *Izba Gospodarcza Transportu Lądowego*, accessed 10.01.2019, <https://igt.pl/node/1420>; *Rozbudowana bocznicza kolejowa DCT Gdańsk – kamień milowy w historii terminalu*, *Morza i Ocean*, accessed 10.01.2019,

In June 2017,¹⁵ a warehouse with a total area of 36.7 thousand m² was opened in the Pomeranian Logistics Centre. After the construction of the new building was completed, the total area of the Centre amounted to over 88,000 m². At the same time, Goodman company finished formal preparations for the construction of a third warehouse with an area of 36,000 m² at PLC.

In 2018, DCT Gdańsk planned a new investment programme amounting to PLN 280 million. The T2B project assumes e.g. retrofitting the T2 berth with two additional STS cranes and five electric RTG cranes. There are also plans to enlarge storage yards and introduce complete automation of the gate complex for lorries that arrive in accordance with previous booking in the e-Brama appointment system. Investments in rail connections are another important development point. The existing railway tracks will be extended to 750 m, and then the rail siding will be extended from four to six tracks. The modernisation of the siding also envisages the purchase of fully electrified Automated Rail Mounted Gantry (ARMG) cranes as well as launching an OCR (Optical Character Recognition) camera system for registering trains and containers. Thanks to planned investments, the terminal's rail capacity will be increased by half.¹⁶ What is significant, at the end of 2018, the current owner of DCT, the above-mentioned Macquarie fund, decided to sell the majority stake in the company.¹⁷ At present, it is not yet known exactly what the further development and investment plans for the Gdańsk hub will be.

<http://morzaioceny.pl/inne/archiwum/89-porty-morskie/deepwater-container-terminal-dct-gdansk/2223-rozbudowana-bocznica-kolejowa-dct-gda%C5%84sk-kamie%C5%84-milowy-w-historii-terminalu.html>.

- 15 *Pomorskie Centrum Logistyczne – powstał kolejny magazyn*, Logistyka.wnp.pl, accessed 10.01.2019, https://logistyka.wnp.pl/pomorskie-centrum-logistyczne-powstal-kolejny-magazyn,300729_1_0_0.html; *Rozwój Pomorskiego Centrum Logistycznego*, Logistyka.net.pl, accessed 10.01.2019, <https://www.logistyka.net.pl/aktualnosci/logistyka/item/87909-pomorskie-centrum-logistyczne-powieksza-sie>.
- 16 Maciej Dzwonnik, *Terminal kontenerowy DCT Gdańsk bije rekordy i chce być jeszcze większy*, Wyborcza.pl, accessed 10.01.2019, <http://trojmiasto.wyborcza.pl/trojmiasto/7,35612,22939482,terminal-kontenerowy-dct-gdansk-bije-rekordy-i-chce-byc-jeszcze.html?disableRedirects=true>; Paweł Wojciechowski, *Terminal DCT. Okno na świat polskiej gospodarki morskiej*, Wyborcza.pl, accessed 10.01.2019, <http://trojmiasto.wyborcza.pl/trojmiasto/7,35612,24094115,terminal-dct-okno-na-swiat-polskiej-gospodarki-morskiej.html>.
- 17 PSA International (PSA), Polski Fundusz Rozwoju (PFR, Polish Development Fund) and IFM Global Infrastructure Fund (GIF), managed by IFM Investors, signed an agreement to jointly acquire 100 percent of shares in DCT Gdańsk in March 2019. *PFR kupił port DCT Gdańsk*, Puls Biznesu, accessed 27.03.2019, <https://www.pb.pl/pfr-kupil-port-dct-956185>.

Chart 1. The volume of container transshipments at DCT Gdańsk in the years 2008–2017 (TEU)

Source: www.dctgdansk.pl.

From the start of its operations until 2012, the Gdańsk terminal transhipped 2 million TEU. In 2013, the volume of transshipments amounted to over 1.15 million TEU, which secured DCT's position as the largest Baltic container terminal in this respect. In turn, the only drop in transshipments so far was recorded in 2015, with the volume of container handling amounting to 1,069,705 TEU in total. During this period, however, drops were recorded in all European Union ports. They were caused, among others, by developing eastern ports taking over transit cargo, including Russian ports located on the Baltic Sea; by limiting the import of goods from the Far East; or by the Russian-Ukrainian war, retaliatory sanctions imposed by the European Union on the Russian Federation, and the Russian embargo on EU goods.¹⁸ However, as soon as 2016, DCT's transshipments increased again, amounting to almost 1.3 million TEU. In 2017, the Gdańsk terminal handled almost 1.6 million 20-foot containers, thanks to which it was included among the top hundred largest container ports in the world according to the Lloyds List ranking (see Chart 1).

Due to the dynamic development of the DCT terminal, the importance of the entire Port of Gdańsk in Poland, the European Union and the world has changed in recent years. It is currently the most important and modern port in our country. A year after DCT started operations, the Port of Gdańsk was 35th in the ranking of European

¹⁸ Monika Rozmarynowska-Mrozek, *Raport: Spadki w większości z 10 największych portów kontenerowych Bałtyku w pierwszej połowie 2015 roku* (Gdynia: Port Monitor, 2015), 2; *Bałtyckie porty tracą w wyniku wojny ekonomicznej między UE a Rosją*, Morza i Oceany, accessed 13.01.2019, <http://morzaioceany.pl/inne/archiwum/14-porty-morskie/2992-ba%C5%82tyckie-porty-trac%C4%85-wyniku-wojny-ekonomicznej-mi%C4%99dzy-ue-a-rosj%C4%85.html>.

container ports. Four years later, in 2012, it was already among the 20 largest container ports in Europe (19th place), and since 2016 it has consistently occupied the 16th position. It should be expected that the investments planned for the coming years will cause the Gdańsk port to become one of the top 15 or even top 10 of European container ports.¹⁹

What is more, in 2010, i.e. in the first year since the launch of the ocean service at DCT, the Port of Gdańsk was ranked fourth among the largest container ports of the Baltic Sea. On the other hand, since 2012, it has been an unchanging runner-up in the ranking, although at the current pace of development it should be expected that it will soon overtake the current leader, St. Petersburg (see Table 2). Finally, in 2017, the Port of Gdańsk was included in the prestigious list of the 100 best container ports in the world prepared by the *Container Management* magazine as the only Polish sea transport hub.²⁰

Table 2. Top-10 Baltic container ports in 2017 in terms of annual transshipments (TEU).

Place in the ranking	Port	Transshipment
1	Saint Petersburg	1,920,650
2	Gdańsk	1,580,508
3	Gdynia	710,698
4	Hamina/Kotka	690,326
5	Gothenburg	644,000
6	Aarhus	511,424
7	Helsinki	491,000
8	Klaipėda	472,998
9	Riga	445,984
10	Rauma	277,507

Source: Record-breaking results of Top 10 Baltic container ports in 2017 (Gdynia: Port Monitor, 2018), 1.

OPERATIONAL ACTIVITIES OF GDAŃSK DCT

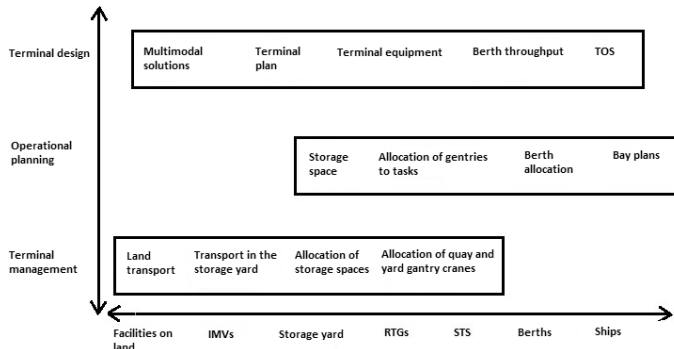
The container terminal is a complex logistics system in which decisions are made in three problem areas (see Figure 1). The specificity of the terminal is determined by

19 *Top-20 container ports in 2008–2017 – on the basis of volume of containers handled in (1000 TEUs)*, Eurostat, accessed 10.01.2019, <https://ec.europa.eu/eurostat/statistics-explained/index.php>.

20 *The Port of Gdansk among the best 100 container ports in the world*, Poland@Sea, accessed 10.01.2019, <http://www.polandatsea.com/the-port-of-gdansk-among-the-best-100-container-ports-in-the-world/>.

planners already at the first stage of its construction, i.e. when designing the terminal; in this case both economic factors and technical aspects are taken into account.

Figure 1. Logistic, operational and management planning in maritime container terminals



Source: own study based on Kap Hwan Kim, Hans-Otto Guenther, *Container terminals and cargo systems. Design, operations management and logistics control issues* (Berlin-Heidelberg: Springer, 2007), 7.

Most European maritime container terminals are multimodal systems, equipped with their own rail sidings and convenient connections with land transport. At the first stage of the terminal construction, special attention is paid to spatial planning (location of the berth, storage yard, warehouse, rail siding, etc.), the decisions about purchasing appropriate equipment (STS, RTG and ARMG cranes, IMVs – Internal Moving Vehicles, etc.), the planned capacity of the berth, which in the future will affect the amount and size of ships handled at the terminal, and the choice of TOS (Terminal Operating System), affecting the overall efficiency of the entire system.

Operational planning includes making decisions with a short time horizon, usually not exceeding a month. Operational planning includes, in particular, the allocation of berths to ships, the allocation of quay and yard gantry cranes for loading/unloading ships, designation of storage areas for unloaded containers (e.g. division into export, import, refrigerated containers, dangerous cargo) and preparation of bay plans.²¹

However, taking into account the current operation of container terminals, it should be remembered that the so-called real-time planning is most significant here.

21 At the stage of operational planning, it is necessary to prepare a cargo list and a bay plan. The former contains information about the containers, intended for various ports of destination, that are to be loaded onto the ship, while the latter is prepared in the form of cross-sections of the ship, with compartments marked for individual 20 – and 40-foot units. Radosław Milewski, “Planowanie procesów ładunkowych uzbrojenia i sprzętu wojskowego w ruchu morskim”, *Zeszyty Naukowe Wyższa Szkoła Oficerska Wojsk Lądowych* 4 (2010): 189.

Random incidents and unforeseen events (such as delays in a ship entering the port, failure of the handling equipment or parts of the system) mean that current operations can be planned within a time horizon of a maximum of 10–15 minutes, and key decisions are usually made in a split second. The actual management of the terminal consists primarily of such activities as the assignment of transport orders to vehicles, planning of container transport routes in the storage yard, allocation of storage spaces for unloaded multimodal containers, or allocation of quay and yard gantry cranes for the ongoing tasks.

In the area of seaports, as part of the port services sector, complex and diverse economic activities are carried out. Adapting the activities of port terminals to changing market conditions is associated with the need to create packages of logistics services for cargo (commercial and distribution, handling, transport and loading services), ships (industrial, supply, repair and renovation, towing and mooring services and other auxiliary services) and ship crews (social, health, hotel and information services).²² However, the essence of the operation of any maritime container terminal is primarily the management of cargo flow, ensuring the movement of containers to the appropriate locations in the yard, and optimisation of the use of the existing means of transport. Modern port handling and storage bases also strive to achieve the highest efficiency, which is conditioned, among others, by:

- the time of unloading and loading the ship with quay gantry cranes,
- the efficiency of devices transporting containers to the side of the ship,
- efficiency in handling road and rail transport,
- the cost of energy consumption per 1 TEU,
- the efficiency of human work.²³

Typical port container terminals include quays, handling and storage yards, gates and areas for road vehicles, a rail loading station, a receiving and distribution warehouse, a dispatch and control centre, a washing and cleaning container station and a repair workshop.²⁴

Quays are used for mooring and servicing ships from land. Containers are stored in piles in storage yards divided into sectors for containers with neutral cargo, refrigerated containers and containers with dangerous goods. Containers transported by road are received and issued through a gate, which is connected by an internal road system

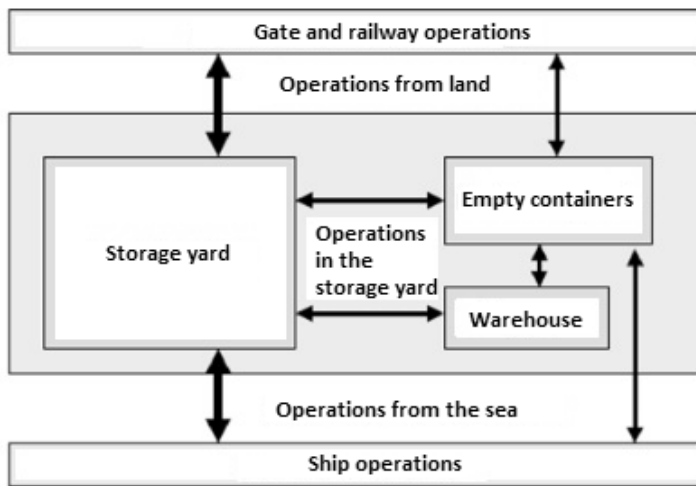
22 More in: Aleksandra Bartosiewicz, "The role of maritime container terminals in the provision of logistics services", *Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach* 104 (2015).

23 Janusz Szytka, Paweł Hyla, "Model funkcjonalny terminala kontenerowego ukierunkowany na środki transportu", *Logistyka* 2 (2010): 1293.

24 Container pick-up points in which empty containers are stored and ongoing repairs and maintenance are carried out are often referred to as container depots. Cf.: Jerzy Kujawa, *Organizacja i technika transportu morskiego* (Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego, 1997), 280.

to the quay, storage yard and railway station consisting of a certain number of tracks and a weight for weighing container wagons. Indoor warehouses are used to store any general cargo in situations when these goods are to be containerised only at the terminal. In turn, the dispatch centre is the headquarters of the services responsible for terminal management and of enterprises cooperating with the base in the field of container handling.²⁵ The basic types of operations taking place at container maritime terminals are presented in Figure 2.

Figure 2. Operations taking place at sea container terminals



Source: own study based on Dirk Steenken, Stefan Voss, Robert Stahlbock, "Container terminal operation and operations research – a classification and literature review", *OR Spectrum* 26 (2004): 6.

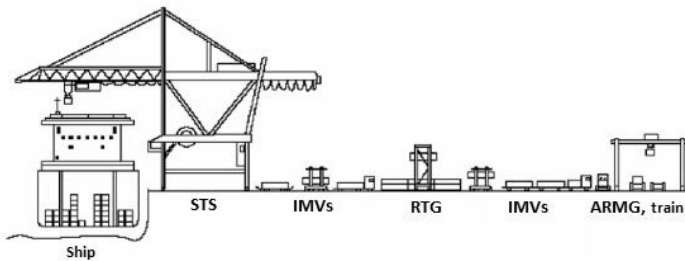
The functioning of maritime container terminals is similar worldwide. In the present article, it will be discussed as exemplified by the DCT terminal in Gdańsk that is of interest to us. During transshipment, containers are first unloaded from the ship by STS cranes equipped with one winch, which moves the container directly to vehicles waiting on the berth. Subsequently, the container is transferred to an IMV tractor, which transports it via the shortest route to the storage yard.

25 Ilona Urbanyi, "Determinanty logistycznej obsługi ładunków i środków transportowych na morskich terminalach kontenerowych", *Logistyka* 6 (2010): 2–3.

DCT operational vehicles (tractors with semi-trailers, gantry cranes, carts, forklifts, etc.) move around the terminal along specially designated routes, while in the port area these vehicles always have the right of way over external vehicles (e.g. lorries).²⁶

The area of the storage yard is divided into sectors (rows) served by RTG cranes. The cargo delivered by a tractor with a container semitrailer is taken over by one of them and transported to the place selected after prior notification by the Terminal Operating System. In the meantime, at the other end of the yard, the containers that are to be transported by land are loaded onto terminal vehicles in order to be brought to the rail loading point in the terminal. Thanks to this, placing containers in the storage yard is a continuous process in which both terminal vehicles moving from the direction of the sea and those working from land do not need to wait unnecessarily for gantry cranes working in the yard. The stages of container handling at the terminal described above are shown in Figure 3.

Figure 3. Stages of container handling at a maritime container terminal



Source: own study based on Steenken, Voss, Stahlbock, "Container terminal", 13.

There are currently 11 STS cranes operating at the Gdańsk terminal, 35 RTG cranes, 4 lifts for full containers, 6 stackers for empty containers, 71 IMVs, 82 container trailers, 17 forklifts. The terminal has 1,072 connections for refrigerated containers. The DCT also has a rail siding with four tracks with a total length of 2.5 km and a warehouse with an area of 8,200 m². The terminal's operational area is 71 ha, while the storage area alone measured in TEU is 55,000.²⁷

²⁶ *Regulamin współpracy – Operacje Bramowe* (Gdańsk: DCT.Gdańsk.SA: 2013), accessed 06.01.2019, http://dctgdansk.pl/upload/files/regulamin_wspolpracy_operacje_bramowe.pdf; *Regulamin współpracy – Ruch Samochodowy* (Gdańsk: DCT.Gdańsk.SA: 2011), accessed 06.01.2019, http://dctgdansk.pl/upload/files/regulamin_wspolpracy_ruch_samochodowy.pdf.

²⁷ *Specyfikacje terminala*, DCT Gdańsk, accessed 08.01.2019, <https://dctgdansk.pl/pl/about-dct/specyfikacja/>.

CONCLUSION

The purpose of the article was to present the history and functioning of the sea container terminal that is the most modern and largest in Poland in terms of the annual handling of 20-foot containers, which is currently DCT Gdańsk. As a result of a descriptive analysis of Eurostat data and information from the DCT Gdańsk website as well as in industry reports by Lloyds List, Port Monitor or Container Management, it was concluded that in the near future the Port of Gdańsk (including DCT) will strengthen its competitive position on both European and global container shipping markets.

Thanks to the DCT terminal established in 2007, the Port of Gdańsk is the second largest Baltic container port and the 16th container port in the EU. Last year, the Gdańsk port was also included on the prestigious list of the 100 best container ports in the world prepared by the *Container Management* magazine. After twelve years of activity, DCT is still developing. In October 2016, T2 berth was opened at the terminal, enabling the handling of vessels with a capacity of over 22,000 TEU, thanks to which DCT Gdańsk's annual transshipment potential doubled from 1.5 to 3 million TEU, and the terminal gained another direct connection from the Far East. For the coming years, the management board of DCT Gdańsk has planned further investment projects, under which T2 berth is to be equipped with additional STS and RTG cranes, and the existing railway siding will be expanded to six tracks. For this reason, it should be assumed that in a few years the Gdańsk terminal will significantly strengthen its competitive position on both the European and global market of container shipping.

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English version: Aleksandra Szczypta, Mark Atkinson

SUMMARY

Deepwater Container Terminal Gdańsk (DCT Gdańsk) is located in the southern part of the Baltic Sea in the Gulf of Gdańsk and is an important element of the trans-European Baltic–Adriatic transport corridor. It is the only deep-water terminal (up to 17 m) in the Baltic Sea Region having direct ocean vessel calls from the Far East. The terminal handles Polish import and export, transshipment and transit. Its high competitive position in Central and Eastern Europe is due primarily to its easy nautical accessibility and year-round ice-free access (location at the estuary) combined with operational excellence. The article presents the origins, development and operational activity of the Gdańsk terminal. In the analytical part of the text, information provided by DCT Gdańsk, Eurostat data as well as industry reports by Lloyds List, Port Monitor or Container Management were used. Thanks to the results of the analysis one may conclude that the Port of Gdańsk (DCT included) will strengthen its competitive position both on the European and global market of container shipping in the near future.

DCT GDAŃSK – HISTORIA, ROZWÓJ ORAZ DZIAŁALNOŚĆ NAJWIĘKSZEGO I NAJNOWOCZEŚNIEJSZEGO MORSKIEGO TERMINAŁA KONTENEROWEGO W POLSCE

Słowa kluczowe: DCT Gdańsk, morski terminal kontenerowy, historia

STRESZCZENIE

Deepwater Container Terminal Gdańsk (DCT Gdańsk) leży w południowej części Bałtyku w Zatoce Gdańskiej i jest ważnym elementem transeuropejskiego korytarza transportowego Bałtyk–Adriatyk. Jest on jedynym terminalem głębokowodnym (głębokość do 17 m) w rejonie Morza Bałtyckiego, do którego bezpośrednio zawijają statki z Dalekiego Wschodu. Terminal obsługuje polski import, eksport, tranzyt oraz tranzyt morski. Swoją wysoką pozycję konkurencyjną w Europie Środkowo-Wschodniej zawdzięcza przede wszystkim dobremu dostępowi od strony morza, brakowi zalodzenia (położenie przy ujściu rzeki) oraz doskonałym możliwościom operacyjnym. W artykule przedstawiono genezę powstania, rozwój oraz działalność operacyjną gdańskiego terminala. W części analitycznej wykorzystano m.in. informacje udostępnione przez spółkę DCT Gdańsk, dane Eurostat oraz raporty branżowe Lloyds List, Port Monitor czy też Container Management. Wyniki przeprowadzonej analizy pozwoliły na wyciągnięcie wniosku, iż w niedługiej przyszłości Port Gdańsk (w tym DCT) wzmocni swoją pozycję konkurencyjną tak na europejskim, jak i światowym rynku morskich przewozów kontenerowych.

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