

## **Commuting to the stadium PGE Arena Gdańsk – the 2012 UEFA European Football Championship perspective**

### **Introduction**

Eight cities in Poland and Ukraine hosting 2012 European Football Championship matches are taking measures to ensure efficient public transport during the event. The range of measures undertaken by Ukrainian cities is not very extensive, due above all to the financial crises (compare V. Bespalov, M. Rechłowicz, 2011). The situation in Polish cities is much better. Access to EU funds has had a significant impact on this development. This does not mean that the scope of investments made is fully satisfactory. Additionally, false assumptions in some cases and decisions contributed to inadequate commuting services to the stadiums.

Nevertheless, investments in public commuting systems made for the organisation of Euro 2012 improve and in some cases introduce a new quality to the systems. Benefits resulting from those investments will be seen primarily during the 2012 European Football Championship and afterwards during other events held at the stadiums. However, the overhaul of the present and construction of new lines, as well as the modernisation and purchase of new rolling stock will be felt by commuters every day.

### **Essential commuting related investments for Euro 2012 in the TriCity**

On 27 October 2003 the Polish Football Association (PZPN) and the Ukrainian Football Association (FFU) signed an agreement on joint efforts to organise the 2012 European Football Championship. On December 1, 2004 Gdańsk as the first Polish city reported readiness to co-organise the EURO 2012 Championship. On April 18, 2007 twelve real UEFA members voted for Poland and Ukraine as the organisers of the 2012 European Football Championship.

The Ordinance the Council of Ministers dated October 12, 2007 regarding the list of Euro 2012 projects (Dz.U. 2007 No 192 item 1385) specified the offered list of Euro 2012 projects adopted by UEFA and covered by the commitments and guaranties of the Republic of Poland and territorial self-government administration, as well as other necessary measures to host the final 2012 UEFA EURO Championship games. The Ordinance included, among the investment projects in Gdańsk, the construction of the stadium „Arena Bałtycka”<sup>37</sup>. More projects were introduced by the Ordinance of the Council of Ministers dated July 8, 2008, amending the list of Euro 2012 related projects (Dz.U. 2008 No 127 item 818). Apart from the stadium the following commuting undertakings were planned in the TriCity.

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<sup>37</sup> The stadium is at present officially called PGE Arena Gdańsk.

- building of Słowacki route (section from the Airport – TriCity ring road – Stadium „Arena Bałtycka”);
- implementation of the Gdańsk Municipal Commuting Project – stage III (GPKM III);
- improving traffic flow in the TriCity Centre by introducing the Integrated Traffic Management System TRISTAR;
- construction of W-Z route (section Kartuska – Otomińska);
- development of Gdańsk Airport;
- improving road access to Gdańsk Port – building of Sucharski route;
- conversion of the Gdańsk Śródmieście integration node (conversion of Śródmieście node and Biskupia Górka viaduct);
- building of outdoor parking lots and linking of communication tracts between the parking lot and the „Arena Bałtycka” stadium in the Gdańsk-Letnica district;
- renovation of the railway station Gdynia Główna;
- construction of the Metropolitan Rail in the TriCity – stage I.

The Ordinance lacked projects of key significance for the championship organisation – e.g. related to the development of the municipal rail commuter system in the TriCity, but included projects that are difficult to believe to be indispensable for conducting the final tournament of the 2012 European Football Championship – construction of the European Solidarity Centre in Gdańsk.

Nevertheless, a recast of the Ordinance of the Council of Ministers dated July 29, 2009, amending the list of Euro 2012 related projects, (Dz.U. 2010 No 8 item 52) supplemented the missing items but left projects remaining beyond the requirements of EURO 2012. In effect, apart from cosmetic amendments to earlier provisions regarding commuting efficiency (e.g. renovation of the railway station Gdynia Główna was listed as conversion of the Gdynia Główna station complex) the list was amended by the following projects for the area of the TriCity:

- development of fast municipal rail in the TriCity;
- conversion of the street Żagłowa in the section from the projected street Stadionowa to the junction with the street Marynarki Polskiej.
- development of the Kosakowo Airport located on the premises of the military airport in Gdynia Oksywie to provide services to civil air traffic.

The Ordinance of the Council of Ministers dated December 23, 2010, amending the Ordinance with the list of Euro 2012 related projects (Dz.U. 2011 No 6 item 20) added to the TriCity commuting projects given above; the building of parking lots between the streets Marynarki Polskiej, Żagłowa and the stadium premises, to provide parking facilities for the „Arena Bałtycka” stadium in Gdańsk-Letnica.

### **Individual transport**

Gdańsk, like every city organising Euro 2012, prepared a „Mobility Concept” developing the most efficient manner for the event participants to reach the tribunes

based on traffic capacity simulations of access roads. The Concept assumes that public transport will remain the key transportation means.

In effect only 2171 parking spaces are planned by the new stadium and 74 bays for coaches. However, in autumn 2010 UEFA pointed out to Gdańsk authorities the need to increase the number of parking spaces. The area of 13 hectares adjacent to the stadium, presently hosting warehouses and industrial facilities, was designated for the purpose. Thus, the parking area increased by another 3500 spaces for cars and 210 for municipal busses (S. Sowula, 2010).

However, ultimately the investment was discarded. The reasons underlying the decision involved on one hand very high costs of buying out the land lots from their present owners, and no options on the other hand for attracting funds – including lack of grounds for applying to the Ministry of Environmental Protection<sup>38</sup> for a subvention. To a certain extent a parking lot for 500 cars by the seat of the Gdańsk International Fair Co. to be built in the neighbourhood of the stadium (M. Tusk, 2011a) is to supplement available parking space.

The strongly limited capacity of parking lots by the stadium capable of admitting 41 thousand spectators sufficiently restricts use of private cars by football fans. In these circumstances, discussions on the road capacity in close vicinity of the stadium and in the area are of no significance. What more the small car park capacity and consequently restricted access by private cars means that fans must use public transport.

However, many participants of mass events do chose to travel by means of their own cars (compare W. Rydzkowski, M. Burda, 2002). On one hand it is a question of habit and on the other lack of familiarity with public transport options. The intension of modifying such behaviour forces the organisers to prepare public transport particularly well for the time of the event. Top quality information on public commuting is an important element for success. It should be publicised by the internet, press, radio and information attached to the football match tickets. Access to information during the event will be provided by volunteers, information centres, distributed leaflets and above all information at the bus/tram/train stops, in the vehicles and on the routes popular with football fans.

### **Access by tram**

When applying for organisation of some of the 2012 Football Championship matches in Gdańsk one of the arguments for locating the projected stadium was the municipal railway line Gdańsk Główny – Gdańsk Nowy Port operated in the years 1951-2005. In effect the revamping of the line and stations were planned and the passenger connections from Gdańsk Główny to Gdańsk Brzeźno were to be reactivated.

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<sup>38</sup> During construction of the stadium in March 2009 a 3 thousand cubic meter tannery dumping ground from 20ties of XX was discovered in the place of the projected parking lot. Similar waste was expected to be found on adjacent lots. However, no grants for neutralisation could be gained due to a statement on lack of dumping grounds.



Gdańsk authorities signed a relevant preliminary agreement with representatives of the railway company. Soon afterwards, however, the city withdrew from the concept switching to the idea of transporting fans to and from the stadium by trams on route from Marynarki Polskiej (compare M. Jamroż, 2011; M. Jamroż, M. Tusk, 2010, 2011; K. Kopeć, 2010; M. Tusk, 2010, 2011b, 2011c). The tramline is farther distanced from the stadium than the railway line but still quite close – the nearest stop is 600 m away.

The Gdańsk Municipal Commuting Project – stage III<sup>39</sup>, listed in the Ordinance of the Council of Ministers dated July 8, 2008, amending the list of Euro 2012 related projects (Dz.U. 2008 No 127 item 818) is in progress. The development and modernisation of the system are the major elements of the project that also includes the purchase of new rolling stock. Nevertheless, the majority of measures, though definitely required for the operation of the municipal tram system in Gdańsk, are not directly connected with ensuring efficient communication for the Euro 2012 championship. An exception to the above, apart from renewal of the rolling stock, is the overhaul of the railway track along the street Jana z Kolna on the junction of Kliniczna and the district Nowy Port, thus ensuring the connection between the city centre and the stadium.

However, the assumptions of the city authorities that fans will commute to and from the stadium by tram are in fact not realistic. The most modern PESA 120Na SWING tramways, 35 of which are to commute in Gdańsk during the championship, can hold 201 persons according to their producer (including 161 standing places with 5 persons/m<sup>2</sup>). Even if we assume that trams will be arriving at the stadium stop every 1:5 minutes<sup>40</sup> and are always 100% full they can merely transport *circa* 8 thousand fans per hour – that is 20% of the stadium capacity.

Keeping such a timetable and 100% fill up of all courses is not realistic. Furthermore, 35 PESA 120Na SWING trams are not enough to do the job and only a couple of the trams used by Municipal Transport Company in Gdańsk are of similar capacity – the rest is smaller<sup>41</sup> (unless the old and heavily worn Konstal 105N trams are used in sets of three). Furthermore, the key problem is transporting fans after the match when they leave the stadium in a short time span.

Another issue is the inadequate construction of tram stops in the vicinity of the stadium. With their present limited size in terms of length and width they are suited for handling for a little over ten passengers at a time (compare J. Modrzejewski, 2011). This disqualifies tramways for the transport of fans from and to the stadium.

The decision to use tramways for the transport of fans from and to the stadium generates another problem – a shortage in rolling stock operated in other parts of the

<sup>39</sup> More on the project in the writings of: R. Choma, P. Kazimierowski (2010) and J. Modrzejewski (2011).

<sup>40</sup> This is the tram timetable on the route between the city centre to the stadium according to M. Grobelny and Ł. Malinowski (2007).

<sup>41</sup> e.g. Düwag N8C trams, modernised by Moderntans, for approximately 160 passengers with 46 pcs projected during Euro 2012.

city. And during Euro 2012 in Gdańsk there will be many fans without tickets to watch the matches on the stadium. For those fans special places are to be organised to watch matches on large outdoor screens. H.-W. Franz (2009) in describing preparations for municipal communication readiness for the 2006 Football Championship in Berlin indicated that the key problem was not providing transport for fans to the stadium but transport for the other fans.

These obstacles in transporting fans to and from the stadium by tram resulted in the Municipal Transport Company in Gdańsk scheduling closure of traffic on the street Marynarki Polskiej in the vicinity of PGE Arena during the projected heavy fan traffic (M. Tusk, 2011d). In effect when the stadium is approximately half full during Lechia Gdańsk Club matches fans on leaving the stadium will have to walk minimum 2 kilometres to the nearest public transport stop.

### **Access by municipal rail**

The location of the stadium in Gdańsk may seem to neighbour directly with the railway line, which until recently was operated as a municipal rail line, automatically suggesting a solution to the problem of transporting fans (Fig. 1.). Fast Municipal Rail services were the key carrier during mass events<sup>42</sup> in the TriCity up till now. Nonetheless, the city rejected the concept of upgrading this line. UEFA in October 2010 recommended a railway connection to the stop Gdańsk Kolonia, approximately 800 m<sup>43</sup> from the stadium. The cost of upgrading this sector was estimated at *circa* EUR 3.5 million. Considerations should have been given to upgrading a bigger section or even the entire line so that it could be used not only to carry passengers during the PGE Arena championship but also in times to follow (M. Jamroz, 2010a, 2010b; M. Jamroz, M. Tusk, 2010; K. Kopeć, 2010; M. Tusk, 2010). The study conducted showed that the solution recommended by UEFA may be useful only during the Euro 2012 championship games.

Carriage of passengers to a stop distanced 800 m from the stadium during other events – e.g. Lechia Gdańsk matches – is not a fully satisfactory answer. The modernisation of the line to Gdańsk Zaspą located in the vicinity of the stadium (M. Tusk, 2011b, 2011c) would be a better solution.

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<sup>42</sup> e.g. mass celebrated by John Paul II at the hippodrome on 5 June 1999 for over 700 thousand faithful, and concerts in Gdańsk Shipyard by Jean-Michel Jarre on 26 August 2005 for 110 thousand spectators, and David Gilmour on 26 August 2006 for an audience of 70 thousand.

<sup>43</sup> The stop closest to the stadium is Gdańsk Zaspą Towarowa 400 m away. UEFA, however, argued that the transport of fans so close to PGE Arena could create a dangerous jam between the railway station and the stadium (M. Jamroz, 2010a; M. Tusk, 2010). The location of the S-Bahn Olympiastadion stop distanced approximately 300 m from the Olympic Stadium with a capacity for over 74 thousand spectators contradicts the above. This stop, apart from a single platform for lines S3 and S75 has additional four platforms with two sets of rails each for additional launched and running S-Bahn trains during events at the stadium. Additionally, 650 m from the Olympic stadium there is a U-Bahn Olympia-Stadion station with two platforms and three sets of rails for daily operated U12 line.

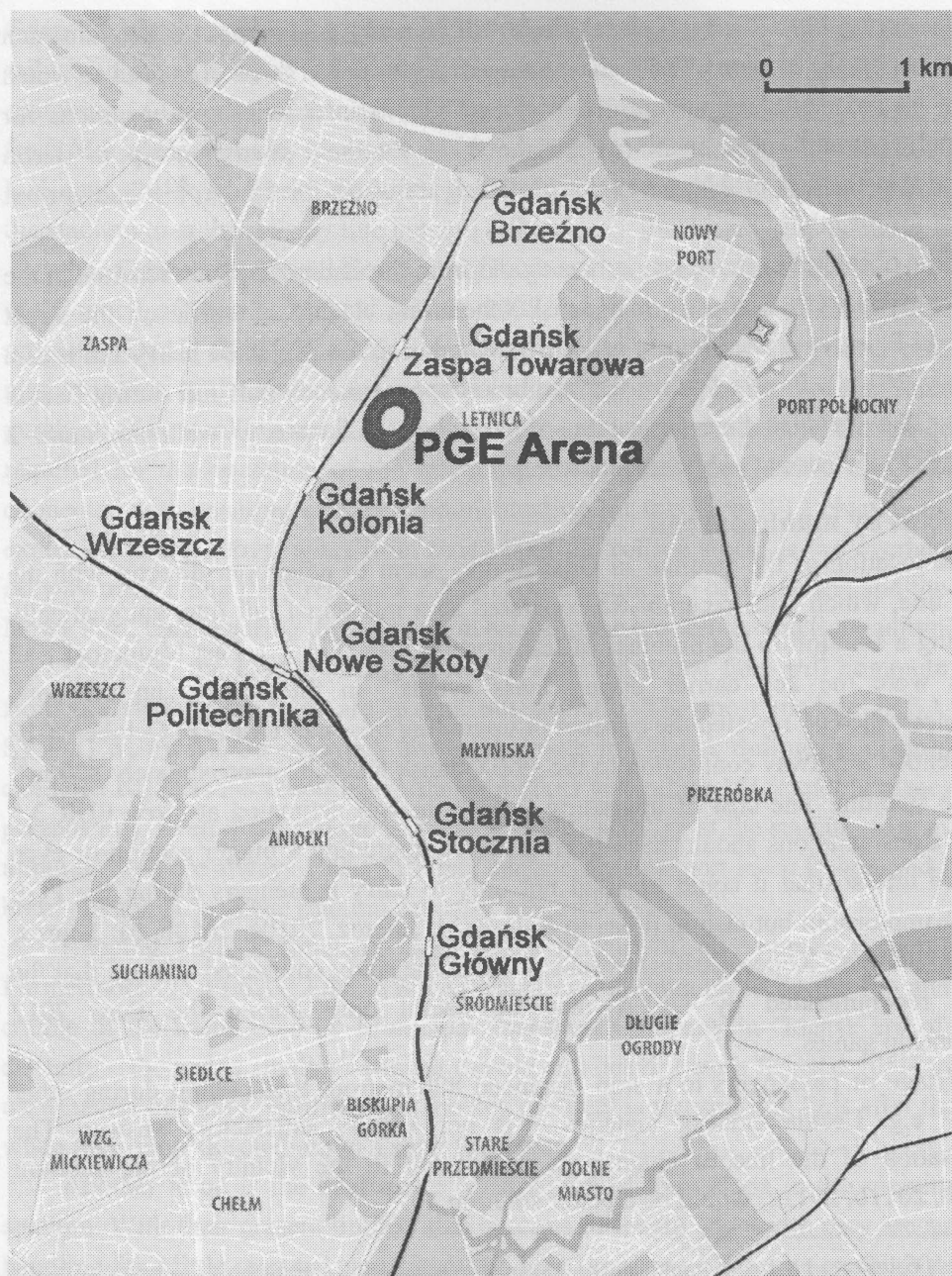


Fig. 1. Location of the stadium PGE Arena Gdańsk and the municipal railway line  
Source: own study.

Finally a decision was made to modernise the line to the stadium and built a new stop in the direct neighbourhood of PGE Areana between the stops Gdańsk Kolonia and Gdańsk Zaspas Towarowa (M. Jamroż, 2011; M. Tusk, 2011e). Trains are to run along the railway tracks used to 2005 by municipal rail and the cargo railway tracks, the repair of which was completed in 2010. Following modernisation, the speed of municipal rail is to increase from 20 km/h to 80 km/h (M. Jamroż, M. Tusk, 2011).



Connections by train to PGE Arena project three tri-wagon electric traction sets EN57 (M. Jamroż, M. Tusk, 2011; M. Tusk, 2011e). A single train will be capable of transporting approximately 1500 passengers. The potential frequency rate every 5 minutes allows for transporting 18 thousand fans to the stadium.

## Summary

Several months following the assigning of the 2012 Euro Championship to Poland and Ukraine an article by B. Szermer (2007) appeared on the possibility of ensuring transport to the stadium in Gdańsk. The author devoted meaningful attention to rail and road commuting. Additionally, he indicated the option of transporting VIPs by choppers<sup>44</sup> after constructing relevant landing grounds in the vicinity of the stadium. It is a characteristic fact that he completely ignored tram transport. It seemed to be quite logical. However, Gdańsk Authorities decided, contrary to the opinions of specialists, that commuting by tram to and from the stadium would ensure transport for the football fans. Fortunately, the project to revitalise municipal rail between Gdańsk Główny, and PGE Arena was readopted. Implementation of this project may ensure reasonable functioning of the entire communication system in Gdańsk not only during the 2012 European Football Championship but also during other events held at the stadium and the neighbouring exhibition grounds of the Gdańsk International Fair Co. Nevertheless, present implementation of the project has two weak points.

Trains travelling between Gdańsk Główny and the stadium are scheduled not to have any intermediary stops. Thus, all fans travelling to the stadium and wishing to use this commuting means will have to ride to the station Gdańsk Główny. The stopping of every train, in result of modernising the station, at the station Nowe Szkoty would result in a convenient change junction also embracing the train stop Gdańsk Politechnika and three tram stops: Kliniczna Szpital and Twarda running on one line and Opera Bałtycka on another line. Thus, fans commuting from the central and northern part of the Gdańsk agglomeration can change to a train to the stadium without covering an additional 5km. This would enhance the usefulness of the railway line to PGE Arena both during the championship games and after Euro 2012. What more, the junction at Gdańsk Politechnika and Gdańsk Nowe Szkoty would relieve traffic at Gdańsk Główny station, which may face problems in passenger traffic during events held at PGE Arena.

A municipal railway station in direct vicinity of a large stadium facilitating transport has many advantages. Nevertheless, the station and access to the station must be designed to ensure efficient boarding and departure by train for all leaving the event at the stadium. If the station provides a single platform this will be rather difficult. Train service may encounter problems with closing doors and leaving the station when passengers keep arriving on the platform. In Gdańsk this will be very difficult because

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<sup>44</sup> The Atatürk Olympic Stadium (Atatürk Olimpiyat Stadyumu) in Istanbul for 76 thousand spectators has a landing site for three choppers.

the train sets projected for the event are to be 195 meters long. Furthermore, the risk of accidents on arrival of the next train to the platform can be enormous in view of the growing number of fans. Therefore, the construction of two platforms with rotational access of passengers for a single train set at the station would be a better solution.

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