

## SPUTNIC – First Working Group Meeting, 29-30 March, Barcelona/Sitges

### Market Organisation: Integration and tariffs

Final Minutes

### Participants

Name	Company	Profile	City	Country
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#### Participating experts:

Arne Beck	KCW Berlin	Consultancy	Berlin	DE
Stanislaw Jedlinski	City of Warsaw	Authority	Warsaw	PL
Vladimir Depolo	Belgrade land development public agency	Authority	Belgrade	RS
Zdenek Dosek	Transport Operator of Prague	PTO	Prague	CZ
Ernst Wittmer	SOB	Tariff Ass.	St. Gallen	CH
Kvetoslav Havlik	KORDIS	Tariff Ass.	Brno	CZ
Rudite Revelina	Riga City Council, Traffic department	Authority	Riga	LV
Timo Korsisaari	Nurmijärvi/Helsinki Metropolitan area	PTO	Helsinki	FI
Branko Mikinac	Zagrebački Električni Tramvaj	PTO	Zagreb	HR
Drago Marić	Zagrebački Električni Tramvaj	PTO	Zagreb	HR
Jan-Henrik Pettersson	Skånetrafiken	PTA	Hässleholm	SE

#### Participating SPUTNIC Working Group Partners:

Bertil Hysten	VTI	Consultancy	Stockholm	SE
Lutz Auerbach	VVO	Transportation Union	Dresden	DE
Martin Ruesch	Rapp Trans AG	Consultancy	Zurich	CH
Dieter Egger	Rapp Trans AG	Consultancy	Zurich	CH

Total of 15 participants whereof

- 11 experts, 4 SPUTNIC partners
- 3 authorities, 4 intermediate organisations, 4 operators, 4 consultants
- 7 from CEEC, 8 from western Europe

## Final Minutes

### Thursday, 29 March, 16:15-18:15 (Moderation: Martin Ruesch)

Martin Ruesch welcomes all participants and gives a short introduction (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)). He introduces the cluster partners (Rapp Trans, VVO, vti) and the topics addressed in market organisation. He summarises the challenges related to market organisation and the main actors involved.

He splits the 1<sup>st</sup> working group meeting topic “integration and tariffs” into four aspects illustrating each with an example from Zurich (Switzerland):

- network/timetable integration,
- tariff integration,
- services integration and
- other integration topics.

Looking at these integration fields, Zurich reached already a high level of integration.

He explains the objectives of the meeting, the agenda and the ‘communication rules’.

Each expert notes the 3 most urgent problems regarding PT integration on paper cards (those of CEEC experts being yellow, the others being light blue – on purpose the participants were not informed of the colour distribution in advance). The cards are then assigned to the aforementioned four aspects of integration:

- Network/timetable integration: interchange between operators
- Tariff integration: revenue distribution (2x), tariff harmonisation (4x), increase in operation costs and subsidies
- Services integration: joint mobility services (door-to-door), limited access to information media for certain target groups
- Other integration aspects: missing legal framework conditions (4x), institutional factors such as bad teamwork and unclear responsibilities of the actors involved (4x), missing leadership (2x), lack of knowledge and awareness by politicians and authorities (2x), different support, ownership and legal status of municipal, regional and interregional transport (3x)

Framework conditions and tariff integration are the most urgent aspects, services and network integration seems less urgent. In CEEC services has not yet been perceived as part of integration. Many or most of the cards from CEEC-experts point to missing framework conditions, both legal or institutional ones. Enforcement of law is also weak. The fact that certain regions have realized PT integration (e.g. Brno) in spite of weak legal institutions shows that the barrier can be overcome. Timing might play an important role when integrating PT in CEEC. When the Prague system was established in 1993 the regional authority as an important actor was almost inexistent. By the time the Brno system (ROPID) was designed in 2002, the regions as powerful actors had been re-established.

Maybe the weak legislation could even be seen as an opportunity? In Warsaw many private bus operators use the gap between regional and municipal law to their advantage. But do passengers benefit in the long run?

What is missing in CEEC is a strong actor which has the will and the power to establish integration. And that is not only a matter of regulation but of initiative. This is a case of network externalities: all would profit, but no one takes the initiative. Should operators or authorities take the lead?

Zagreb is in the process of building up an association to integrate the 3 public and the 2 private operators and the railway. The legal/financing regulations are a problem as the state only pays for railway services. For the rest of the country integration is not an issue as the country is divided into separate market areas (with one PT operator each) which have almost no interrelations.

In Belgrade timetable integration is no big issue because the buses run every 3-5 minutes, making integration of timetables almost unnecessary. Tariffs have been integrated but lead to an increase in costs and thus subsidies because the integration reduced competition. In Belgrade public and private operators do not compete for the market (e.g. for exclusive operation rights) but in the market (competing on the same lines). Various experts state that a concession system allows to combine integration and competition within the same PT system.

3 subgroups – were set up in the Working group. Their discussions can be summarised as follows:

- Network/Timetable Integration (Auerbach, Havlik, Korsisaari): main challenges are smooth interchanges between different operators (physically and regarding timetables) and bad infrastructure causing capacity and timetable bottlenecks. To overcome these problems it is important to set up a strong institution (no matter whether authority or operator). But legal framework and funds are missing.
- Regulation/framework conditions (Hysten, Beck, Jedlinski, Revelina, Dosek, Mikinac, Maric, Pettersson): in reality politics and legislation do not match. The new EU-legislation on its way might force national governments to reconsider their legislation. The new EU-legislation allows lots of freedom, from privatisation to tendering to direct awards; if you tender services, the tendering framework conditions are crucial.
- Tariff Integration (Ruesch, Depolo, Wittmer): Usually tariff integration follows network and timetable integration (second step); operators and authorities can influence integration; it is possible to realise integration without national legislation; in the long term revenue distribution should be based on demand instead of supply (incentives). A strong PT policy supports tariff integration.

As a final step each expert can award 3 points to the most urgent topics considering the discussions of the afternoon. 28 points are distributed. Among the most urgent aspects (3 to 5 points) rank:

- lack of knowledge, interest and awareness by politicians, authorities and citizens
- revenue distribution schemes securing incentives and preventing discrimination
- the strong influence of tariff integration on operating costs and subsidies
- “institutional factor” of integration incl. roles of the actors
- how to harmonise municipal and regional tariff when passengers come from the countryside

This exercise and the afternoon discussions show two main issues: tariff integration and the institutional setup of integration.

### Friday, 30 March, 16:15-18:15 (Moderation: Lutz Auerbach)

Lutz Auerbach welcomes everybody for the second day of the meeting. It is agreed to skip the issue of legislation for this second day as it would lead discussion into a dead end.

Lutz Auerbach gives an insight into integration practices at the transport union Verkehrsverbund Oberelbe (VVO) which is Germany's 9<sup>th</sup> biggest integrated PT system covering 5'000 km<sup>2</sup> with 1.2 Mio. inhabitants (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)). The VVO integrates the services of rapid transit railway, regional railway, narrow gauge railway, regional and urban buses, trams and ferries. Main tasks include the planning, organisation and management of an integrated PT system as well as the ordering, financing, tendering and contracting of railway services. VVO integrates the services of 12 PT operators with respect to tariffs, timetable, network and services. At the heart of all lies the general public transport plan, which is revised every five years. It is the basis of all further regional detail planning. Each transport mode is used according to its strengths: the regional railway for speedy regional connections, the tramway/light rail to move high numbers of passengers within conurbations and the area services (buses) to feed rail bound services which form the backbones of the system. Optimal points of interchange between these modes are therefore crucial for the whole system. A customer survey revealed that different tariffs for particular transport modes are the most important access barrier to PT. Therefore VVO introduced an integrated tariff and fare system in 1998 based on the principle: one ticket for all modes within VVO-area. VVO's fare system is based on 22 fare zones. It is easy to handle for customers as well as operating companies. It is marketed jointly by all operators within the area. When introduced it reduced existing tariff conflicts and increased the number of passengers and sales volume. Service integration within VVO includes pre- and on-trip passenger information covering all PT within the VVO area. It is a very complex issue but essential for the customer.

Kvetoslav Havlik gives an overview on integrated public transport systems in the Czech Republic in general and in the southern Moravian region in particular (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)). Compared to other CEEC the Czech Republic has quite advanced integrated PT systems: there exist 8 integrating PT authorities and most regions know some form of integration. Sometimes there are conflicts between neighbouring systems when certain buses operate in both areas. The various systems have very different organisational approaches: ROPID (Prague) and Ostrava were established by the cities as the regions were almost inexistent by that time. KORDIS/IDS JMK was established 10 years later (2002) when the regions had regained their power. Therefore KORDIS was established jointly by the city of Brno and the southern Moravian Region. KORDIS being the integrator of IDS JMK aims at integrating and improving the PT services and demand without any additional money (same subsidies/budget as before the set up of IDS JMK). The area integrated by KORDIS is growing every year. By 2010 the whole Southern Moravian region should be included. Currently IDS includes 17 PT operators.

Within IDS JMK timetables, network, tariff, services and marketing are fully integrated. The network is organised in a hierarchic way: Railway and trams are the backbones of the system, whereas buses mostly serve as feeder lines. Compared to former times passengers now travel faster but have to change transport modes more often, which is not a problem thanks to timetable integration interchanges are smooth and comfortable. Equal interval timetable also facilitates customer understanding. Timetables are made by KORDIS who also sets quality standards for their operators. The tariff system is based on fare zones. Tickets have zone and time validity. All single and prepaid seasonal tickets are valid on all modes within the IDS JMK area. Prepaid tickets are strongly promoted by a 20% reduction compared to single tickets. They help to retain customers, stabilise the cash flow and are easier to handle for the drivers. Within IDS JMK there is a common marketing policy. PT is promoted as IDS JMK services, not by the single operators. KORDIS also operates a common call centre, customer information office and dispatching system. IDS JMK attained its goals: with the same amount of money as before the number of passengers and the fare revenues have increased substantially. Almost 80% of the customers are satisfied.

Answers to particular questions:

- It took about 1 year to set up the system. KORDIS started at a small scale and grew bigger almost every year.
- It is not possible to pay tickets by mobile phone. This is not a priority at KORDIS.
- KORDIS employs about 20 people with an annual budget of about 300'000 Euro. It is financed by the state, the regions and the municipalities, but also by projects.

- When setting up KORDIS it was a condition that there should be no additional costs. As demand and revenues increased after setting up the system, cost coverage has increased too.
- KORDIS has the power to manage the operators because it is KORDIS that manages the budget. Bus lines are tendered by the regions.
- Enlargement policy: IDS JMK started around the city of Brno. It is enlarged constantly where it is easiest, independent of passenger demand or politics. Decisions are taken by consensus by a working group that consists of the regional and the city administration and the owners of the tracks (the Czech Railways and Brno Public Transport). The bus operators are not part of the working group.
- The increase in revenues (after introduction of IDS JMK) is smaller than the increase in passengers. This is mainly due to the introduction of the prepaid tickets with 20% discount. On the other hand, some single ticket prices also increased.
- About 5-8% of passengers are fare dodgers. This is estimated to be a usual share in CEEC.
- Although after network integration passengers were forced to change their means of transport more often, this does not necessarily mean more travel time because part of the journey is now undertaken on a faster travel mode (e.g. train).
- quality standards include behaviour of staff, operating standards (punctuality, early departures, vehicle replacement in case of breakdown) and technical standards; the latter include GPS, destination information, ticket validators, ticket vending devices, but no vocal announcement of stops; low floor buses are an advantage in tendering procedure but not a must. There is quite a long list of penalties to be paid if an operator does not fulfil the required standards

Ernst Wittmer presents the Ostwind Tariff Association, a tariff integration example from Eastern Switzerland (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)). The initiative for establishing the Ostwind tariff association was taken by the governing councils of the 4 cantons (regions) in north-eastern Switzerland. Their goal was to strengthen public transport without placing a heavy burden on public funds. In 2002 the Ostwind came into operation. Until today it only includes monthly and annual tickets; single tickets will be included from 2008. Today the Ostwind covers an area of 3'500 km<sup>2</sup> and 750'000 inhabitants and integrates 30 PT operators covering all kind of modes (rail, bus, cable car, ship). The integration of the operators into the tariff union was not a completely voluntary affair (because operators lost their former tariff sovereignty). In fact, the cantons (regional authorities) obliged the operators to set up a partnership with the purpose of developing and operating an integrated fare system. As it is the same cantons that subsidise uncovered costs of PT, they had the power to do so. They also threatened to tender an operator's services if he would be reluctant to participate. This pressure on operators was probably a contributory factor to a number of subsequent mergers. The Ostwind mainly consists of an agreement between PT operators who established the Ostwind Company. This company is managed by one of the participating operators – on behalf of all. The managing company is supervised by the committee of participating PT companies. Strategic decisions of the tariff association (tariff policy, medium and long-term development planning) are taken by the tariff association council that consists of 4 representatives of the cantons and 4 representatives of the PT companies. In contrast to other integrated fare systems in Switzerland, the management and marketing costs (currently 380'000 Euro per year, half of it for marketing purposes) of the Ostwind association are borne by the cantons.

The Ostwind tariff association for monthly and seasonal tickets is a great success. Revenues have grown around 25% and subsidies could be reduced accordingly. None of the affiliated PT companies could have attained this kind of result on its own. With the planned extension of the tariff union to single tickets, the Ostwind will become stronger at the expense of the single operator. The PT companies are therefore very anxious not to lose too much power to the "central office". Therefore the Ostwind association will stay responsible for the tariff and the tariff related marketing only. The marketing of services will remain the daily business of the operators who try to brand itself with a positive image.

The Ostwind is one of 17 tariff unions in Switzerland. Each has its own tailor-made tariff scheme. With people travelling longer distances this leads to coordination problems on a national level. Therefore the forum of tariff unions has been established – a cooperation platform to share information and ideas.

Within the framework of 6 basic questions the situations in the different countries are discussed.

#### *Little PT integration in Belgrade/Serbia*

In Belgrade tariffs are integrated on an urban and suburban level; however the state railway is not included. Smaller cities usually have only one operator which makes integration easier or even unnecessary. There is no national legislation that promotes PT integration; it is up to the communities to take action. In Belgrade, the directorate (part of the city administration that will soon become a legal entity on its own) defines network and timetables; it awards public service contracts (PSC) and tenders the services every 4 years. State railways are divided into a network company and an operating company. The network should be open access until 2009. Within the city of Belgrade urban railways will be operated by a new company that will sooner or later be integrated into the urban tariff system. Within the existing system there are discussions about revenue distribution. In Belgrade, the integration of tariffs created additional costs; before integration there were only subsidies for public operators, now private operators are subsidised too. Some of the costs can be offset by higher revenues. For example the number of seasonal tickets quadrupled. However, tariff increases are difficult to achieve, as the communities need the state's approval (which is very reluctant to tariff increases). Other cities in Serbia have no integrated systems but will follow sooner or later the capital. Vladimir Depolo suggests that the discussion on tariff integration should be combined with discussing the subsidy system. If the two topics are connected, politicians will swallow the pill easier.

#### *Little PT integration in Zagreb/Croatia*

In the city of Zagreb the local public operators runs all PT services within the city and 40% in its surroundings; the other 60% in the surroundings are run by private operators. Since 2007 Zagrebacni Elektricni Tramvaj (ZET) has a public service contract (PSC) for the first time in history. PT is organised in a concessions system (exclusive right to run a certain service for at least 5 years); there is no competition in the market, but there have been some tenders for the market. In the surroundings each operator has its own tariff and customers need several tickets. In the city itself there is an integrated tariff with Croatia Railways which are compensated for the acceptance of the "urban PT tickets" by Zagreb municipality. In the regions passenger can travel with several operators using only one ticket; however, the price of this ticket simply equals the sum of the various part-journey ticket making it very expensive and unattractive. In Zagreb region some form of integration is planned to be established within the next 3 years; it is expected that the other regions will then follow the Zagreb pilot. For integration to be successful the harmonisation of both tariffs and quality standards is crucial. For example, in Zagreb ZET has a rather old fleet and relatively low prices, with other operators it is the other way round (new fleet at higher prices). Current plans of ZET include the renewal of the fleet and the introduction of contact less ticketing systems and SMS-ticketing.

#### *No PT integration in Riga/Latvia*

Privatisation of municipal PT companies is currently no topic in Latvia. For passenger trains it is even forbidden by law. 70% of the Latvian economy is concentrated in the city of Riga. The city's PT system is characterised by diverse ownership and tariff systems. Railways are owned by the state, trams and trolleys are owned by the municipality, buses are owned by a public operator and minibuses are run by private operators. The applied fare reductions (e.g. for disabled people) also differ with ownership – just as the level of subsidies. All this makes integration very difficult. The integration of tram/trolley into the bus network has been discussed for over 2 years, but without success.

2 years ago a long-term PSC with the municipal operator was signed (18 years.). The 8 private operators are granted a 5 year PSC each. They receive no subsidies at all. In turn they do not grant any reductions for elderly or disabled people. The other operators are forced to grant these reductions by the state, but the latter does not compensate the operators accordingly. A new legislation on PT is currently debated in Parliament. If it is approved, the situation should improve. Currently PT in Riga is undergoing a period of change: there will be new forms of market organisation and a common electronic ticketing system.

#### *Little PT integration in Warsaw/Poland*

In Poland there are two progressive regions with respect to PT integration: the region around Gdansk and Gdynia, and Southern Silesia.

In Warsaw the main barriers to PT integration are the different responsibilities and the disperse management. Long distance trains are administered by the state, regional trains by the regional administration and local trains/metro by the municipality. Publicly operated buses, metro and trams within the city of Warsaw have common tickets. But when the agglomeration shall be included, a new institutional body is needed.

The Polish railways are in a very bad condition. During the last year the city tried to integrate regional trains into the city's PT network. Where integration has been achieved, it was done by bilateral agreements between the city of Warsaw and surrounding districts. There is a new national legislation being prepared that will strengthen the positions of the large cities. They will be able to contract the railway services inside the cities. Integration should be implemented step by step, first step being an integrated compensation system (harmonisation of different subsidy funds etc.)

#### *Revenue distribution systems:*

In the Netherlands a demand based revenue distribution system based on electronic ticketing has been implemented for 2.9 billion Euros. In Germany fair revenue distribution systems are still a hot issue. Schleswig-Holstein has currently introduced a smart system. In Switzerland demand driven approaches (based on trips and passenger-kilometres) are common practice. This approach fulfils the requirements of fair and transparent revenue distribution including clear definitions of key figures and compatibility with national institutional framework conditions. At KORDIS a supply driven approach is used; operators are compensated per bus-kilometre. With the gross cost contracts at KORDIS there is no need for revenue distribution. But when using net cost contracts (as in Switzerland or Germany) revenue distribution systems are needed to incite the operators to increase demand and revenues.

Revenue distribution systems can be costly and difficult and cause controversy among operators. Modern technology should be used to help.

**Friday, 30 March, 15:00-16:30 (Moderation: Bertil Hysten)**

Bertil Hysten welcomes everybody to the afternoon session on tariff measures. He gives a short introduction into the topic (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)) posing some fundamental questions (who should decide about tariffs and what is a reasonable degree of cost coverage?) and pointing to some crucial trade-off decisions when designing tariff schemes (simple versus sophisticated). He gives a short overview on the situation in Scandinavia.

In Denmark the PT market underwent a major reform. Now 5+ Public Transport Authorities (PTA) cover all Denmark. They decide about tariffs – each in its own way. Operators are managed by very detailed incentive contracts. Subsidies are split between regions and municipalities. Integration between train and local buses is very good. Nevertheless PT is losing ground.

In Norway, the PTA generally decide about tariffs, but some PSC give limited power to the operator. Net contracts all include incentives.

In Sweden, PTA have full tariff power since 25 years. There is little scope for operator initiatives. Tariff schemes differ greatly between PTAs. Some have 100 fare zones while others used to have only one.

By 2012 passengers in most of Scandinavia should be able to travel using one single smartcard. The system is not based on credit cards, some operators and PTAs require contact less validation in order to make boarding very quick, others require that passengers insert the card into a validation machine.

Jan-Henrik Pettersson gives an insight into the Öresund tariff system (see slides on [www.sputnicproject.eu](http://www.sputnicproject.eu)) which more or less integrates the two tariff systems of the Skane region (Sweden) and the Copenhagen region (Denmark) that are linked by the Öresund bridge across the sea. It was introduced when the bridge opened in 2000. The whole area includes around 3 Mio. inhabitants. The Öresund tariff system includes all local and regional PT on both sides of the bridge: city buses, regional buses, metro, local and regional trains, ferries. Although fare levels are the same, the ticketing systems are not fully integrated, as the Swedish passenger cannot use his magnetic card in Denmark (they have no card reader – he needs an additional paper receipt). The zonal system is easy to understand and has 10 larger zones on the Swedish side and 7 smaller ones on the Danish side. When setting the common fares different traditions had to be bridged. For example Denmark was used to personal monthly passes whereas in Sweden monthly passes used to be transferable.

As individual car traffic on the Öresund bridge is priced, the PT fares compete directly with the corresponding costs of a car crossing the bridge. As a consequence to the fierce price competition, the Duo/Family ticket was introduced, which is valid for 2 adults and up to 3 children and is 10% cheaper than the price of two single adult tickets. This proved to be a great success. Other tickets include cash tickets, the Öresund card for commuters and the discount card for “every now and then”-users which is prepaid but offers a 20% discount on all fares. Its main idea is to have less cash payment (costly handling). Passenger can receive travel information by mobile phone. Currently there is a trial going on for payment by phone (to be evaluated in summer 07). Success factors of the Öresund fare system include simplicity, a tight timetable, the situation of Copenhagen airport along the line, competition with road traffic and high quality standards. For example operators guarantee their customers that they will arrive in time. In case of delays the operators compensate the passengers for the inconvenience.

Timo Korsisaari presents the Finnish case where Matkahuolto (“trip care”) was established more than 80 years ago as an association of private PT operators in order to market PT all over the country. Matkahuolto is the PT coordinator for all Finland except the area of the three large cities in the South. Since 1998 it issues a (almost) nationwide smartcard. The fare system is the same all over the countryside. It is based on a degressive distance tariff (the maximum price per kilometre being determined by the Ministry of transport). The application of this same tariff system eases the nationwide use of the smartcard. Matkahuolto is also responsible for a fair revenue distribution to its member (based on actual passenger demand), joint timetable information and marketing.

*Fare levels and tariff policies:*

In Zagreb tariff used to be set using 3 fare zones, but politics forced the introduction of a one zone system (flat fare). The operator was never compensated for the corresponding revenue losses. Currently cost coverage of ZET (PT operator in the city of Zagreb) is about 50%. The uncovered costs (i.e. the other 50%) are borne by the city of Zagreb; however, the city's PT budget is subject to regular debates. It is important to convince politicians that they are not subsidising operators, but their citizens.

In Latvia tariff increases are opposed by politicians who fear elections. For the last seven years the tariffs were fixed at the same level. This year finally an increase was approved. The operators only receive subsidies for operation, but not for investment which leads to degrading infrastructure and rolling stock.

In Poland fare levels are very low. Tariff increases are hindered by strong labour unions as well as by politicians. There has been no increase in fares since 2001. Fare policy is focused on mobility guarantee, not on cost coverage (which currently is only 38%).

Bertil Hysten summarises the discussion: the division of power between different authorities and operators can be an important barrier for reforms in tariff systems. Tickets (in the purely physical sense) and tariffs are often linked which makes development more difficult.

### Friday, 30 March, 17:00-17:30 (Plenary session)

Martin Ruesch summarises the discussions and findings of the meeting on integration and tariffs.

In some urban areas a quite high level of integration has been reached with respect to timetable and network integration whereas in other areas actions have to be taken especially relating to interchanges and timetables.

There is however a stronger need for action with respect to tariff integration and the organisation/institutional set up.

**Challenges** with respect to **tariff integration** include:

- the harmonisation between local and regional PT
- the integration of national railway services
- a possible increase of costs by tariff integration  
solutions without cost increase exist (harmonisation losses / organisation effort covered by revenue increases)
- border crossing tariff integration
- the appropriate approach for revenue distribution (supply or demand oriented)

**Challenges** with respect to **organisation/institutional set up** include:

- lack of interest, knowledge and awareness of politicians
- missing responsibility / initiative (Who takes the lead for integration?)
- what kind of national/regional regulation is needed?
- which kind of organisation/institutional solution is needed and how to implement it?

Generally the question was raised whether integration reduces competition. A general answer cannot be given: it depends on the form of integration and competition.

The practices from Brno and VVO have showed that in **integrated networks** the different travel modes are used according to their individual strengths and weaknesses (railway/subway as backbone, bus/tram as feeder lines). Such a system relies on smooth interchanges and connected departures (usually combined with an equal interval timetable). Possible benefits include more reliability, less travel time, more efficiency (cost reduction avoiding parallel lines and network optimisation), demand and revenue increase. Network and timetable integration requires a central and coordinated PT planning.

The practices on **tariff integration** from Brno, VVO, Eastern Switzerland and the Skane region showed that the consequent introduction of one ticket for all modes, operators and lines within an area can substantially increase PT demand and revenues. Depending on the frame framework conditions the tariff integration can be reached in two steps (1. step: passes, 2. step: single and multitrip tickets). Sometimes it comes at a cost (harmonisation losses, coordination cost) which however might be offset by higher revenues.

With respect to the **organisational set up** different solutions prove promising, depending on the framework conditions: transport associations (involves a coordinating entity), tariff unions and bilateral agreements. Key success factors include:

- Process to establish the organisational entity
- Responsibilities: clear definition rights and obligations
- Proper compensation
- Proper revenue distribution
- Quality standards
- Lean organisation

With respect to **tariff policy** politics play a crucial role. In CEEC it is mainly the authorities that decide on tariffs, the influence of the operators is rather low. According to the different policies, cost coverage degrees vary from 35% to 70% (in

urban areas). The example from the Öresund tariff scheme showed that PT tariffs cannot be set independent from the costs of private car usage. When designing tariff schemes there is always a trade-off between simple and sophisticated solutions (customer convenience versus revenue optimisation).

Especially in the long term, integration of PT in mobility services, transport planning and land use planning is equally important.

### **Main Conclusions**

Integration reduces the entry barrier for using PT and increases demand and revenues. The main challenges are the integration of tariffs and the setting up of a suitable organisational/institutional framework (transportations association, tariff union) – possibly at no additional costs.

Integration possibilities and approaches depend also from the local framework conditions and the level of competition.

The main actors for PT integration are authorities, transport operators and politicians (and transportation associations, tariff unions). For integration to be successful co-operation between these actors is needed which can usually only be achieved by a strong PT policy support. But the local/regional initiative by authorities and PT operators is equally important.

Integration is even possible with a weak national regulation but it requires local/regional initiative (policy, authorities, PT operators)

26.04.2007 / de / MSR

***Annex 1: Pictures***

**1<sup>st</sup> Working Group Meeting Agenda  
29 and 30 March 2007, Barcelona**

**WG 3: Market Organisation  
Integration and tariff systems**

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**Objectives of WG Meeting**

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- To identify and validate main problems/challenges, trends and challenges in CEEC related to services, network, timetable and tariff integration (including models for integration, institutional set up, design of organising authority etc.)
- To exchange information, experiences and know how and information on integration aspects including tariff systems between CEEC and other European cities/urban areas
- To present and discuss good practices examples from operators and authorities from CEEC and other European Countries
- To derive conclusions on challenges and need for action

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**Preparatory documents**

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Working paper on Integration (focus tariff and fare systems) including

- State of the art and problems/challenges in the field of market organisation
- Overview on integration fields
- Integration related to tariff and fare systems

**1<sup>st</sup> Working Group Meeting Agenda  
29 and 30 March 2007, Barcelona**

**WG 3: Market Organisation  
Integration and tariff systems**

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**Draft Programme**

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**29 March 2007**

13:30 – 14:30	<b>Lunch</b>
14:30 – 15:30	<b>Opening session</b>
15:30 – 16:00	<b>Coffee Break</b>
16:00 – 18:00	<b>Working Session (part 1): Current Situation and problems related to integration in urban public transport</b>
	Introduction by cluster leader
	- Topics addressed in WG Meeting
	- Overview on integration fields
	- Objectives / expectations for the meeting
	- Programme for the WG Meeting
	- “Rules of the game”
	Current Situation, problems, trends and key challenges in CEEC and other countries related to integration in urban public transport (statements by the experts and discussion)
	Validation of current situation, problems, trends and key challenges in CEEC Countries

## 1<sup>st</sup> Working Group Meeting Agenda 29 and 30 March 2007, Barcelona

### WG 3: Market Organisation Integration and tariff systems

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#### Draft Programme

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#### 30 March 2007

- 9:30 – 13:30      **Working session (part 2): Practices in network, services, time table and tariff integration**
- Introduction by VVO based on the experience from the transportation association Oberelbe
- Good Practice Cases from CEEC and other European Countries and Discussion
- Further examples and statements by experts on integration issues
- Structured group discussion on good practice/experiences (benefits and costs, success and failure factors, barriers, transferability and implementation, important framework conditions) and Conclusions
- 13:30 – 14.30      **Lunch**
- 14:30 – 16:30      **Working session (part 3): Tariff measures**
- Introduction by VTI on tariff measures based on examples from Sweden
- Good Practice Cases from CEEC and other European Countries and Discussion
- Structured group discussion on good practice/experiences (benefits and costs, success and failure factors, barriers, transferability and implementation, important framework conditions) and Conclusions
- Outlook on further activities in WG 3
- 16:30 – 17:00      **Coffee Break**
- 17:00 – 18:00      **Closing session**

### Annex 3: Inquiry Results

#### Inquiry results

The questionnaire treated questions concerning integration and tariff systems.

In only one of ten cases there are no Public Service Contracts otherwise the PSC is a common practice. Basically competition is already present in the different European PT markets. In the western EU states competition is more a common practice than in the new member states. The proportion of urban/regional PT operated by public or private operators is different in each country. The only difference is that the share of public operators is higher in CEEC countries than in western countries. There the public transport is operated more often by private companies (see figure below). An informal sector in PT exists only in two cases but even there it is scarce.

In six of ten cases there are conflicts related to the tariff systems applied and in four of these cases the different tariffs are not justified. The kind of harmonisation of tariffs which has been implemented in the respective region generally differences between east and west. In the eastern countries preliminary stages of tariff co-operation such as mutual acceptance of tariffs dominate. The western countries already continued to develop the harmonisation. There tariff or transportation associations are more common. A most pressing problem of integration is the lack of sufficient legal solutions and of a legislation framework. Additional barriers are missing research in the field of technical solutions and missing participation of the operators. They often fear to lose their tariff power and to provide confidential information on revenues to other operators (fearing a reduction of their competitiveness).

#### 1. General questions

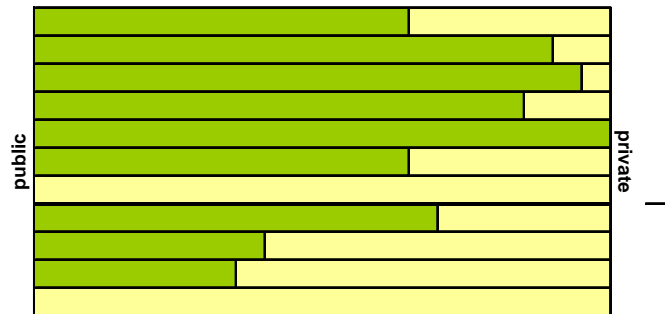
E/W	Inhabitants	Public Service Contracts	Other type
E	1.5 Mio	yes	
E	1'200'000	yes	
E	720'000	yes	
E	1.7 mio	no	no
E	120'000	yes (net)	
E	1'020'000	yes (gross)	no
W	2.8 mio.	yes, both (net and gross)	yes
W	750'000	-	-
W	1.2 Mio	yes (self-supporting PT)	yes
W	1.2 millions	-	-

#### 2. Is there competition in the urban/regional PT market?

E/W	common practice	Competition is			other form:
		scarce	in the market	inexistent	
E	X				
E		X			
E					
E		X	X		tendering of a part of bus services
E		X	X		
E				X	Only to compare a unit price for vehic.km
W		X	X (scarce)		
W	X (bus)	X (railway)			
W	X		X		
W	X				

3. What is the proportion of urban/regional PT operated by public or private operators?

	Proportion	
	public	private
E	65%	35%
E	90%	10%
E	93%	7%
E	84%	16%
E	100%	
E	65%	35%
		100%
W	70%	30%
W	40%	60% (incl. SBB)
W	35%	65%
W		100%



4. Is there an informal sector in PT and are informal actors seen as allies or competitors?

	informal sector		
	yes	no	
E		X	
E		X	
E		X	
E		X	
E		X	
E		X	tolerated competitors
E	X		
W	X (but scarce)		
W		X	
W		X (only public and private companies)	
W		X	

**5. Who is responsible for setting the tariffs in urban/regional PT?**

Responsible for setting tariffs:			
	for public operators	for private operators	differences
E	the city directorate for PT	the city directorate for PT	
E	regional organizer of integrated transport system		final approval is done by politicians
E	City public service regulator	passenger commercial transport licencing	Minibus routes operated by private operators have been ratified by the Passenger commercial transport licencing commission after operator's suggestion that all passengers should pay the full fare. There are no municipal subsidies for this form of transport
E	the City council	operating within the network: the City council, also many private bus operators getting concessions from regional authorities	competitive reasons, they claim lower costs etc.
E	CITY GOVERNMENT	CITY GOVERNMENT	
E	entitled authority	entitled authority	
W	operator and PTA together	operator and PTA together	
W	Tariff Ass.	Tariff Ass.	
W	region authorities	region authorities (tendered PT, Ministry of transportation and Communication)	regional authorities are paying the PT services, other PT services are self-supporting
W		Region	

**6. What kind of tariff measures has been implemented in the past 5 years (for example new types of tickets for special target groups)?**

E	integrated tariff system established in 2003
E	very few, almost nothing, "sliding passes"
E	Elderly people (75years old +) and primary school children are able to use municipal public transport free of charge, the 3rd group disabled people of sight and hearing are able to use PT with 75% discount. Elderly people till 75 years who's pension is less than 128 EURO have 50% discount of PT ticket or monthly card
E	the common periodical ticket (the same price) was introduced, it regard both PT and passenger train operators within the Warsaws area and partly outside the town
E	specific group of costumers are subventioned by city government.
E	There are different types of fare systems (single ticket for various duration of journey or various number of stops, zonal ticketing with month, trimester and year validity, validity from a day of purchase not from 1st day in month), the biggest change is cancellation of reduction for people over 70 years and members of resistance movement, but in Bratislava this kind of reduction is still valid.
W	renewal of total tariff system with the aim to provide a discriminating free revenue distribution between operators, who may compete against each other in the near future
W	Tariff Ass. for abonnements since 2002
W	smart card system which allows different kinds of options of paying
W	student discount tickets and duo/family ticket

7. What are the main elements of your tariff policy? Please rank by numbering from 1 to 5 (1 being the most important element, 5 the least important one)

	max revenues	provide basic mobility	provide cheap mobility	improve modal split	other
E	1	3	2	4	
E	5	1	3	4	2 (provide integrated transport services, integrated tariff)
E	2	3	1	4	5 (find balance between possible dotation (subsidy) and payability of passengers)
E	5	1	3	2	4 (selling long-period contracts (monthly, quaterly tickets))
E	3	1	2	4	
E	2	5	1	4	3 (to continue with refurbishment of busses to CNG)
W	2	5	4	3	1 (provide a discriminating free revenue distribution)
W	3	2	4	1	
W	2	1	4	3	
W	3	1	4	2	

8. Do you recognize any conflicts related to the tariff systems applied, for example different tariff systems used by different operators within the same area?

	conflicts		justified	
	yes	no	yes	no
E		X		
E		X		
E	X			X
E	X			X
E		X		
E	X			X
W	X		X	
W	X			
W	X			X
W		X		

9. What kind of harmonisation of tariff systems has been implemented in your city/region so far?

	none	mutual acceptance on the same line	mutual acceptance within the same network	tariff associations	traffic association	others
E			X			
E					X	
E		X				
E		X	X			
E	X					
E		X				
W				X		
W				X		
W		X				
W				X	X	

10. If tariff harmonisation or a common system in a region is not common: what are the main barriers to establishing such schemes?

	tariff harmonisation or a common system in a region is not common, why:	Who is opposing them and why?		
		politicians	authorities	others
E	to continue to improve tariff harmonisation and integration, the actualisation of national legislation corresponding to European framework is needed	problem of awareness	institutional organisation	lack of participation in discussions
E	Different mechanism of dotation and government support policy			
E	splitting the costs and revenues among operators, different bodies/authorities, governing PT inside Warsaw and outside as well as PT and the regional railway transport		difficulties in calculating a number of passengers and costs to be covered by local authorities	the same difficulties concerning operators costs
E	different ownership of the operators	politicians, because they do not understand advantage of integration of common tariff system, they see only costs with regulatory authority and costs with new tariff equipment	all by their own reasons	
E	to effort of all actors (private bus company, railway company, public company for municipal PT in Bratislava) to keep their revenues on contemporary level,		authorities, because reason like politicians	operators, because look above regarding effort to keep revenues
W	Market failure: Missing strong actor (e.g. PTA) who engages himself in this subject			operators, because they fear the need to provide informations on revenues to other operators
W				operators, because loosing tariff competence
W			not willing to co-operate with self-supporting PT companies	part of the PT is self supporting and part is tendered, self-supporting operators have their own smart card system which is valid in whole Finland except in five biggest cities
W				

11. What are the 3 most pressing problems related to tariff systems and the forming of traffic associations or the introduction of other new PT structures in your country?

	1	2	3
<b>E</b>	no problems related to tariff systems ar indicated. Strong interest for implementation of new technologies.		
<b>E</b>	lack of research and, in the same time a lack of Good/Best practices, lack of comparisons culture, and of identification of main problems	lack of new technologies (Smart cards)	the reasons indicated in the question 10
<b>E</b>	There are different funding mechanisms in state and Riga Municipality	Given discount policy	Minimal government support to City Municipality
<b>E</b>	lack of sufficient legal solutions	mentioned in question no. 10	
<b>E</b>	legal problems	owner ship	technical problems
<b>E</b>	lack of legislation framework	lack of good practise to follow	lack of public funds for PT
<b>W</b>	Market failure (see above)	Missing technical solutions to provide clear discriminating free revenue distribution	Weak PTA
<b>W</b>	building integrated tariff union	procurement ticket automat with corresponding software to the tariff system	-
<b>W</b>	2 different smart card systems	co-operation between regional authorities and self-supporting companies	-
<b>W</b>	no problems, in the early 80's PTA were organised in each county by law		