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# Direct Service Manual

## on Public Transport Practices

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# 1 Direct Service

Direct Service is a time-tested means of harmonising transport fares at the national level – almost like a national fare network. Through Direct Service, customers are able to buy simple and uniform multimodal travelcards, travelpasses and one-trip tickets that are valid for multiple forms of transportation operated by different transport companies (TCs).

The idea is almost as old as the railway system itself. Around 150 years ago, the largest Swiss private railway companies began to harmonise their passenger transport fares. Today, multimodal transport and corresponding accumulated discounts are the norm in Switzerland. Working behind the scenes, the Direct Service Network (DSN) has become an extremely differentiated marketing, distribution and billing entity. The range of specialised travel products is so broad and diversified that it becomes rather difficult to gain a clear overview. However, multimodal transport is no longer “uniquely Swiss”. Transport networks appeared in Europe and Asia in the 1980s. Since then, flat countries such as the Netherlands or Denmark have introduced electronic ticketing and established their own national multimodal transport systems.

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## 1.1 Benefits of DS products for both customers and TCs

The following chapters describe the functioning of this large national transport network, which is primarily the result of a combination of legislation, efficient cooperation and good coordination.

Before doing so, we shall focus our attention on those who use DS products on a daily basis: the public transport customers themselves. DS products offer the following immediate benefits:

1. DS products are simple
   There are over 240 different TCs in Switzerland. And yet, with a single ticket, passengers may travel on various means of transport (e.g. rail, bus, boat, cablecar). This ticket may be purchased at practically any point of sale. The DSN motto is “one trip, one ticket”.
2. Customers are rewarded for using DS products
   In addition to the “one trip, one ticket” principle, customers also receive distance discounts over longer trips, including those for which multiple means of transport are used. The longer the trip, the greater the discount.
3. DS products offer great flexibility
   Passengers using DS products do not have to reserve seats nor take a specific train for their trip. With regular tickets, travellers have the entire day to decide which train to take. There are also DS travel subscription products, e.g. full-fare travelcard (GA), which offers unlimited travel on practically all routes operated by Swiss TCs for an entire year.

DS products bring benefits not only to travellers but also to the 240 TCs that belong to the DSN. The appeal of a comprehensive system encourages more customers to use trains, buses, boats and cableways. All participating TCs benefit from higher income and improved modal splits. By joining the DSN, they become part of a Swiss-wide distribution network and a marketing organisation with enormous communication power. If every TC had to maintain its own distribution network, the resulting costs would be much higher.

## 1.2 DSN and FNs: two forms of coordination of public transport in Switzerland

The DSN has been around for over 150 years (at least as far as railways are concerned). While users of Swiss public transport consider DSN benefits to be a given, foreign visitors find it amazing that a single daypass can be used for trains, local transport and even boats and cablecars.

The Federal Office of Transport (FOT) decides which TCs must join the DSN. Within the DSN, decisions on fares and product ranges are reached on the basis of rules established and agreed upon by all participating TCs. The calculation of ticket fares is determined by each TC according to the given route section travelled.

Since the 1970s, smaller fare networks (FNs) have appeared in urban agglomerations. Today, there are twenty different FNs in Switzerland. The most well known are the Zurich Transport Network (ZVV), the Northwest Switzerland Fare Network (TNW), Unireso in Geneva and the Libero Fare Network in the Bern-Solothurn region. There are two main types of FNs: those offering only monthly or annual travelpasses and those offering a fuller range of products, including individual tickets, multiple-trip tickets and travelpasses. The latter type is referred to as a

Figure 1: Map of FNs in Switzerland source: SBB

fully integrated FN. A “transport network” is a term used to describe a fully integrated FN that has established itself as a legal entity responsible for planning transport, setting fees, sales, communication and billing.

Fares for travel within a given FN are generally based on a zone pricing system whereby the geographical area covered by the FN is broken down into different fare zones. By purchasing a ticket, the passenger has the right to travel anywhere within the given zone over a specified period of time, regardless of the means of transport used or the distance travelled.

In contrast, DS fares apply for travel beyond the boundaries of a given FN or in areas for which no FN exists. In the pages that follow, we shall describe how the DSN works. Cooperation between the DSN and FNs has nevertheless intensified in recent years. One reason for this is that customers could not easily perceive DSN and FN system boundaries. They therefore failed to understand why a single DS ticket could not also be valid for an entire trip within an FN’s local public transport network. We shall therefore devote individual chapters to showing the interactions and planned forms of cooperation between the DSN and individual FNs.

There are still a few TCs that are neither part of the DSN nor are members of an FN (e.g. various mountain and cableway companies as well as smaller companies that provide local transport services). These TCs are entirely independent and are free to establish their own fares and conditions of use.

## Transport networks in Switzerland

| Region/FN | Brand | Type | Active since |
|---|---|---|---|
| Aargau/Olten | A-Welle | I | 2004 |
| Basel/Northwest Switzerland | TNW | I | 1984 |
| Bern/Solothurn | Libero Tarifverbund | I | 2004 |
| Berner Oberland | BeoAbo | A | 2006 |
| Biel/Seeland/Berner Jura | ABO zigzag | A | 1992 |
| Davos/Klosters | Davoser Pass | A | 1991 |
| Fribourg | Frimobil | I | 2006 |
| Geneva | Unireso | I | 2001 |
| Engadin | engadin mobil | I | 1999 |
| Jura | Vagabond | A | 2001 |
| Lausanne and surroundings | Mobilis | I | 2004 |
| Lucerne/Obwalden/Nidwalden | Passepartout | I | 1986 |
| Neuchâtel | Onde verte | I | 1991 |
| Eastern Switzerland (SG/TG/AI/AR/FL) | Ostwind | I | 2002 |
| Schaffhausen | Flextax | I | 1988 |
| Schwyz | Tarifverbund Schwyz | I | 1999 |
| Ticino/Moesano | Arcobaleno | I | 1997 |
| Zug | Tarifverbund Zug | I | 1988 |
| Zurich | Zürcher Verkehrsverbund | V | 1990 |
| Zurich (economic area) | Z-Pass | I | 2004 |

A = FN offers only travelpasses

I = FN is fully integrated

V = FN is fully integrated and considered a transport network in its own right

# 2 Legal basis

The legal basis for Direct Service can be broken down into four levels. The highest level is formed by the Passenger Transport Act (PTA, SR 745.1), specifically Art. 16 and 17. Individual provisions contained within the PTA are then clarified in Art. 56 and 57 of the Passenger Transport Ordinance (PTO, SR 745.11), which forms the second level. Implementing provisions and basic Direct Service principles are established in Convention 510 (C510), which forms the third level. And finally, very detailed regulations cover individual matters pertaining to cooperation between the various TCs.

## 2.1 Passenger Transport Act (SR 745.1)

The Passenger Transportation Act (PTA, SR 745.1; previously known as the Transport Act) came into effect in January 2010. The legal basis for Direct Service can be found in Art. 16 (Direct Service) and Art. 17 (Organisational aspects).

Art. 16 PTA may be considered the aspects heart of Direct Service. It requires all TCs to work together to ensure that customers travelling with multiple TCs will be able to do so using only one ticket. Following revision of the PTA, the cooperation requirement was extended to include local transport services. As a result, passengers may now travel on the entire public transport network using a single ticket.

Art. 16 Direct Service

1 Transport companies shall generally apply a single transport contract allowing customers to use long-distance, regional and local transport services operated by multiple transport companies. If a need exists, long-distance and regional transport services must be provided under Direct Service conditions.
2 Transport companies shall agree on common fares and tickets for this purpose.

Art. 17 requires TCs to establish a cooperation framework. Various aspects of cooperation that must be handled jointly are set forth in Art. 17 para. 1 a–e. Art. 17 para. 2 authorises the Federal Office of Transport (FOT) to organise Direct Service activities in a way that satisfies customer needs.

Art. 17 Organisational aspects

1 Transport companies shall establish the terms for mutual relations to ensure Direct Service. Their agreements shall cover the following in particular:
   a. Areas of cooperation;
   b. Requirements to be met in order to join the Direct Service Network;
   c. Sharing of common administrative costs;
   d. Distribution of transport income;
   e. Joint liability and mutual recourse.
2 If a Direct Service route is particularly important, the Federal Office of Transport (FOT) may establish additional organisational requirements.
3 The conventions on Direct Service and liability should take the interests of individual TCs into account as long as this does not impinge on overarching public transport interests. These conventions shall be submitted to the FOT for approval.
4 If a transport company fails to provide timely Direct Service for which a need exists, then the FOT shall issue the necessary orders.

Of course, the PTA also includes other articles dealing with general Direct Service conditions: Art. 15 PTA covers fares. Among other things, it requires TCs to agree on a common set of fares to be applied by all DSN members. Art. 20 establishes the legal basis for how to handle travellers who do not have a valid ticket.

## 2.2 Passenger Transport Ordinance (PTO, SR 745.11)

Individual articles contained in the PTA are explained in greater detail in the Passenger Transport Ordinance (PTO, SR 745.11). Art. 56 PTO establishes the cases when local TCs must join the DSN. At the same time, it establishes the circumstances where TCs are not obliged to join the DSN.

## 2.3 Convention 510 (C510)

The general DSN structure is based on Convention 510 (C510), which may be likened to the statutes of a cooperative. C510 contains the implementing provisions for Art. 16 PTA (Direct Service) and Art. 17 PTA (Organisational aspects) and is binding on all DSN members. Any changes or adjustments to C510 must be approved by the FOT.

C510 covers the following key points:
– DSN rules and forms of participation
– Rules of procedure, including tasks and responsibilities of the various DSN bodies
– Handling of business, including rules on decision-making
– Obligations of TCs
– Basic principles for the distribution of income
– Basic principles for the sharing of costs and payment of sales commissions
– Basic principles for sales within the DSN
– List of TCs that belong to the DSN
– Terms of reference for DSN bodies and the DSN Secretariat

In Switzerland, all regional transport TCs that receive public orders for the provision of transport services under the Ordinance of 11 November 2009 on Subsidies for Regional Passenger Transport (RPTSO, SR 745.16) must join the DSN. TCs that offer long-distance and – with a few exceptions – local transport services are also required to join the DSN. TCs that do not qualify for subsidies are free to join the DSN if this makes sense from a business perspective. This would include TCs that provide tourist transport services that do not link up to the public transport network (e.g. chair lifts, boats, mountain railways).

## 2.4 DSN regulations

Very detailed regulations on individual aspects have been established to formalise cooperation between the various TCs. The most important regulations are described below:
– Regulation 511:
  Regulation on the Distribution of Direct Service Income (i.e. distribution of DS sales income to the various member TCs).
– Regulation 512:
  Regulation on the Sharing of Direct Service Costs (e.g. for marketing and advertising or for TC ticket distribution systems).
– Regulation 545:
  Regulation on the Means of Payment Used to Purchase Direct Service Tickets.
– Regulation 550:
  Regulation on Direct Service Billing and Clearing.
– Regulation 570:
  Regulation on the Sale of Passenger and Luggage Transport Services.

These regulations are not publically accessible. They reflect the contractual agreements made between the various TCs.

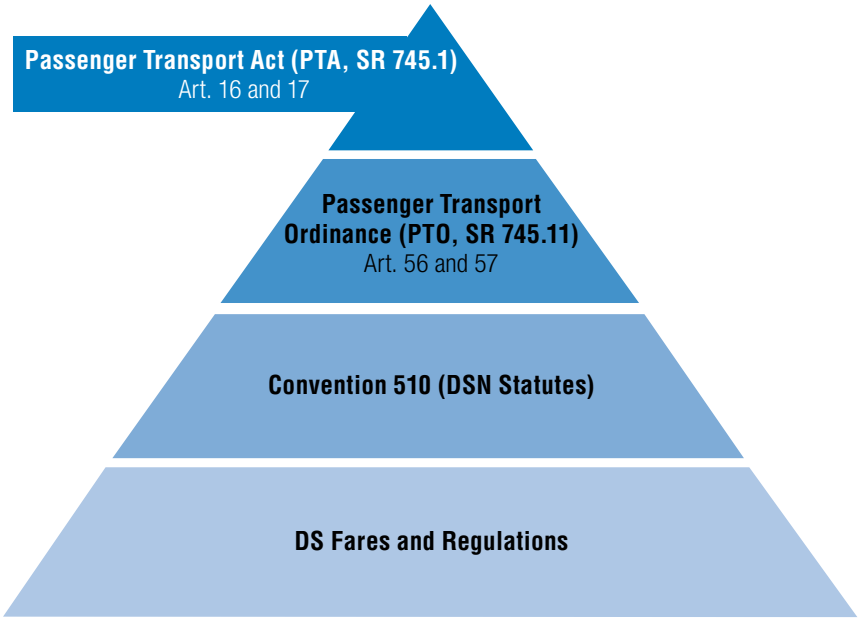


Figure 2: Legal basis for the DSN

**Brief summary**

The legal basis for Direct Service can be found in Art. 16 und 17 of the Passenger Transportation Act (PTA, SR 745.1), which requires all TCs to work together. Cooperation themes and organisational formalities are covered in Convention 510 (C510), which may be considered as the Statutes for the Direct Service Network. Common regulations address specific DSN issues in greater detail. Regulation 570, for instance, is very complete in its coverage of how DS tickets should be designed.

# 3 Direct Service Network (DSN)

The Direct Service Network (DSN) is comprised of practically all TCs in Switzerland. Such a national transport network requires suitable structures and processes to ensure efficient cooperation and optimal consideration of the interests of all member TCs. The latest revision of the DSN governance structure took place in 2011. The following pages describe the various DSN bodies and their tasks (February 2013 – subject to possible changes and subsequent developments).

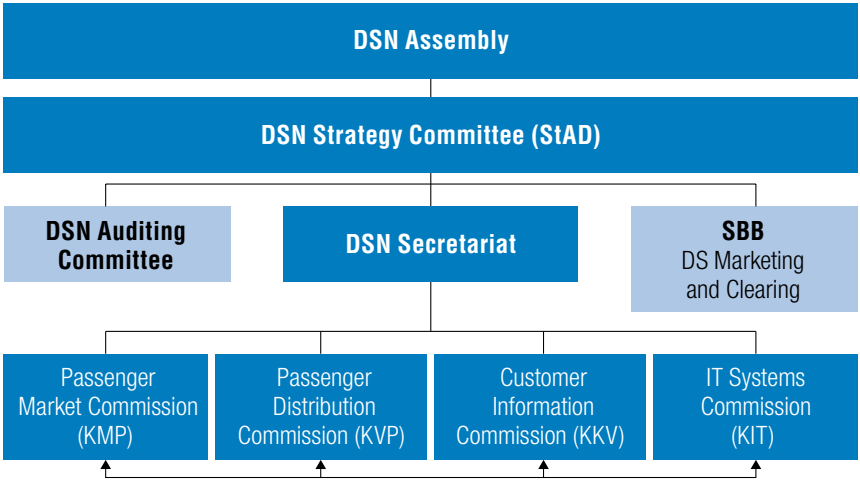


Figure 3: DSN structure

## 3.1 DSN Assembly

The DSN Assembly is the highest decision-making body within the DSN. Based on democratic principles, it is comprised of all member TCs and FNs that accept at least one DS product and corresponding fare (e.g. half-fare travelcard). While the DSN Assembly can be likened to a general assembly of a cooperative, its members never meet physically. Instead, all decisions are reached on the basis of ballots cast by post.

This procedure involving the submission of ballots by post is referred to as a “general survey”. Key decisions within the DSN must be approved by the majority of DSN members; examples of important decisions include: adjustment of regular fares and the price of travel subscription products; major budget requests for expenditure above CHF 10 million.

Voting rights vary according to the item of business at hand. In some cases, the general survey requires all DSN members to vote. In other cases, the only TCs authorised to vote are the ones that are directly affected by the specific item of business. For instance, on matters pertaining to adjustment of the price of the GA travelcard, only TCs that accept the GA are authorised to vote. To sum up, the following matters require all DSN members to take part in the vote:

– Amendments to C510
– Fundamental changes in pricing and product range
– Changes in conditions of sale and use that will have a significant financial impact
– Basic principles applying to the distribution of income and the sharing of costs
– Costly adjustments and modernisation of ticket distribution systems

The following rules apply to decision-making through general surveys:
Each participant has one vote. A proposal is deemed accepted if two-thirds of the participants vote in favour of a given item of business within the twenty-day period established for the casting of ballots. If less than two-thirds but more than half of the participants vote in favour of a given item of business, then the proposal is also considered as accepted if these voters represent at least 50% of the income/costs associated with that item of business.

## 3.2 Direct Service Strategy Committee (StAD)

### 3.2.1 Role and objectives

The Direct Service Strategy Committee (StAD) is like the executive board of a cooperative. It decides on matters and principles of strategic importance and establishes the strategic parameters for pricing, product range, sales, distribution of income, sharing of costs, customer information as well as ticket sales and distribution systems. It is also responsible for further strategic positioning of the “Direct Service” brand and manages key DSN innovation projects such as the “Future Swiss Public Transport Pricing System (ZPS)”.

### 3.2.2 Composition

The StAD is comprised of seven to nine directors or managing directors of Swiss public transport companies. When choosing StAD members, consideration is given to ensuring a balanced representation of public transport segments and Swiss linguistic regions. Members with voting rights include one representative from Swiss Federal Railways (SBB), one representative from PostBus Switzerland Ltd. and five to seven additional members representing other TCs. SBB and PostBus Switzerland Ltd. choose their own representatives. The remaining members of the StAD are selected by the Executive Board of the Swiss Association of Public Transport

(SAPT). One member of the StAD must be a representative of a Swiss FN. Currently, this person is from the ZVV. The Confederation, represented by the Federal Office of Transport (FOT), has one member who serves in an advisory capacity within the StAD. This representative only has the right to vote on matters pertaining to reduction of fares. The SAPT and the DSN Secretariat are also present in an advisory capacity and their representatives do not have voting rights. The chairperson is chosen by the StAD itself (self-constitution). SAPT Director Ueli Stückelberger currently chairs the StAD.
The chairs of DSN commissions also attend StAD meetings if items of business or themes relate to matters falling within their purview. However, they do not have voting rights.

### 3.2.3 Decision-making

A quorum of at least five members with voting rights (one of whom must be the SBB representative) is required in order for the StAD to validly reach decisions. Each member with voting rights shall have one vote. A proposal is deemed accepted if the SBB representative and most (half + one) of the remaining participants vote in favour of the proposal. In urgent cases, decisions may be reached through ballots submitted by post.

Since November 2011, a referendum may be organised to challenge StAD decisions. At least 20% of all DSN members must agree to the referendum. A general survey will then be issued to all TCs within the DSN to gather their votes. While the StAD is required to convene meetings at least twice per year, five to six meetings tend to be the norm.

### 3.2.4 Composition of the StAD (February 2013)

| Name | TC | Role |
|---|---|---|
| Ueli Stückelberger * | SAPT | Chair |
| Markus Thut * | SAPT | Head of DSN Secretariat |
| Hans Amacker | RhB | Member |
| Vincent Ducrot | TPF | Member |
| Bernard Guillelmon | BLS | Member |
| Michel Joye | TL | Member |
| Franz Kagerbauer | ZVV | Member |
| Urs Kessler | JB | Member |
| Jeannine Pilloud | SBB | Member |
| Daniel Schlatter | PAG | Member |
| Norbert Schmassmann | VBL | Member |
| Pierre-André Meyrat ** | FOT | Representative of Federal Office of Transport |
| | | |
| FNA representatives: | | |
| Andreas Büttiker ** | TNW | Representative of fare networks |
| Christoph Stucki ** | unireso | Representative of fare networks |

* Member without voting rights

** Member with limited voting rights

## 3.3 DSN commissions

Four commissions are responsible for DSN operations:
– Passenger Transport Market Commission (KMP)
– Passenger Transport Sales Commission (KVP)
– Transport Customer Information Commission (KKV)
– IT Systems Commission (KIT)

The same formal general conditions apply to all commissions, which are similar to those applying to the StAD. The key points are briefly described below. The remit and composition (February 2013) of each commission can be found in the following chapters.

### 3.3.1 Decision-making

Each commission is comprised of nine to twelve members, including one member from SBB, one member from PostBus Switzerland Ltd. and seven to ten members representing TCs within the DSN. Each member has one vote. The commissions choose their own chairperson. The Confederation (represented by the FOT) and the DSN Secretariat attend meetings in an advisory capacity without the right to vote. Each member has one vote and decisions are based on a simple majority of the votes cast. The chairperson also has one vote. In the event of a tie, the chairperson's vote is considered the casting vote.

Decisions may be submitted to the StAD for consideration if an established number of commission members, or the SBB alone, feel that this is necessary.

## 3.4 Passenger Transport Market Commission (KMP)

### 3.4.1 Role and objectives

The KMP makes operational decisions on marketing and sales, pricing and product ranges as well as on the distribution of Direct Service income. The KMP also continuously monitors and adapts the DS product range and fares and sends corresponding proposals to the StAD. On issues relating to common product ranges, the DSN's KMP works closely with the FNA's KTB. It also decides whether to admit new Swiss TCs to the DSN.

### 3.4.2 Composition of KMP (February 2013)

| Name | TC | Role |
|---|---|---|
| Stephan Pfuhl | SBB | Chair |
| Hans-Jakob Stricker | RBS | Deputy Chair |
| Valentin König | ARBAG | Member |
| Bruno Meyer | ZVB | Member |
| Marcel Mooser | MGB | Member |
| Susanna Oertli | PAG | Member |
| Damian Pfister | BLS | Member |
| Lukas Tenger | ZVV | Member |
| Georg Vischer | BVB | Member |
| Stefan Würgler | JB | Member |
| Fredy Zürcher | SGV | Member |
| Brigitte Gafner * | FOT | Representative of Federal Office of Transport |
| Markus Thut * | SAPT | Representative of DSN Secretariat |

* Member without voting rights

## 3.5 Passenger Transport Sales Commission (KVP)

### 3.5.1 Role and objectives

The KVP reaches operational decisions on all matters pertaining to distribution, including means of payment, provisioning, clearing, securing income, ticket inspection and sharing of costs. It establishes distribution standards (sales systems) for novel means of sale as well as for data storage and exchange. For ticketing, it is responsible for security, formats and change management. The KVP is also responsible for most of the DSN's regulations.

### 3.5.2 Composition of KVP (February 2013)

| Name | TC | Role |
|---|---|---|
| Gian-Mattia Schucan | SBB | Chair |
| Ralph Schertenleib | PAG | Vice Chair |
| Helmut Eichhorn | TPF | Member |
| Hansueli Kunz | BLS | Member |
| Lorenzo Martinoni | ZVV | Member |
| Reto Meister | BLT | Member |
| Beat Nater | VBL | Member |
| Meinrad Schmid | SOB | Member |
| Michel Schmid | CGN | Member |
| Thomas Werlen | MGB | Member |
| Jonas Anklin * | FOT | Representative of Federal Office of Transport |
| Susanne Grün * | SAPT | Representative of DSN Secretariat |

* Member without voting rights

## 3.6 Transport Customer Information Commission (KKV)

### 3.6.1 Role and objectives

The KKV coordinates and develops the theme of customer information in public transport. It establishes common standards and regulations (e.g. on signage and customer information infrastructure). It also seeks to establish key quality standards that are intended to optimally satisfy customer needs. In addition, it regulates such issues as cooperation in the event of an incident, the mutual exchange of "real-time information" (e.g. information on traffic disruptions) as well as the funding of shared systems.

### 3.6.2 Composition of KKV (February 2013)

| Name | TC | Role |
|---|---|---|
| Anton Häne | SBB | Chair |
| Ulrich Reinert | RBS | Vice Chair |
| Werner Fritischi | THURBO | Member |
| David Gervasi | ZVV | Member |
| Fabian Kirchhofer | PAG | Member |
| Sascha Kunz | BOB | Member |
| Jürg Lehmann | STI | Member |
| François Longchamp | TL | Member |
| Philipp Suter | VBSG | Member |
| Christof Wyttenbach | BLS | Member |
| Hanspeter Operecht* | FOT | Representative of Federal Office of Transport |
| Reto Steiner * | SAPT | Representative of DSN Secretariat |

* Member without voting rights

## 3.7 IT Systems Commission (KIT)

### 3.7.1 Role and objectives

The KIT further develops central IT systems for public transport sales and distribution. It establishes standards for the exchange of data and ensures optimal functioning of interfaces so that DS tickets may be managed centrally but sold in a decentralised fashion. It also seeks to establish common IT solutions.

### 3.7.2 Composition of KIT (February 2013)

| Name | TC | Role |
|---|---|---|
| Andreas Kronawitter | BLS | Chair |
| Reto Trachsel | PAG | Vice Chair |
| Bruno Baumgartner | SOB | Member |
| Mathias Delorme | TL | Member |
| Martin Ittig | MGB | Member |
| Rolf Knecht | SBB | Member |
| Urs Püntener | RhB | Member |
| Grégoire Ramuz | TPF | Member |
| Bruno Thalmann | ZVV | Member |
| Cyrill Weber | ZVB | Member |
| Martin Zahn | VBZ | Member |
| Roland Wittwer * | FOT | Representative of Federal Office of Transport |
| Susanne Grün * | SAPT | Representative of DSN Secretariat |

* Member without voting rights

## 3.8 Fare Network Association (FNA)

In parallel to their cooperation through the DSN, Swiss FNs also work together through the Fare Network Association (FNA). The FNA has its own governance structure, which resembles the one used by the DSN. Instead of C510, the FNA is based on a cooperation agreement (Swiss Transport Network Agreement, A551), which was drafted in 2011. This agreement contains provisions that are not as binding as those set forth in C510. Individual FNs are free to determine their own fees. The main reason for establishing a fare network is not merely to sell a common product range but also to improve cooperation with other FNs and harmonise conditions of validity. These include, for example, common age limits or special tickets for dogs. The highest body within the FNA governance structure is the FNA Assembly, which meets twice per year. The FNA governance structure includes an FNA Strategy Committee (StAV), which is equivalent in purpose to the DSN Strategy Committee (StAD). There are also two operative bodies, the Fare Regulations Commission (KTB) and the Sales and Systems Commission (KVS). In comparison, the DSN governance structure has four operative bodies.

The DSN and FNA governance structures will eventually merge whenever thematic areas overlap. This will allow potential synergies to be optimally used and will create ideal conditions for public transport innovations and projects.

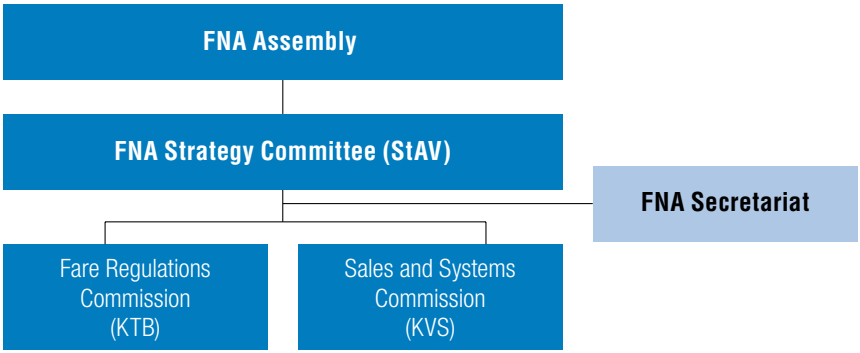


Figure 4: New FNA governance structure

## 3.9 DSN Auditing Committee

The DSN generates a total annual turnover of around CHF 1.805 billion from the sale of travel subscription products. This income is re-distributed among participating TCs. The DSN therefore requires an internal auditing committee to continuously verify and improve the quality of re-distribution mechanisms. The "magic formula" composition of the DSN Auditing Committee is as follows:

– Three representatives of SBB (chosen by SBB).
– One representative of PostBus Switzerland Ltd. (chosen by PostBus).
– Five representatives of other TCs (chosen by SATP Executive Board).

The chairperson is chosen by the members of the DSN Auditing Committee. This person coordinates administrative procedures for the various audits and serves as the contact person for dealings with TCs and decision-making bodies.

### 3.9.1 Composition of DSN Auditing Committee (February 2013)

| Name | TC | Role |
|---|---|---|
| Markus Strub | ZVB | Chair |
| Sandro Borgatta | MOB | Representative of TCs |
| Daniel Kull | SBB | SBB representative |
| Heinz Marmet | SBB | SBB representative |
| Michel Schmid | CGN | Representative of TCs |
| Franz Schüpbach | PAG | Representative of PostBus Switzerland Ltd. |
| Rolf Tobler | SOB | Representative of TCs |
| Thomas Trütsch | SBB | SBB representative |
| Fredy Zürcher | SGV | Representative of TCs |

DSN Auditing Committee members must be very familiar with transport billing and clearing systems. Auditing work is remunerated. Associated costs are considered part of the DSN Secretariat's overhead and corresponding invoices are sent to the TCs for payment. The activities of the DSN Auditing Committee are established in a Terms of Reference document, which forms an integral part of the DSN's C510.

The main tasks include:
– Verification of transport billing records produced by the various TCs, as long as these relate to transport within the DSN. Emphasis is placed on those TCs that do not use the central Passenger Transport Sales and Information System (PRISMA).
– Verification of SBB billing records (clearing office).
– Verification of distribution ratios established by the DSN Secretariat.
– Verification of DSN Secretariat costs.
– Drafting of an Audit Report to be submitted to the DSN Strategy Committee (StAD).

TCs that do not use the PRISMA system submit their sales figures manually. However, this can result in incomplete or untimely submissions. This is why the DSN Auditing Committee focuses primarily on these TCs.

## 3.10 Federal Office of Transport (FOT)

The Federal Office of Transport is the supervisory authority for public transport according to Art. 52 of the Passenger Transportation Act (PTA, SR 745.1). Specifically, this means that the FOT has the power to cancel decisions or orders issued by TCs or DSN bodies or prohibit implementation if the said decisions or orders impinge on legislation, concessions or international agreements or if they run counter to national interests.

Art. 52 PTA: Supervisory authority

**The Federal Office of Transport (FOT) shall be responsible for supervising public transport services for passengers. It shall have the power to cancel decisions or orders issued by TCs or DSN bodies or prohibit implementation if the said decisions or orders impinge on legislation, concessions or international agreements or if they run counter to national interests.**

The FOT:
– Ensures that the tasks to be regulated under PTA are carried out (e.g. distribution of traffic income to TCs).
– Approves DS-related conventions and agreements (C510 as well as fare network agreements).
– May order TCs or routes to be included within the DSN when “a need exists” (e.g. transit routes of national importance).
– Decides whether “a need exists” under PTA in the event a TC decides not to join the DSN.

– Renders the final decision in the event of an appeal on whether a new member should join the DSN.

The FOT has representatives on all bodies within the DSN governance structure. As a rule, these representatives do not have voting rights. However, for matters that directly pertain to fare reductions, the FOT shall have one vote within the StAD.

In many cases, the FOT represents “the interests of customers”, ensuring that no actions put any customer groups at a disadvantage.

## 3.11 DSN Secretariat

The DSN Secretariat is housed within the Swiss Association of Public Transport (SAPT). Nineteen employees work under the guidance of Markus Thut in three main sections: “Fares Management”, “Distribution Ratios” and “Distribution and IT Systems”. The head of the DSN Secretariat also receives support from a staff unit.

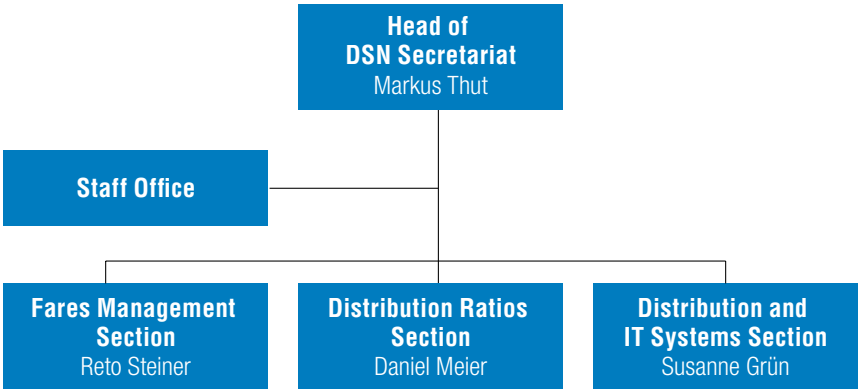


Figure 5: Organisation Chart of DSN Secretariat

The DSN Secretariat provides support to the various DSN bodies and is comprised of the following three sections:

The Fares Management Section is responsible for decisions regarding the DS product range. Responsibilities include establishing customer-friendly fares, helping TCs with questions, examining suggestions for improvement and submitting corresponding proposals to the DSN commissions concerned. In addition, the Fares Management Section keeps all public transport employees, particularly sales personnel and ticket inspectors, informed of the latest developments. It is also the Fares Management Section that processes orders for discounted fares for TC personnel (FVP).

The Distribution Ratios Section is responsible for establishing rules on the distribution of income generated from the sale of DS travel subscription products. There are 38 different distribution ratios covering the broad range of DS products. The most important distribution ratios (i.e. for the full-fare travelcard and the half-fare travelcard) are updated on an annual basis. The distribution ratios for lower-turnover DS products (e.g. daypass, marching order pass) are updated at five-year intervals.

The Distribution and IT Systems Section is responsible for managing various distribution projects. This includes operation and ongoing improvement of the DaX data interface, which is used to sell the comprehensive range of DS tickets as well as for management of DSN Secretariat activities. The Distribution and IT Systems Section also represents the interests of TCs in innovation projects relating to ticket sales and distribution. Finally, it is responsible for coordinating major DSN projects such as the Future Swiss Public Transport Pricing System (ZPS) project and the Public Transport Card project.

DSN Secretariat staff also work with SBB and other TCs on numerous large- and small-scale projects. In doing so, they contribute their expertise and consider the interests of all TCs within the DSN. The DSN Secretariat keeps members and government authorities informed of the latest developments in reports, newsletters, online and offline articles and meetings. In addition, the DSN Secretariat may also commission work to third parties (e.g. studies, projects, managerial tasks).

**Brief summary**

The DSN is structured like a cooperative. It is intended to ensure that the requirements and needs of all its members are taken into account in current business matters and projects. The DSN Assembly functions as a general assembly. Whenever important decisions need to be made, a letter is sent to all DSN members requesting their vote on the matter(s) at hand (general survey). These letters are then returned by post with the corresponding votes. The DSN Strategy Committee (StAD) manages DSN business and projects of strategic importance. The DSN has four operative commissions: the Passenger Transport Market Commission (KMP), the Passenger Transport Sales Commission (KVP), the Transport Customer Information Commission (KKV) and the IT Systems Commission. These commissions handle specific operative matters relating to their field and prepare the strategic items of business to be discussed by the StAD.

The DSN governance structure includes an internal auditing committee whose role is to ensure the correctness of income distributions and cost sharing between DSN members.

The Federal Office of Transport (FOT) has a representative in all DSN bodies. Its role is to ensure compliance with the provisions of the Passenger Transportation Act (PTA, SR 745.1) and safeguard customer interests.

The DSN Secretariat is responsible for carrying out various operative tasks such as further development of fare structures and the creation of operative income distribution ratios for travel subscription products (e.g. GA). It also manages and coordinates important ticket distribution projects. It provides administrative support within the DSN governance structure and handles the flow of information between DSN members.

The various FNs also work together through the Fare Network Association (FNA) whose governance structure closely resembles that of the DSN. However, the FNA pursues somewhat different objectives, which mainly relate to harmonisation and cooperation matters.

# 4 Cooperation between TCs within the DSN

Direct Service is more than just the governance structure presented in the previous chapter. It is also a set of established processes and standardised procedures that enable business activities to take place in a transparent, fair and efficient manner. We shall describe some of these standardised processes below.

## 4.1 Types of DSN membership

TCs can either become full-fledged members of the DSN or may merely adopt one or more DS fares. What does this mean exactly?

### 4.1.1 Becoming a full-fledged member of the DSN

If a TC becomes a full-fledged member of the DSN, it accepts all of the basic DS products. In other words, it offers a single fare for multimodal transport (recognition of Fare 600, 603/604 and 660) and applies the prices for full-fare and half-fare travelcards (Fare 654) as well as the prices for point-to-point travelpasses (Fare 650). TCs print DS tickets on standard CIT 2012 security paper. TCs are also bound by all regulations established in C510, particularly the Regulation on the Sharing of Direct Service Costs (R512).

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In order to join the DSN, the TC must have a passenger transport licence issued by a Swiss authority; the TC is furthermore required to provide regular transport services on Swiss territory or across border zones (e.g. Lake Constance). Acceptance of a route or route section across a border zone must be authorised by the Federal Office of Transport (FOT). The FOT may also order a TC to join the DSN if this serves a specific interest. This is normally the case for regional traffic routes that connect with the main transport infrastructure network.

### 4.1.2 Adopting one or more DS fares

As an alternative to becoming a full-fledged member of the DSN, TCs may decide to merely adopt one or more DS fares instead. The vast majority of TCs have adopted the half-fare travelcard (Fare 654). This means that the TCs offer a 50% discount on all tickets sold to holders of the half-fare travelcard. Since holders of the full-fare travelcard (GA) should not be at a disadvantage with respect to holders of the half-fare travelcard (HF), participating TCs also offer this 50% discount to GA holders. In other words, whenever a GA holder wishes to travel on a route operated by a TC that only accepts the HF, the GA holder will also pay half the usual fare.

Adoption of the half-fare travelcard (HF) can be considered as the “lowest threshold” form of DSN membership. Many cableway and tourist transport operators choose this option. First of all, it allows them to tap into a huge pool of potential regular customers. Secondly, they continue to generate income from the sale of tickets at half-fare to HF holders while also receiving a proportion of total HF sales within the DSN.

Adoption of the full-fare travelcard (GA) is another form of DSN membership. Here, the TC offers unlimited use of their entire infrastructure free of charge to GA holders at any time (excl. certain night services and purely tourist routes). The TC also offers the same GA conditions to daypass holders over a 24-hour period.

Some TCs may choose to adopt other DS travel subscription products such as the Track 7 travelcard or the luggage pass. The Track 7 travelcard is valid on all SBB routes but generally not on PostBus and local transport routes.

### 4.1.3 How do TCs join the DSN?

TCs normally join the DSN on one of two dates: 1 June and the 2nd Sunday of December (when timetables change). TCs must submit a membership application to the DSN Secretariat no later than six months before the date when the TC wishes to join. This membership application should include an explanation of the reasons why the TC wishes to join the DSN as well as information regarding the current range and expected development of passenger transport services. The TC must also include a copy of the passenger transport licence and its most recent annual report.

The DSN Secretariat then submits the membership application to the KMP for approval. The application will also be sent to the StAD for information purposes.

#### Benefits of DSN membership

Apart from cases where TCs are required by the FOT to join the DSN, the decision to join is generally based on cost-benefit considerations.

It is not easy to answer the question of which type of TC should join the DSN and to what extent. It depends on various factors applying specifically to each TC as well as on general conditions. TCs need to consider the following questions: who are my customers (tourists, families, day travellers, commuters, etc.)? What tickets do my customers usually buy? What ticket range do I already offer? What is my capacity utilisation? What is my business model? What environment do I conduct business in and who are my direct competitors? etc. The decision on whether to join the DSN must be based on a comprehensive analysis and clarification of these questions.

Generally speaking, it can be said that TCs that choose to recognise the half-fare travelcard will certainly lose half of the income that they would otherwise earn from tickets sold at the regular price. However, about one-third of this “loss” is recovered by selling HFs directly to customers. Whether adoption of HFs will increase ticket sales or whether the larger number of travellers will compensate for the 50% discount varies considerably and depends on each individual case.

## 4.2 Decision-making within the DSN

The DSN is based on democratic principles. Participants have various opportunities to take part in important DSN decisions either directly or indirectly via chosen representatives.

### 4.2.1 General surveys

The most important decisions within the DSN are made by the DSN Assembly. This includes decisions on the following: matters for which the amounts involved exceed CHF 10 million; strategic decisions affecting all participants; relevant changes to pricing or product range; and any changes to be made to C510.

A general survey is sent out to member TCs for the purpose of collecting votes. TCs receive a ballot paper and a voting brochure presenting the item of business, the arguments in favour as well as the arguments against. Each participant has one vote. After receiving the general survey, TCs will have twenty working days to return their ballot papers. Only actively submitted ballots will be counted. A proposal is deemed as adopted if two-thirds of participants vote in favour within the established deadline.

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### 4.2.2 Decision-making through DSN bodies

Each TC has the right to nominate a suitable candidate for a vacant seat on a DSN body. Candidatures are normally submitted to the DSN Secretariat. Considerable importance is given to ensuring a balanced composition of DSN bodies (adequate representation of all business segments and linguistic regions).

Even TCs that are not represented within a DSN body may submit their proposals or ideas. The easiest way to do so is to submit them to the DSN Secretariat. DSN employees help TCs to formulate and present proposals and make sure that they are forwarded to the right DSN body or working group.

**Brief summary**

In addition to having its own governance structure, the DSN also has various firmly established procedures and processes. TCs may join the DSN at two specific times of the year (1 June and timetable change in mid-December). There are various ways in which a TC can join the DSN (full-fledged DSN membership or acceptance only of individual fares). Each TC must decide for itself which form of membership is the most advantageous. The DSN is based on democratic principles and there are various ways in which TCs can take part in decision-making: direct submission of ballots in general surveys; active participation in DSN bodies or working groups; or via direct proposals submitted to the DSN Secretariat.

# 5 Product range and fares

Public transport customers have different mobility needs. In order to find a suitable product that serves the needs of both regular commuters and occasional travellers, the DSN offers a very broad range of different ticket options.

Each product has a different fare, which is established in the “General Conditions of Use of the Public Transport System”.

## 5.1 Full-fare travelcard (GA)

The most well-known flagship DS products are the full-fare and half-fare travelcards. The full-fare travelcard (GA) is the key to unlimited use of Swiss public transport. It provides around 431 000 GA holders with free access to 165 Swiss TCs, including boats, mountain railways and cableways. The GA has developed into a niche product of the traditional commuter pass. The tremendous growth rates observed in recent years bear testimony to this fact.

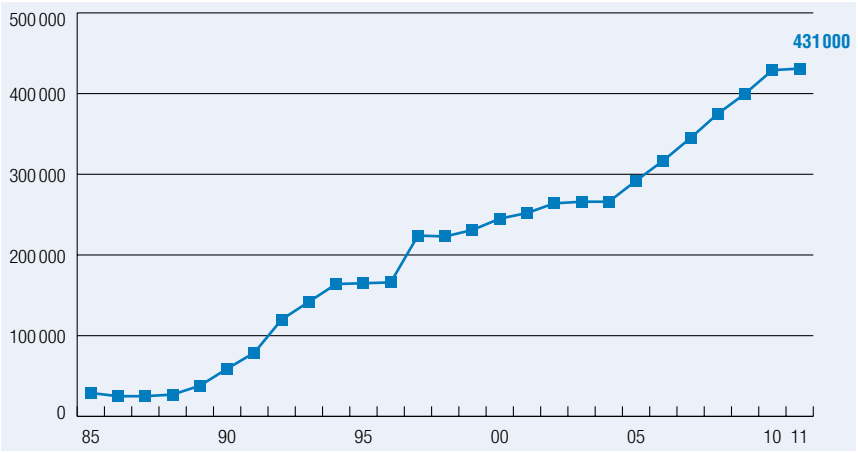


Figure 6: GA travelcards in circulation

### Historical development of GA travelcards

The first GA travelcard was introduced in 1898 at the initiative of the Association of Business Travellers and Northeast Railways (NOB). Fifteen railway companies representing a total of 3 195 km of track took part. Due to a lack of coal deliveries during World War I, the GA travelcard was discontinued until 1920, when it was once again included in the product range.
Towards the end of the 1920s, the zone of validity of the GA travelcard was expanded to cover 5 500 km. Further expansion occurred in 1948, when the PostBus Switzerland Ltd. network was added. At the time, GA holders were required to pay half-fare when boarding Postbuses but practically all railway companies had already joined the GA. Another important milestone was reached in 1990 when 24 TCs offering local urban transport services became DSN members.
From the customer's perspective, the GA was more of a flop until 1980 and very few people actually bought it. In 1970, there were only about 8 000 GA travelcards in circulation. However, in 1974, the number began to rise steadily, reaching 38 330 by 1989. Twenty years of dizzying double-digit growth followed: in 1997, there were 224 096 GA; in the summer of 2006, the figure had risen to 300 000; by early 2010, there were 400 000 GA.

## 5.2 Half-fare travelcard (HF)

The half-fare travelcard is the second supporting pillar of the DS product range. As the name implies, holders of the HF are able to buy tickets at half the regular fare.

There are currently 2.3 million HF in circulation, making the HF the most popular travel subscription product among Swiss inhabitants. One-third of all people living in Switzerland have an HF, which is accepted by around 240 TCs. From the customer's perspective, the HF pays for itself in a relatively short period of time: after only four 2nd class round-trip tickets between Bern and Zurich.

HF holders may also purchase daypasses, which enable them to enjoy GA conditions over a 24-hour period.

HF holders who are under the age of 25 may also purchase the Track 7 travelcard, which allows them to travel 2nd class free of charge starting from 7.00 p.m. This is a very popular product among young people and there are currently 90 000 Track 7 travelcards in circulation (February 2013).

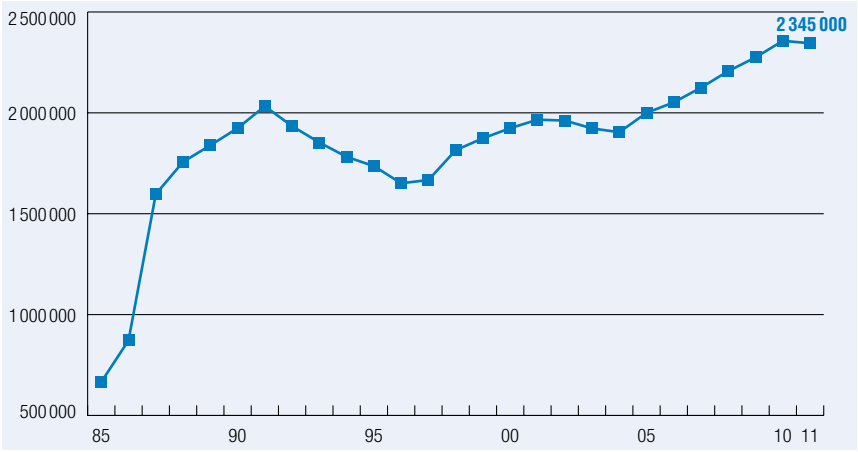


Figure 7: HF travelcards in circulation

## Historical development of half-fare travelcard

The first half-fare travelcard was introduced in 1891 during the "Swiss Conference of Commercial Transport Companies". It was then discontinued in 1898 and re-introduced in 1923. At the time, there were fewer than 100 000 HF in circulation even though the price had been halved in the 1920s. In the 1930s, the HF faced stiff competition from the very popular Sunday ticket. The price gradually increased, reaching CHF 360 in 1983. At the same time, sales picked up steam and the number of HF in circulation increased to around 650 000. Environmental discussions in the 1980s (dying forests) led to a federal subsidy to encourage as many travellers as possible to shift from private to public transport. The HF price fell to CHF 100 and was renamed the "Borromini" (after the Ticino architect who appears on the CHF 100 banknote). Turnover increased massively but after federal subsidies were phased out in 1997, the figure dropped to around 2 million, where it has remained ever since. Today, there are 2.3 million HF in circulation, making this product the most successful discount card of any transport system anywhere.

## 5.3 Other DS products

The DSN range includes many other products. Junior and grandchild travelcards, for instance, are intended for families. For CHF 30 per year, children accompanying their parents (or grandchildren accompanying their grandparents) ride free of charge. There are also discounted products for travellers with disabilities.

The City Ticket serves as a transition solution between the DSN and FNs. It complements a regular individual train ticket, allowing passengers to use local transport services in towns over a 24-hour period.

The DS product range also includes tickets for luggage and bicycle transport, multiple-trip tickets, point-to-point travelpasses and inter-regional travelcards, group tickets and a broad range of tourist products (SwissTravelSystem, or STS).

## 5.4 Fares

Fares regulate relations between TCs and customers. Fares indicate where and for how long a ticket is valid and under what conditions tickets may be used. The most important fare is the "General Fare for Passenger Transport (F600)". F600 contains many general rules (e.g. age limits) that have not yet been covered in other fares. Fares are posted on the websites of participating TCs and of the SATP.

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Fares are legally binding and are based on DSN Convention 510 (C510). They regulate individual C510 provisions in a very complete and detailed fashion. Fare adjustments, additions and enhancements are handled by the DSN Secretariat, which is also responsible for ensuring that all TCs are informed of changes in fares.

### Overview of the most important fares

| Number | Title | Brief description |
|---|---|---|
| 600 | General Fare for Passenger Transport | This is the most important and comprehensive fare document within the DSN. The general provisions contained in it apply to practically all tickets. Examples include the age at which children pay half-fare (age 6 for all DSN-member TCs and FNs). |
| 603/604 | Distances and Prices | These fare documents mainly contain a list of figures. They establish the basic parameters for the calculation of prices. Typical fares in F604 include “the fare triangle”, i.e. DSN Tables of Fares. |
| 654 | Full-fare travelcard (GA) Half-fare travelcard (HF) Track 7 | This fare document regulates all conditions of use for the GA and HF that have not already been established in F600. Examples include conditions on how long GA travelcards can be left on deposit (e.g. when travelling outside of Switzerland on holiday) |

All things considered, the DSN Secretariat manages 25 different fares. Some of these fares are managed by SBB (e.g. fares relating to international passenger traffic), since SBB is responsible for the DSN system as a whole.

## 5.5 Marketing of DS product range

Swiss Federal Railways (SBB) is responsible for marketing the DS product range. The scope of its marketing mandate is set forth in corresponding terms of reference. Each year, SBB establishes an annual marketing plan involving various campaigns that are mainly focussed on leisure travellers and travel subscription customers. In recent years, greater importance has been given to special offers by third parties (Migros, Coop, Swiss Post). The annual DS marketing budget and marketing plan must be approved by the KMP.

In order to efficiently handle around 2.7 million regular customers (i.e. those holding the GA or HF travelcards), customer data is stored in a central customer database (KUBA). This ensures that practically every point of sale can offer identical services such as “replacement of lost cards”. With over 240 TCs in the DSN, issues relating to the ownership, use and protection of data invariably arise.

SBB manages the KUBA database as part of its DS marketing mandate. SBB and all other TCs have absolutely the same access conditions and viewing rights for the KUBA database. Customer data may only be used by SBB (which holds the DS marketing mandate) and only for DS marketing purposes. The question of whether TCs will be able to use customer data to market their own products is still being discussed. TCs are increasingly in need of analyses and evaluations. Anonymised data may therefore be extracted from the KUBA database for the purposes of enabling DSN members to perform such analysis. In addition, all TCs need to be able to access customer data for ticket inspections. This will become particularly important when new travel subscriptions using RFID-embedded cards (e.g. future PT card) are introduced and e-ticketing solutions are adopted throughout Switzerland. For this reason, the KUBA database will be redesigned and replaced with a more flexible system as part of the “Future Swiss Public Transport Pricing System (ZPS)” programme.

### Branding issue

To date, the DSN does not have its own public logo. The double arrow on the red background has symbolised the SBB since 1982. Since then, SBB has become the most well-known and most popular brand in Switzerland. This is why the DSN does not use its own logo. Instead, it is represented under the SBB logo by three pictograms: train, bus and boat. These pictograms symbolise the other 240 TCs that belong to the DSN. This distinctive mark can be found on all travel subscription products, tickets, brochures, advertisements, etc. In recent years, there has been growing sentiment among TCs that the DSN should have its own brand. It is therefore possible that a new DSN brand or even a public transport brand will once again be discussed.

Figure 8: Pictograms showing modes of public transport available through Direct Service

**Brief summary**

The DSN covers a full range of ticketing options. The two most well-known DS products are the half-fare travelcard (HF) and the full-fare travelcard (GA). One in every three people living in Switzerland now holds an HF. These two DSN flagship products alone generate an annual turnover of around CHF 1.407 billion (over one-fourth of the total annual turnover for public transport as a whole). In addition to the GA and HF, there are tickets for all segments and travel needs, tickets for children, senior citizens and even dogs.

All tickets are subject to common conditions of use and tables of fares. These are legally binding and are managed by the DSN Secretariat. SBB is responsible for marketing the DS product range. It organises marketing promotions and campaigns targeted to the leisure travel segment. The marketing budget, the planning of measures and controlling activities must be approved by KMP. While the DSN lacks its own brand, it can at least be recognised through the public transport pictogram appearing alongside the SBB logo.

# 6 Calculation of transport fares

## 6.1 Regular tickets

The price of a "regular" DS ticket is calculated using a point-to-point pricing system. This approach is different from the zone pricing system used by FNs. With the point-to-point pricing system, the Swiss transport infrastructure is broken down into various route sections (e.g. Zurich–Olten, which would be the points where passengers board and leave the train).

Transport fares are calculated according to a minimum base price. The base price currently corresponds to a 2nd class ticket costing CHF 3. This base price is used in all cases, regardless of the length of the route to be travelled. Fare kilometres between two points (e.g. Zurich–Olten) are added together and then converted using a kilometre table.

TCs that adopt a kilometre-driven approach to pricing offer distance discounts, i.e. the cost of the ticket decreases the longer the distance travelled. In other words, the larger the number of kilometres, the smaller the average price per kilometre. Distance discounts are also offered to passengers who travel on routes operated by other TCs. For this reason, all TCs use a kilometre-driven approach to pricing and refer to a common table of fares (F600). Most of the major railway companies such as SBB, RhB and BLS calculate their fares on this basis.

Some TCs, however, use a fare-driven approach to pricing, offering continuous distance discounts for specific routes or route sections. This is usually the case for TCs that cater mainly to tourists (e.g. boats, mountain railways, cableways and bus operators such as PostBus Switzerland Ltd.). Most TCs that use a fares-driven approach to pricing also refer to the common table of fares (F600). A few purely touristic TCs apply their own pricing rules. The only requirement is that the DS distribution system must be able to apply and process these rules. The necessary minimum standards and authorised variants are established in the Collection of Parameter Data (F604.0).

### Fare kilometres and distance surcharges

In public transport, the number of fare kilometres often depends on the actual distance travelled in kilometres between two stops. The fare charged for travel along a given route section can be made more flexible by calculating the number of fare kilometres or the distance surcharge between two stops. This becomes possible by improving the service provision (e.g. increasing the number of trains travelling along a given route). The FOT is responsible for ensuring that fares remain uniform all over Switzerland. It usually allows TCs that qualify for subsidies to adjust their fares by no more than 150% with respect to effective kilometres travelled. Along tourist routes, the difference in fares can be even higher. The somewhat large difference in fares between TCs that use a calculation based on fare kilometres and those that use a calculation based on effective kilometres is partly due to historical factors. Private railways were less subject to the strict regulatory conditions imposed on the Swiss national railways company SBB.

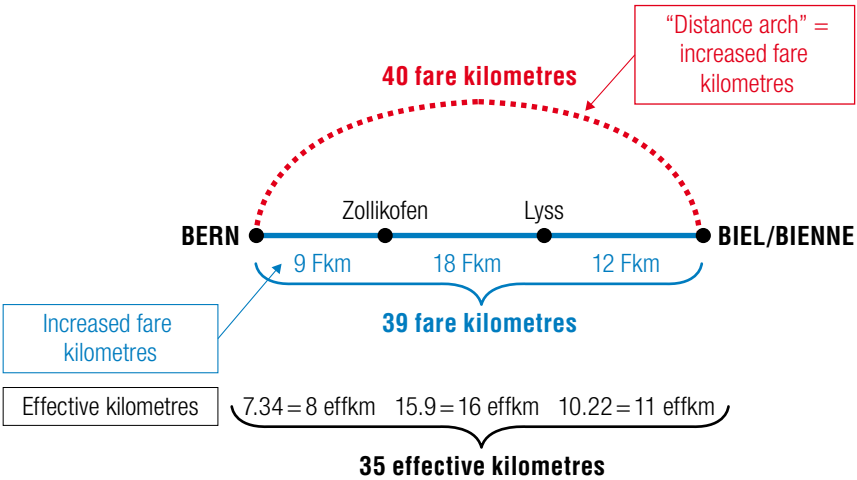


Figure 9: Fare kilometres and distance surcharges

In addition to the different means of calculating fares (see Figure 9), TCs may also apply distance arches on certain routes, usually long-distance ones. The fare for the given distance arch only applies if the traveller gets off at the final destination on the given route.

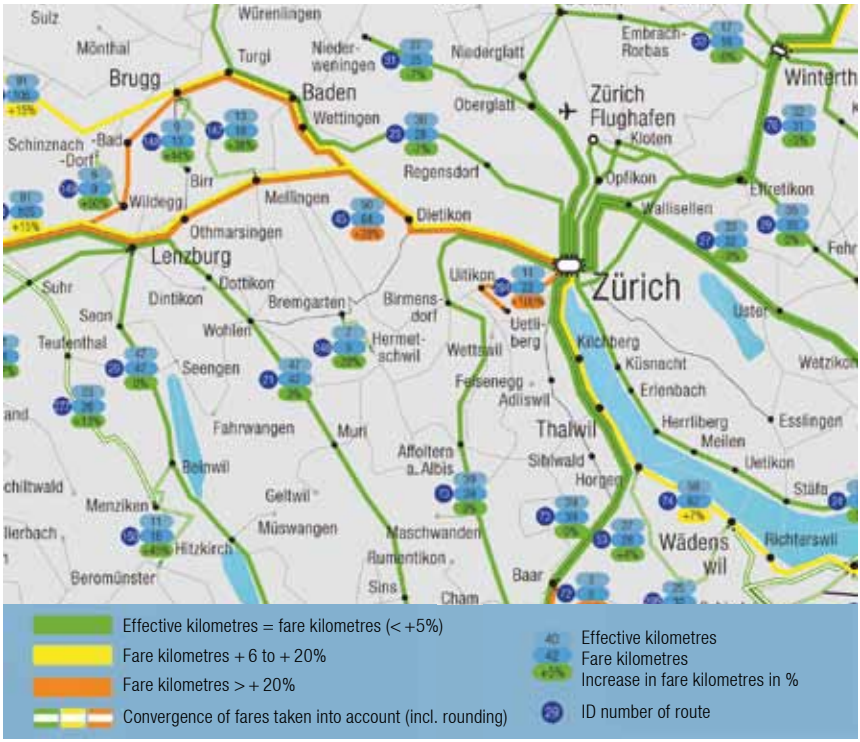


Figure 10: Distribution of fare kilometres and distance surcharge along a Direct Service route.

## 6.2 DS fare adjustments

DS fare adjustments may be made twice each year: once when the timetable changes (usually on the 2nd Sunday of December) and once on 1 June.

There are three phases in the process of adjusting fares. In the first phase, the StAD decides the overall percentage increase in fares. It analyses the various strategic conditions (e.g. price elasticity), considers policy decisions of owners as well as the financial needs of TCs. It also tries to keep fare increases as reasonable as possible for customers. In the second phase, the total amounts for individual products (e.g. GA, HF, etc.) will be coded in. As the entity responsible for managing DS marketing, SBB submits a corresponding proposal drafted in consultation with the KMP. The TCs are then asked to make individual adjustments to fares along their

routes based on the proportion of the total fare adjustment that corresponds to them. These individual fare adjustments by TCs are nevertheless subject to price regulations.

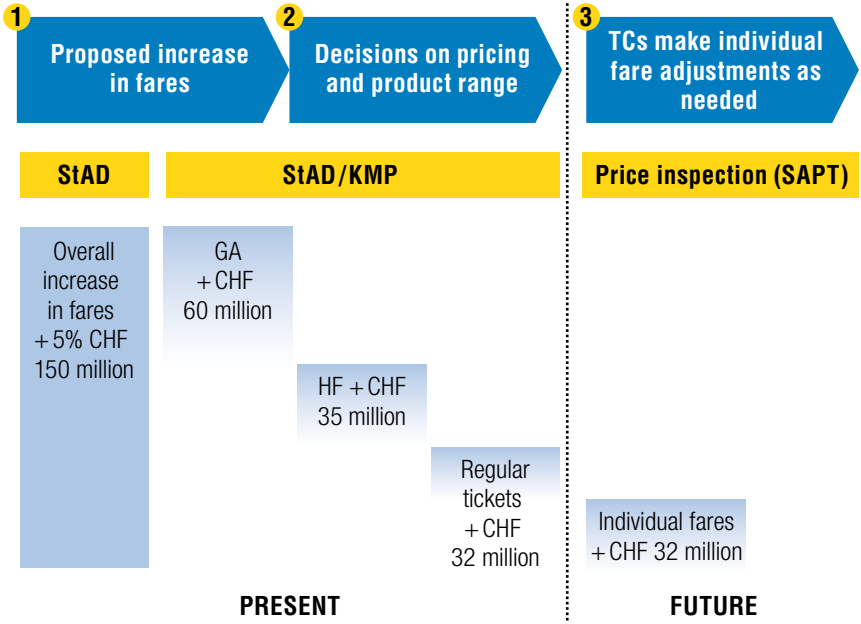


Figure 11: DS fare adjustment process

A general survey presenting the full range of proposed fare adjustments is then submitted to all TCs concerned for consultation. At the same time, the proposals are sent to the price inspector, who will verify whether the full range of proposed fare adjustments does not generate excessive profits, i.e. an abuse of monopoly. Negotiations with the price inspector generally take several months, which means that a lead time of about a year is required for fare adjustments.

Prices are established for the entire year, which means that there are no seasonal prices. In exceptional cases, a surcharge may be applied over and above the fixed price of travel subscription products. Holders of the GA travelcard, for instance, may be asked to pay a surcharge for travel along purely touristic PostBus routes or on night service buses (e.g. Alpine Ticket). As a mandatory condition, all surcharges must be applied to all travellers in equal measure.

**Brief summary**

With Direct Service, regular tickets are calculated using a standard fare for the given route section travelled. A common table of fares (Fare 600) is used for reference. The fares applying between two stops are calculated on the basis of fare kilometres, which tend to be higher than the actual number of kilometres travelled. Most of the large-sized TCs provide company-wide distance discounts to their customers. This is referred to as a kilometre-driven approach to calculating prices. Smaller-sized TCs tend to not offer distance discounts for trips involving route sections operated by other TCs. They therefore apply a fare-driven approach. This is the case for TCs catering mainly to tourists as well as for bus operators. Fares may be adjusted twice each year. The StAD decides on the total fare adjustment and informs each TC of the portion of the total fare adjustment to be applied along their routes. In addition, fares adjustment is subject to price regulations.

# 7 Distribution of income and sharing of costs

A considerable volume of income is generated from the common range of DS products. This income needs to be distributed to individual TCs. The full-fare and half-fare travelcards alone generate a turnover of around CHF 1.407 billion (as of 2012) annually. This corresponds to about one-fourth of the total income for all public transport in Switzerland (Basis: around CHF 6.008 billion total income, source: Facts and Arguments 2012). The various costs for marketing, managing the DSN Secretariat, administration, innovations and projects are jointly shared by all TCs within the DSN. The distribution of income and sharing of costs are described in detail in the following chapter.

## 7.1 Distribution of DSN income

All rules on the distribution of income are established in the Regulation on the Distribution of Direct Service Income (R511). Basically, the DSN draws a distinction between two types of income:

– Income from DS tickets for travel across specific distances (e.g. individual tickets, point-to-point travelpasses)
– Income from travel subscription products (e.g. full-fare travelcards, daypasses)

### 7.1.1 Distribution of income from DS tickets for travel across specific distances

The Passenger Transport Sales and Information System (PRISMA) is used to calculate the proportion that each TC will receive from each DS product sold. This proportion is determined on the basis of fare kilometres or specific fares and credited to the TC's current account.

### 7.1.2 Distribution of income from travel subscription products

Income from travel subscription products is distributed with a certain time delay and is subject to withholdings and deduction of commissions. The proportion of income to be paid to each TC is calculated by means of a distribution ratio. The DSN Secretariat is responsible for calculating and informing member TCs of distribution ratios.
The most important distribution ratio is the one used for the full-fare travelcard (GA). This ratio applies to around CHF 1.14 billion in income (total amount distributed in 2011).

The distribution ratio for the GA travelcard is based on a representative survey of GA customers. Respondents are asked to fill in a questionnaire on their public transport usage patterns over a given week. Survey response rates are currently around 34% (as of 2012).

Customer responses regarding their travel usage are then digitised and made available for subsequent processing. Individual trips are recorded at the price that the customer would have paid had he/she not subscribed to the GA travelcard. The trip records are then used as the basis for calculation of the distribution ratio (i.e. price of ticket divided by the proportion of the trip that each TC provided transport services for). The accumulated proportions add up to the virtual income that can then be used to determine the percentage of the total income to be distributed to each TC.

A large number of TCs receive minute proportions of the income generated by the GA travelcard. In order to prevent large fluctuations of income to these small-sized TCs and provide greater planning certainty, a compensation fund was created. This fund ensures that annual income does not rise above or fall below a 30% threshold. In addition, the GA distribution ratio is based on four equally weighted reference years. With each passing year, the oldest reference year is dropped and the newest one added.

The GA distribution ratio introduced in December 2012 is based on reference years 2007 (May) to 2011 (April). A provisional distribution ratio is also published for reference years 2008 (May) to 2012 (April). This provisional distribution ratio is important for TCs since it provides them with information needed for submission of bids to the Confederation and the cantons. Various steps (e.g. quality control by TCs) are still required before the provisional distribution ratio becomes definitive in December 2013.

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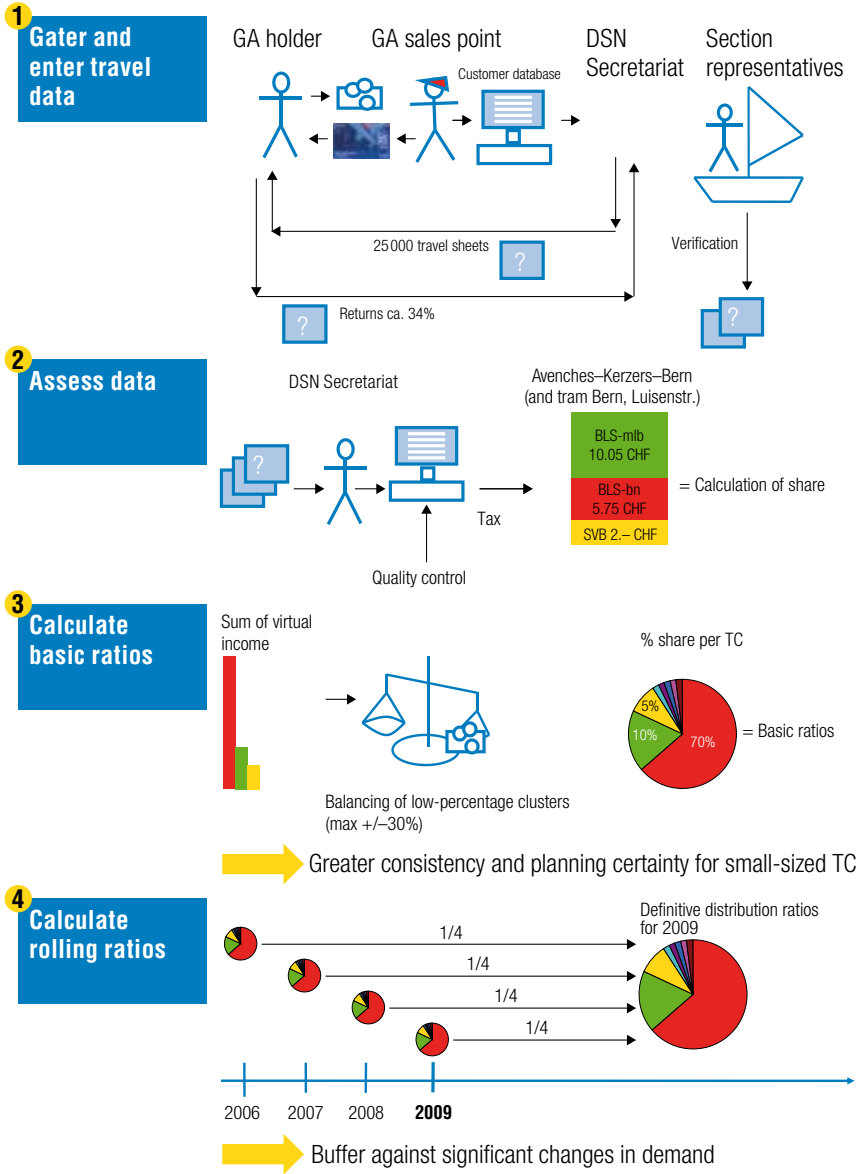


Figure 12: Four-phase process in the calculation of distribution ratios

Unlike the distribution ratio used for GA travelcards, the distribution ratio used for HF travelcards can be calculated almost automatically, since the sales system keeps a record of all tickets purchased by HF holders and calculates the loss of income that each TC incurs compared to what customers would otherwise have paid with the regular fare. TCs that are not connected to the central Passenger Transport Sales and Information System (PRISMA) submit their calculations to the DSN Secretariat directly. The total fictitious loss of income incurred by each TC is then compared to the total loss of income for all tickets sold to HF holders to determine the corresponding distribution ratio for each TC.

The DSN Secretariat also calculates a distribution ratio for the HF daypass, Marching order passes, Swiss Pass, InterRail, Track 7, bicycle tickets and other product categories.

## 7.2 Sharing of costs within the DSN

Common DSN costs are around CHF 35 million (as of 2011) each year. All rules on the sharing of costs are established in the Regulation on the Sharing of Direct Service Costs (R512). The main cost blocks include:

- DSN Secretariat costs
- Using technical means to sell and issue tickets and clear transactions
- Printing and distributing tickets
- Joint marketing and advertising costs
- Mandate to market public transport products abroad (STS AG)
- Costs for products issued in credit card or ticket format
- Projects and innovations

Common administration and marketing costs amount to just under 1% (0.81%) of the total estimated income of CHF 4 billion.

Costs are usually assessed once per year. Cost allocations are determined according to different principles. A portion of the costs is calculated using a mixed-cost ratio, which is referred to as the standard ratio. Here the income derived from the distribution ratios of travel subscription products (excl. international and FN services) is added up to determine the proportion of costs that each TC will pay on the basis of the total income generated. A second important cost-sharing ratio is based on the proportion of income generated from the total traffic volume recorded in the Passenger Transport Sales and Information System (PRISMA).

### 7.2.1 Withholding from sales

Marketing costs for individual products within the product range (mainly credit card-format travelcards such as the GA, HF, Track 7 as well as the Junior and Grandchild travelcards) are handled differently, namely through the withholding of certain amounts from each sale. Withholdings are based either on a fixed amount or on a percentage of each product sold.

Example of one-year HF travelcard:

| | | |
|---|---|---|
| | Sales price | CHF 165.– |
| – | Amount withheld | CHF 10.– |
| = | Income paid into the HF fund | CHF 155.– |

As the entity responsible for the DSN mandate, SBB uses the withheld amounts to cover the costs of producing and mailing HF travelcards by post, producing the magazine for regular customers, dispatching reminder letters, maintaining the website and paying employees who perform HF-related tasks. DSN auditors ensure that these funds are properly used. If a lot of money is left over at the end of the year, then this surplus is paid back into the HF fund and redistributed to members according to the established HF distribution ratio. If the amount withheld by SBB is too high or too low, then SBB may request a corresponding adjustment. The decision to grant this request is reached by KMP. Naturally, any amounts withheld do not appear in TC accounting records.

### 7.2.2 Commissions

One of the strong points of Direct Service is the fact that all member TCs sell each other's tickets. TCs receive a commission for each ticket that they sell to compensate them for their sales costs. Calculation of commissions and calculation of traffic income are handled separately. The basic principle for the calculation of commissions is simple: TCs that sell a ticket on behalf of other TCs will receive compensation from the latter. Commissions are calculated on a monthly basis. When clearing sales commissions, some TCs will be credited while others debited. In 2011, around CHF 220 million in commissions were credited/debited in this manner.

Income from commissions should cover the costs of selling tickets and advising customers. Sales commissions take into account two different components in this process:

– Handling commission to compensate for the actual workload associated with sales and advisory services
– Commission to cover the costs associated with the means of payment used (credit and debit cards, commissions for credit cards and Reka cheques, handling of cash, etc.)

Calculation of commissions to all TCs is a zero-sum game: TCs that sell tickets receive the exact commissions paid by the TCs that received the ticket income. However, there can be major differences in account balances depending on how many tickets one TC sold for another TC and vice versa. Current commission percentages can be found in Art. 6.3 of Regulation 512 (R512).

**Example of calculation of commissions**

The MOB sells a ticket from Château-d'Oex to Spiez. The MOB receives a sales commission of 12% on the sale of that ticket. Part of this commission is paid by BLS (for the portion of the trip that took place on the route between Zweisimmen–Spiez) and part by the MOB itself for the portion of the trip made along its own route. If the MOB sells a GA travelcard in Château-d'Oex, it will receive a lump-sum sales commission of CHF 50. This commission is paid by around 165 other TCs that take part in the GA travelcard product. Each TC pays the portion of this commission that matches its own GA distribution ratio.

### 7.2.3 Billing/clearing

Swiss Federal Railways (SBB) is responsible for calculating DSN costs and income. Its specific mandate is governed by the Regulation on Direct Service Billing and Clearing (R550). For each TC, SBB maintains an account showing all credit and debit entries made on the basis of clearing certificates. Generally speaking, all accounting entries take effect on the 20th of the month in which the traffic volume took place. SBB pays interest on each account. SBB obtains all information from the central Passenger Transport Sales and Information System (PRISMA) or from the TCs that do not use PRISMA and therefore submit their records to SBB directly. TCs may view traffic income and sales statistics via the web-based application POR InTicket (PRISMA online report).

**Brief summary**

DS products generate a turnover of around CHF 6 billion. Around CHF 1.805 billion comes from the common range of travel subscription products. The GA travelcard alone accounts for around CHF 1.1 billion. Income from travel subscription products, for which routes travelled are unknown, is distributed to all participating TCs in accordance with their respective distribution ratios. The DSN Secretariat calculates each distribution ratio on the basis of a representative survey of customers within a given period of time. These trips made on public transport networks are generally charged full-fare, which corresponds to the price the passenger would normally have paid had he/she not purchased a travel subscription product. The accumulated value of all trips made by each TC is compared to the total DSN traffic volume to determine the proportion of GA income to be distributed to each TC.

The DSN also generates costs, which are shared by all participating TCs. These costs include DSN Secretariat overhead, common marketing measures and maintaining sales and distribution systems. TCs share costs on the basis of a cost-sharing ratio. For DS travel subscription products in credit card format, a certain amount is withheld from the sale of each product to cover marketing costs. For the sale of tickets of other TCs, the TC making the sale earns a commission. SBB is responsible for billing and clearing within the DSN.

# 8 Sales

## 8.1 Structure of Swiss public transport sales

TCs within the DSN sell each other's transport services. For example, a ticket to Scuol (RhB) or Müstair (PostBus Switzerland Ltd.) may be purchased directly at the SBB train station in Yverdon-les-Bains. The central distribution systems are jointly funded by all member TCs. Sales and distribution include all processes from the sale of tickets to the calculation of ticket volume.

With the current sales process, personal contact with customers is steadily losing importance. Travellers purchase most of their tickets from unmanned points of sale (e.g. ticket vending machines, cell phone, e-ticketing) and gather information themselves (e.g. over the Internet) on the various products on offer. The sales process rarely begins with advisory services to customers (e.g. at the ticket window or via a call centre). After a ticket has been purchased, the next step is ticket inspection (either systematically by on-board ticket inspectors or randomly). After-sales services are then provided, such as leaving GA travelcards on deposit (e.g. when travelling outside of Switzerland on holiday), refunds or renewal of travel subscription products for regular DSN customers.

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The DSN has established a common sales and distribution system, the Passenger Transport Sales and Information System (PRISMA). This system provides all points of sale with uniform access to customer data and information on the various products. The specific benefit is that customers receive the same services at any train station (e.g. refunds) regardless of where they initially purchased their ticket. Tickets are sold through ticket vending machines connected to the PRISMA system or increasingly also through the TCs' own sales systems.

## 8.2 Distribution channels

Customers want to be able to use various distribution channels to easily purchase low-cost multimodal transport tickets whenever and wherever they need them. Public transport companies in Switzerland have responded to these growing customer expectations by multiplying the number of distribution channels (e.g. cell phones). However, this also increases the complexity of distribution systems.

TCs within the branch wish to intensify cooperation and establish linkages between the various products. In the future, they wish to introduce multimodal tickets covering every stop along a given public transport route in Switzerland. The growing dependence increases the need for coordination between the various TCs as well as for adoption of a common distribution system. The DSN will be able to address these needs by establishing a single public transport platform for the sale and distribution of all DS products. The new platform is being developed within the framework of the "Future Swiss Public Transport Pricing System (ZPS)" programme.

## 8.3 Data exchange solutions – the road to multimodal public transport

### 8.3.1 DaX (Data Exchange)

Customers need to be able to buy public transport tickets as easily as possible. The DaX data interface allows DS products to be sold at ticket vending machines and other points of sale at practically all TCs and FNs.
Nevertheless, technical limitations do not allow all DS products to be sold through the DaX interface. With the latest technical DaX Standard 2.0.15, data are delivered to the sales systems of partners twice each year.

The DaX interface enables various TCs to import data into their sales system and sell tickets through their own ticket vending machines. The data relating to the completed sales are sent to the central clearing system, which then calculates the income to be distributed.

In recent years, the range of available public transport products has increased. This is partly due to the fact that there are now more FNs. In order to transfer data between the various ticket distribution systems and the central clearing system, a common "language" must be used by all the systems involved. The DaX standard serves this purpose by establishing a generalised data transfer format. However, processes to implement new articles are complex and time-consuming. Future market needs have therefore not yet been fully addressed.

As part of an initial project, the existing DaX interface will be optimised. A web-based application has enabled the previous manual ordering process to be phased out in favour of an automated one. TCs can now place their orders for DaX items online using the order application. In addition, processes have been improved and DaX operation has been made more efficient.

The optimised DaX is a transitional solution to be used over the next few years. With the planned introduction of the new public transport platform, data transfers will become more efficient and coordinated so as to satisfy transport needs within the DSN as well as within and between FNs. This will enable a complete range of public transport services to be offered in Switzerland.

### 8.3.2 NOVA public transport interface

Modernisation of ticket sales and distribution systems should include implementation of a new and revised public transport interface (NOVA). The new interface will bring the following enhancements:

- Exchange of not only billing data but also control data
- Simpler exchange of DSN and FN data
- A central system will be used to manage customer data and product range data
- Better use of synergy potential.

**Brief summary**

In order give public transport customers the option of purchasing any product within the full product range in as many locations as possible, ticket/travel subscription data will be entered into an interface. In the medium term, current distribution systems and the data interface will be replaced by more modern and flexible solutions.

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# 9 Projects and innovations: a glimpse into the future

Technological developments and changing political conditions have also affected Direct Service, a system that has proven its merits for decades. Huge growth in demand combined with the Confederation's insistence that users bear a greater burden of the costs of public transport have given rise to a coordinated strategy comprised of various projects. The StAD strategically manages PT projects while the various DSN and FNA bodies handle the technical details.

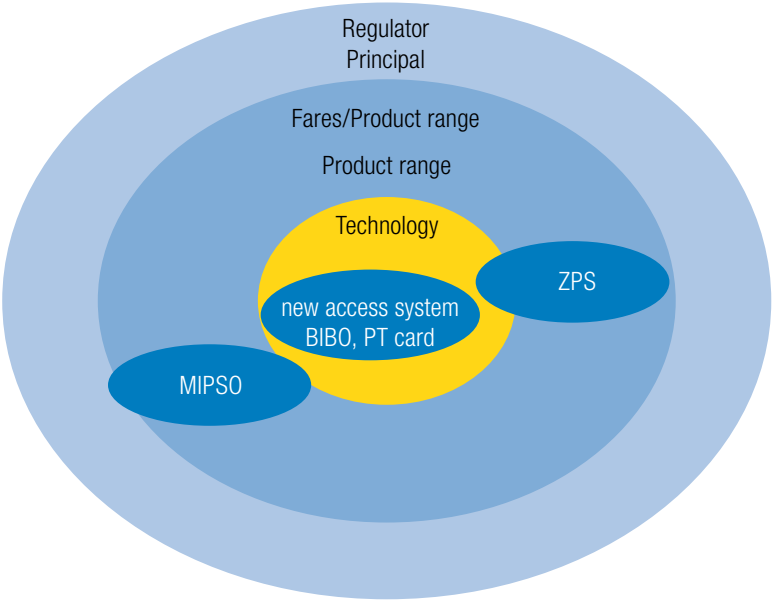


Figure 13: Overview of projects

## 9.1 MIPSO – PT product range in Switzerland

The Medium-term Pricing and Product Development (MIPSO) project entails a comprehensive evaluation of the full range public transport products in Switzerland. The aim is to use existing ideas and approaches to develop new products and services and to identify any gaps in the product range. Through a coordinated and harmonised product range, the mobility needs of customers can be satisfied to the greatest possible extent.

## 9.2 "Future Swiss Public Transport Pricing System" (ZPS) – the foundation for future ticket distribution

With the "Future Swiss Public Transport Pricing System" (ZPS) project, the new technological foundation for future ticket distribution will be laid.

ZPS pursues the following three objectives:
- Phasing out and replacing the ticket sales systems introduced back in the 1990s. By today's standards, these systems are now obsolete.
- Ensuring the seamless use (from the customer's perspective) of DS and FN tickets so that truly only one ticket will be required for each trip on public transport.
- Enabling price differentiation based on the standard fare along transport routes so that travellers pay more for the transport services that they use but still find fares affordable.

The new systems, the public transport platform, should be used by all TCs and FNs. This will lead to cost savings and enable existing synergy potential to be tapped more effectively. The NOVA public transport interface will enable all TCs to access travel usage databases, thereby allowing them to provide customers with uniform service everywhere. Careful decisions were made to clearly distinguish between tasks that TCs will perform jointly in the future and those that fall within the entrepreneurial responsibility of individual TCs. A major challenge will be integrating the new PT platform in the existing system architecture of TCs and FNs.

## 9.3 PT cards – a first step towards e-ticketing

The PT card is the future, electronic identification card for travellers, a sort of "membership card" for public transport. Initially, all GA, HF and regional travelpasses will become part of the PT card. This means that customers will only require a single travelcard for multiple public transport services (e.g. HF plus regional travelpasses). Later on, the PT card will be used to purchase other types of services (e.g. museum tickets). At the same time, a renewal system will be introduced for the various travel subscription products. PT customers will no longer receive a plastic card each year with an expiry date. Instead they will receive a PT card and will actively decide whether to cancel or renew the PT card service. The introduction of a single multi-purpose PT card combined with the new active cancel/renewal system will reduce card production costs and increase renewal rates without interruptions.

Each PT card will be equipped with an RFID chip. This technology has already been introduced for Mobility car-sharing and credit cards. A card reader enables ticket inspectors to verify PT cards and corresponding tickets or travel subscriptions. The PT card also introduces electronic control within the Swiss public transport system. RFID chips combined with electronic verification have already been introduced in a few FNs. However, some of these isolated solutions are incompatible with one another. For this reason, the PT card will enable a single RFID standard to be established for the whole of Switzerland.

The PT card will be an important first step towards e-ticketing. It will enable valuable experience to be gained towards full inclusion of all transport products in the e-ticketing system.

## 9.4 Be in, Be out (BIBO): a new way to use public transport in Switzerland

The smaller the barrier to a system, the more appeal it has for customers. Ticket purchasing and validation are still hurdles to the unlimited use of trains, buses and trams. This is mainly because everything needs to be planned in advance. Spontaneous decisions to continue trips still require interruptions in order to purchase individual tickets. In some cases, the decision is determined by ticket window opening times or whether passengers have enough cash to buy tickets from ticket vending machines.

The electronic access system BIBO (Be in, Be out) offers the same access to public transport as that enjoyed by holders of the GA travelcard. The system requires that all transport vehicles (e.g. trains, buses or trams) be equipped with tiny sensors that can detect the presence of the PT card of passenger Y in the vehicle. A check-in process, i.e. sliding the PT card over a touch point will not be required when entering or exiting public transport. Today's 430 000 GA holders would also not welcome the reintroduction of a check-in/check-out procedure.

Tram/train/bus travel usage data would be transmitted to the backend system at night. Inspections of valid tickets would continue as before but should be faster with the PT card system. Fares for virtual individual tickets would be charged to the cardholder's account. Both prepaid and postpaid billing options would also be offered. However, online tracking of customer movements via BIBO or by the police would not be possible. Travel usage data would be used for statistical purposes, i.e. primarily to determine the distribution of income among TCs. However, this would take place without any form of individual identification. The new system would certainly benefit customers but primarily the TCs: much lower distribution costs compared to

what they now incur through the sale of tickets via ticket windows and ticket vending machines; 100% precision in the calculation of DSN income distributions, including FN shares; and flexible pricing options.

Swiss public transport companies conducted the first pioneering tests of the technology for BIBO around ten years ago (EasyRide). Since then, the technological basis has not only improved substantially, it has also become much cheaper. Moreover, it is now possible to gradually implement the technology without having to fully equip the entire transport infrastructure network. The technology should be ready for rollout starting from 2020.

**Brief summary**

Even proven approaches such as Direct Service must innovate. At present, various plans are being discussed for subsequent development of Direct Service without undermining the core factors that have ensured its success. First of all, the DS product range will be analysed and made even more customer friendly (MIPSO project). Then current ticket sales and distribution systems will be phased out in favour of a more modern one (ZPS project) enabling electronic access to public transport (PT card, BIBO).

# 10 Abbreviations

| | |
|---|---|
| BIBO | Be in, Be out (contactless collection of travel data) |
| CD | Corporate Design (external image of company, including company logo) |
| CIT 2012 | Standard security background appearing on paper used to print DS tickets |
| C510 | Convention 510; “DSN Statutes” |
| DaX | DataExchange; exchange of sales and billing data |
| DETEC | Federal Department of Environment, Transport, Energy and Communications |
| DSN | Direct Service Network |
| FN | Fare network |
| FNA | Fare Network Association |
| FOT | Federal Office of Transport |
| FVP | Discounted travel fares for TC personnel |
| GA | Full-fare travelcard |
| HF | Half-fare travelcard |
| KIT | IT Systems Commission (DSN body) |
| KKV | Transport Customer Information Commission (DSN body) |
| KMP | Passenger Transport Market Commission (DSN body) |
| KTB | Fare Regulations Commission (FNA body) |
| KUBA | Customer database |
| KVP | Passenger Transport Sales Commission (DSN body) |
| KVS | Sales and Systems Commission (FNA body) |
| MobilBonus | Magazine intended for holders of DS travel subscription products |
| PAG | PostBus Switzerland Ltd. |
| PRISMA | Passenger Transport Sales and Information System |
| PT | Public transport |
| R511 | Regulation on the Distribution of Direct Service Income |
| R512 | Regulation on the Sharing of Direct Service Costs |
| R545 | Regulation on the Means of Payment Used to Purchase Direct Service Tickets |
| R550 | Regulation on Direct Service Billing and Clearing |
| R560 | Regulation on PRISMA2 Accounting |
| R570 | Regulation on the Sale of Passenger and Luggage Transport Services |
| SAPT | Swiss Association of Public Transport |
| SBB | Swiss Federal Railways |
| StAD | DSN Strategy Committee |
| StAV | FNA Strategy Committee |
| STS | Swiss Travel System; DS travel subscription products for tourists |
| TC | Transport company |

| | |
|---|---|
| VAT | Value-added tax |
| ZPG | Hand-held device used to verify and issue train tickets |
| ZVV | Zurich Transport Network |