



## **Swiss Poster Research Ltd.**

# **Organization, Studies, Model, Planning Tool**

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# 1 Introduction

## 1.1 Mission and Applicability

In the intermedia competition, the media genre Out of Home is in competition with print, TV, radio, cinema, online and mobile. In order to be able to position itself in the market, it needs hard performance values that meet the increasing demands of customers in a competitive environment that is becoming tougher and tougher. Hard data that is comparable between the individual media, if possible, is required.

On behalf of the outdoor advertising companies APG|SGA, Clear Channel, Neo Advertising, Alpenplakat, WWP and Baracom, SPR+ acts and provides advertising clients, media agencies and media providers with a planning tool for the planning, evaluation, analysis, optimization and documentation of out-of-home campaigns.

In addition, SPR+ has a mobility model of the Swiss population for all of the approximately one million road sections in Switzerland, on the basis of which a wide variety of industries can be advised by SPR+ for location planning and mobility analysis.

## 1.2 Research Subject

SPR+ measures the media performance of both Out of Home campaigns and individual digital and analogue outdoor advertising faces. For this purpose, it records how many contacts, weighted by visibility, the population of a defined geographical target area achieves with the individual outdoor advertising faces, differentiated by various socio-demographic target groups. SPR+ thus provides a very hard currency, because in contrast to all other media in the Swiss media landscape, only the contact values in outdoor advertising are weighted down according to visibility.

Three research objects are derived from this:

### 1.2.1 National Mobility Model

The national mobility model of SPR+ covers the mobility of the entire population living in Switzerland. For each of the approximately one million road sections, it is known how many vehicles and pedestrians move on them, as well as where they come from and where they are going. In addition, socio-demographic characteristics such as age and gender are known for each of these people.

### 1.2.2 Out of Home Advertising Faces

All analogue and digital outdoor advertising faces are digitally recorded and geocoded in relation to the Navteq road network. Many individual characteristics of the outdoor advertising faces are included in this process. Currently, over 60'000 outdoor advertising faces are recorded in the system.

### 1.2.3 Visibility

The national mobility model and the outdoor advertising faces are set in relation to each other and the following visibility weightings are included in the model:

- Visibility distance
- Angle of passage
- Speed of passage
- Time of day
- Clustering (number of faces per outdoor advertising location)
- Temporal visibility
- Digital attraction

### 1.3 Transparency

SPR+ is the only research institute in the field of out-of-home research that makes its concepts, models, methods, data inputs, weighting criteria with their factors and the results absolutely transparent. This is the only permissible scientific approach. Any other approach would not be serious research, but at best marketing. It also ensures the neutrality and objectivity of SPR+, which is a very important client concern. SPR+ believes that marketing should always follow the results of research and not the other way round: marketing follows research!

There are differences in outdoor advertising from country to country. With its research, SPR+ has succeeded in responding specifically to local Swiss conditions: Outdoor advertising with homogeneous, small formats in high density deep into the narrow, winding city centres.

### 1.4 Background

Since the 1960s, methods and models have been developed worldwide with the aim of investigating the performance of the Out of Home media category according to scientific criteria. The neutral and transparent basic research of Swiss Poster Research Plus Ltd. (SPR+) is considered by international experts to be one of the pioneering, most advanced projects. Since the 2000s, SPR+ has used elements of various research approaches and redefined them using state-of-the-art GPS technology. The concept is based on years of extensive preliminary work by Prof. Dr. Martial Pasquier, a specialist in communication and media. In 2016, the SPR+ model was expanded to include MobNat, which integrated other data sources besides GPS (single source) into a national mobility model (integrated approach) while maintaining the same visibility weighting and panel geocoding mechanisms. The extension was possible because these additional data sources were not available before.

SPR+ analyses the mobility behaviour of the Swiss population and determines the visibility-weighted contacts with outdoor advertising faces. The results are made available to the market in a planning tool that is independent of individual outdoor advertising providers and enables the individual calculation of performance values of cross-owner outdoor advertising campaigns and individual faces. Market proximity and market dialogue are ensured by the Research Advisory Council, which includes well-known representatives from the advertising industry, media agencies, media owner and media specialists.

## 1.5 Milestones

2000	Foundation of the simple company Swiss Poster Research (SPR) by APG   SGA and Clear Channel Switzerland (CCS)
2003	SPR presents the results of the pilot study conducted for Winterthur
2006	Foundation of Swiss Poster Research Plus Ltd. (SPR+). In the same year, SPR+ launches the SPR+ Expert planning tool and the new Out of Home currency study for street faces in Switzerland's 55 conurbations.
2009	SPR+ launches the railway station study. With the railway station study, performance values for outdoor advertising faces in Swiss railway stations could be shown for the first time.
2016	SPR+ launches MobNat, which made it possible for the first time to evaluate outdoor advertising faces outside the conurbations and to report national performance values.
2019	Integration of the AM4DOOH research results into the SPR+ Expert planning tool. For the first time, performance values for digital outdoor advertising faces could be reported.

## 2 SPR+ Studies

### 2.1 Overview

For the calculation of contact values and reach values of analogue and digital outdoor advertising faces and outdoor advertising campaigns, a model was created that should represent reality as accurately as possible. For this purpose, large amounts of data from different sources were used, analysed and processed. The idea is to use average daily frequencies at street segments and a plausible path allocation to all people in Switzerland to calculate how many people pass an advertising face on average. Using the geometries of the road segments and the measured positions of the advertising faces, it is also possible to determine at what angle advertising faces are passed and also at what average speed. In conjunction with a visibility adjustment model that takes into account not only these parameters but also those such as illumination, size and the cluttering of advertising faces, the performance values can be calculated.

The components of the entire model and the calculation methodology are described below.

### 2.2 Formats covered

All analogue and digital outdoor advertising faces are digitally captured and geocoded in relation to the Navteq road network. Many individual characteristics of the outdoor advertising faces are taken into account. There are currently over 60'000 Swiss advertising faces in the system. The following

formats on streets, in railway stations and in shopping malls are in the database and updated twice a year:

### 2.2.1 Analogue

- F200
- F12
- F24
- Turning pillars (F200 and F400)

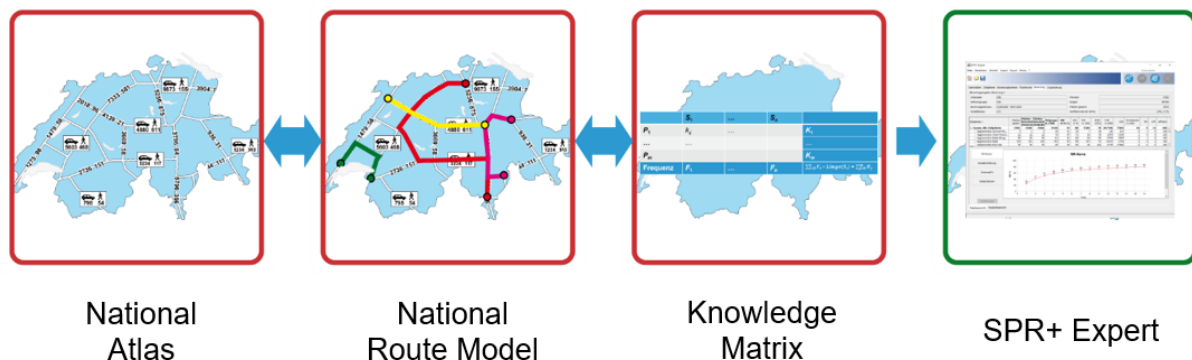
### 2.2.2 Digital

- D20 (diagonal  $30 < x < 55$  inch)
- D40 (diagonal  $55 \leq x < 145$  inch)
- D80 (diagonal  $145 \leq x$  inch)

## 2.3 Model Components and SPR+ Expert

The model for calculating performance values for analogue and digital advertising faces consists of four components:

1. the "National Atlas", which contains people frequencies for all road segments in Switzerland,
2. the "National Route Model", which assigns paths to all persons in Switzerland,
3. the "Knowledge Matrix", which makes the atlas, the path model and the necessary information about the advertising faces available for the calculation algorithm in a compressed form, and
4. "SPR+ Expert", the user interface for the online evaluation of faces and campaigns.



The national atlas and route model are used to generate the knowledge matrix. For the online evaluation of SPR+ Expert only the knowledge matrix is needed.

## 2.4 Input Data

The calculations use a variety of different georeferenced input data. Among others these are

### 2.4.1 Structural Data

- Road network (HERE, Navteq)
- Building vectors (Swisstopo)
- Node-edge models for railway stations and shopping malls (SPR+)
- Municipal boundaries
- Geographical area definitions (WEMF)
- Geographical area definitions (FSO)

- Face data (Face providers)
- Public transport stops (OSM)
- Other POI, geo and frequency data

#### 2.4.2 Population Data

- Population (age and gender) for every building in Switzerland with coordinates (FSO, ARE)
- Households geocoded (FSO)
- NOGA working places geocoded, with business field, and no. of employees for every building in Switzerland with coordinates (FSO)

#### 2.4.3 Mobility Data

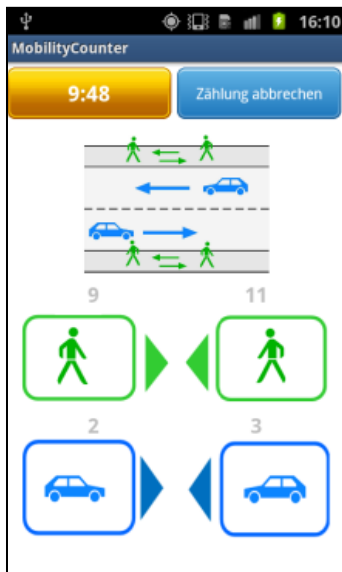
- Traffic measurement (FSO, SPR+)
- Micro census mobility and transport (FSO, ARE)
- Speeds (HERE, Navteq)
- Railway station frequency measurements (SBB)
  - Boarding, alighting, transferring, transit passengers
  - Edge frequencies
  - Total frequencies
- Railway station edge frequencies (SPR+)
- Shopping malls frequency measurements (mall operators)
- Shopping Malls Interviews (SPR+)
- SPR+ GPS Tracks
- SPR+ Frequency Counts

#### 2.4.4 SPR+ Data

More than 11'500 test persons were equipped with GPS trackers, with which all movements of the persons were recorded for seven days. The GPS tracks not only provide individual routes of the test persons, but also allow statements to be made about the variability of the routes - in terms of route length as well as spatial dispersion. In addition, the mobility in residential areas is mapped very precisely via the GPS data, which is incorporated into the route generation for the National Atlas as well as into the route model.

An app ("Mobility Counter") was specially developed for the SPR+ counts, with the help of which the counts can be carried out in a simplified and controlled manner. The location of the counter is documented via GPS in conjunction with a photo. The data obtained is sent to a central server immediately after the count, where it is checked for completeness and plausibility.

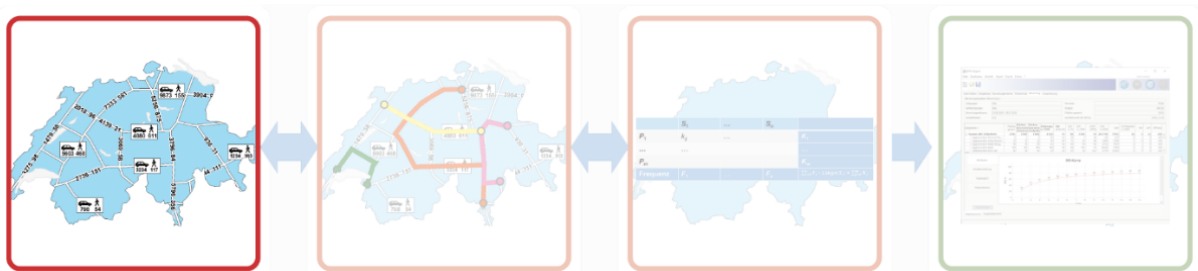




In total, data from almost 10'000 counting points (4'388 public, 5'455 SPR+) are included in the calculation.

The SPR+ counts are extrapolated using daily, weekly and annual hydrographs based on ASTRA hydrographs (Government Institute).

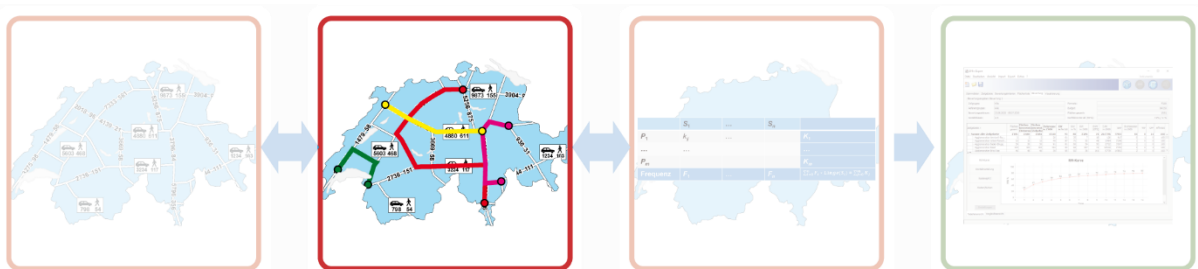
## 2.5 National Atlas



The National Atlas shows average daily frequencies for each road segment in Switzerland, separated by direction for motor vehicles and pedestrians.

The extrapolated count data, the public measurement data and extrapolated GPS data go directly into the atlas. Subsequently, routes of persons are generated, which are calculated on the basis of the source-destination relationships from the microcensus data, the GPS data and the structural data. Using methods of linear optimization, these routes are linked with the frequencies already calculated and ultimately produce the entire frequency atlas.

## 2.6 National Route Model

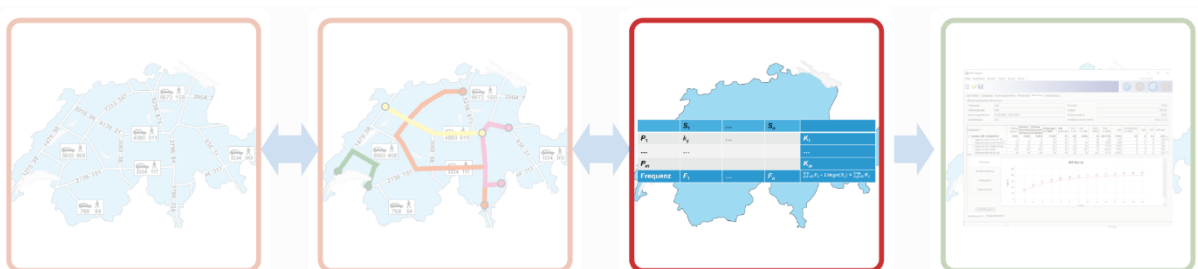


The micro census contains detailed information on the mobility behaviour of more than 33'000 and 54'000 Swiss people, respectively, representative of the entire Swiss population. This information is transferred to the population according to the weight of the micro census persons. Thus, each person is assigned a set of trips that satisfy the statistical data of the micro census (e.g. number of trips, length of trips) for an average day. In addition, the routes of more than 10'500 test persons determined by GPS are integrated. In this way, paths are generated from every household in Switzerland for every person registered in the household, taking age and gender into account and considering POI-specific characteristics (coordinates, number of employees in establishments).

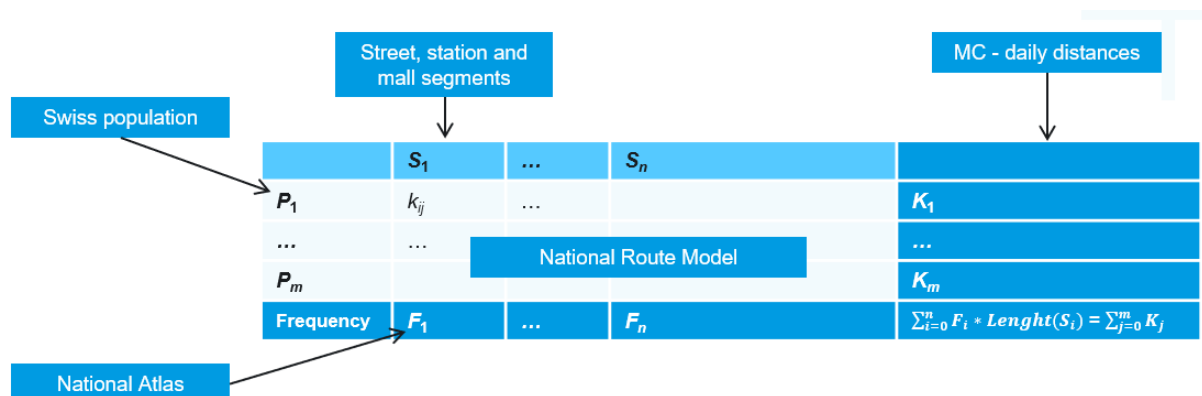
These paths provide a comprehensive picture of mobility in Switzerland as a whole. This defines a "snapshot" for one day.

The atlas and the path model provide the basis for the knowledge matrix.

## 2.7 Knowledge Matrix



The "knowledge matrix" component contains in concentrated form the results of the atlas, Route model and panel-specific information.



The rows of the matrix represent the approximately eight million persons of the Swiss resident population and the columns represent the approximately one million road segments. Thus, in its basic form, the matrix has 8 trillion fields. In addition to the street segments, it also contains railway station segments, which are treated according to the same procedure. The contents of the matrix are processed and scaled in such a way that they can be understood as probabilities with which a person enters a street segment. A balancing algorithm (iterative proportional fitting) is used to adjust the matrix so that the sums of the columns each realise the segment frequencies of the atlas. The row sums are adjusted to the MZ daily distances.

With the knowledge of which advertising faces are positioned at which segments, the contacts can now be summed up over all persons. In particular, it is possible to perform target group-specific calculations, e.g. for all men between 30 and 40 in the city of Zurich.

If one takes the row sum in each case as the expected value of a Poisson distribution, this forms the basis for calculating the reach of campaigns.

The method described above is simplified. Additional parameters enter into the calculation. These are realised in the form of panel-specific or panel-segment-specific devaluation factors.

Panels that are in direct proximity to other panels, for example, are devalued by a certain factor. Unilluminated faces are also devalued. Likewise, it makes a difference whether faces are positioned parallel to the direction of movement, frontally or facing away.

For faces that are visible from several segments, a face-segment-specific devaluation factor is calculated, which depends in particular on the generated routes.

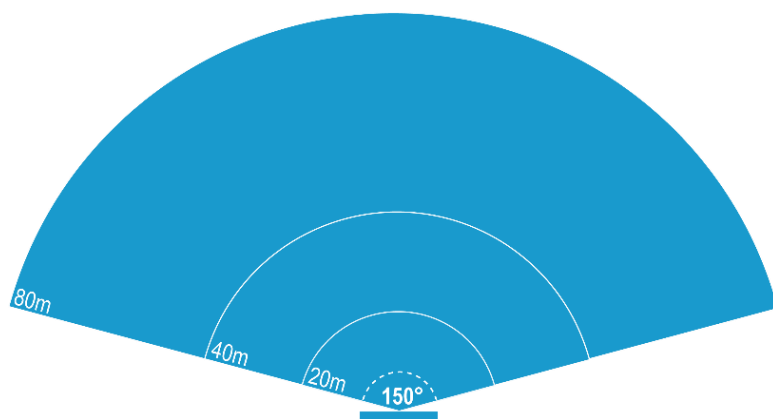
## 2.8 Devaluation Factors

Devaluation factors are multiplied by the contents of the matrix during the evaluation at runtime. They reflect the panel-specific attributes. The calculation of these factors is sometimes very complex and is therefore carried out in advance as far as possible.

The core of the calculation is the visibility area concept, which is explained in the following section.

## 2.9 Visibility Area Concept

A visibility area concept was developed for the algorithmic calculation of contacts. The coordinates and orientations of the surfaces are used to generate a geometry for each surface, which can then be geometrically intersected with the road network.

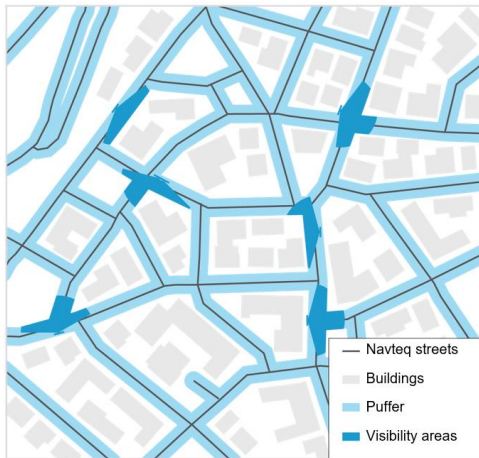


Passers-by create a contact at an advertising face when they enter the so-called "visibility area" (VA).

These visibility areas are individualised, i.e. they are intersected with streets and buildings in such a way that they represent as good a reflection of reality as possible.

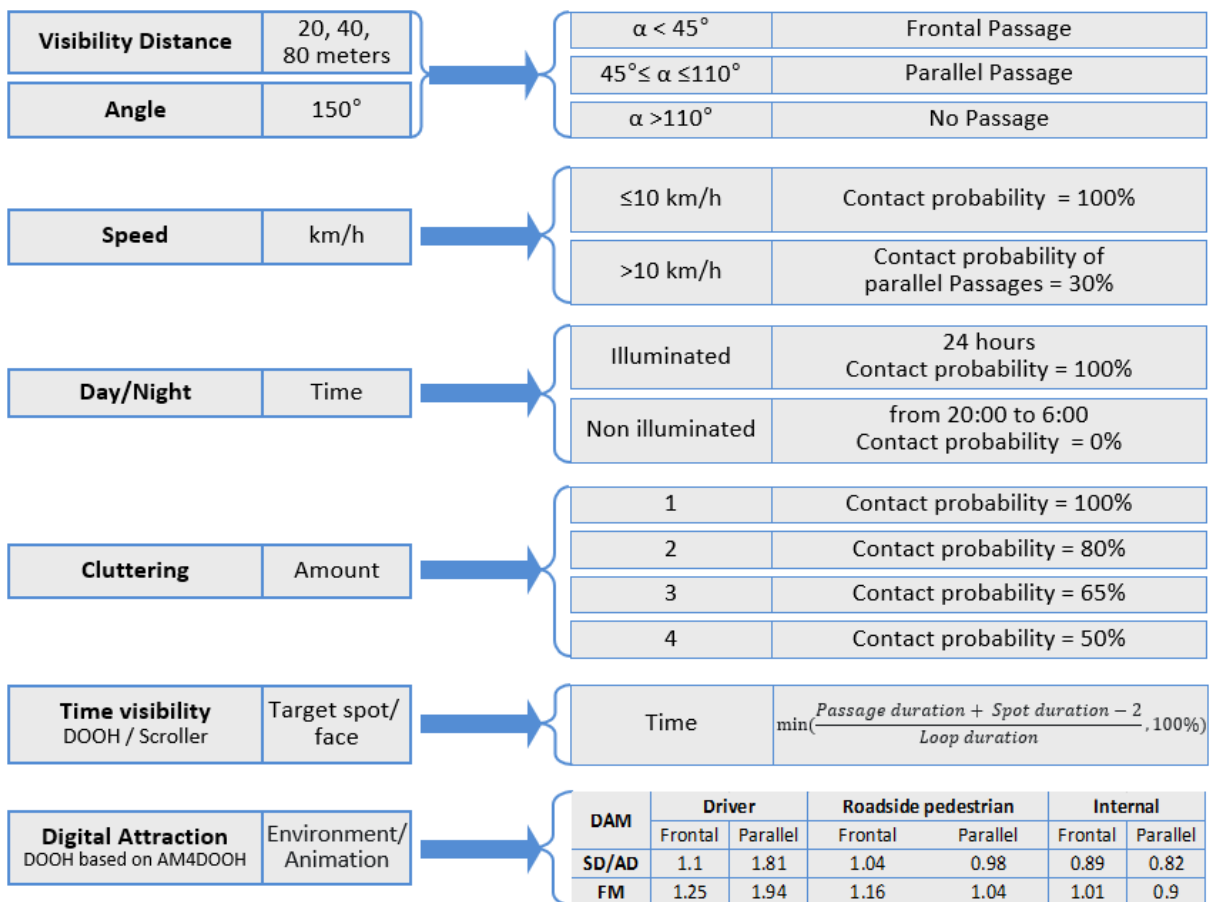
The standardised visibility area is automatically individualised for each advertising face in Switzerland by means of a GIS cut with a 15-metre buffer around the Navteq road network and the Swisstopo

buildings. The result is for each advertising face exactly the area from which a face is visible. Visibility obstructions and blind spots are punched out like Christmas cookies from a dough.



## 2.10 Visibility Weighting

Other factors play a role in calculating a contact value: viewing distance, angle, speed, lighting, day/night, clustering of advertising media, temporal visibility, digital attraction. The following overview shows the criteria taken into account for the contact calculation with reference to visibility areas.



These are the criteria that have a significant influence on contact quality. Since there is neither an international standard nor published serious empirical studies for the weighting criteria and their factors for analogue advertising faces, SPR+ leans on the criteria of other foreign research and takes into account the specific Swiss conditions. For example, eccentricity, which is sometimes taken into account abroad, has no influence on contact quality in Switzerland because the streets in Switzerland are very narrow and the outdoor advertising formats are small, standardised and homogeneous.

The weighting criteria and factors were jointly determined in accordance with a user group based on foreign visibility research as a convention.

For digital advertising faces, the international standard from the AM4DOOH research project was adopted and integrated into SPR+.

Except for temporal visibility, these criteria are evaluated for each face-segment combination and combined into one factor each. They are static and can therefore be pre-calculated.

## **2.11 DOOH**

### **2.11.1 AM4DOOH**

AM4DOOH was a research project carried out by an international consortium (consisting of APG|SGA, Clear Channel Outdoor, Exterior Media and JCDecaux) together with the OOH World Association WOO as sponsor. This pioneering project used virtual worlds to give consumers a realistic experience of how they encounter different forms of digital and traditional outdoor advertising. Combined with eye-tracking methodology, it robustly measured how people view different out-of-home formats in different environments. The aim was to explore the relative difference in how DOOH is viewed compared to traditional OOH. Significant factors for DOOH were derived from this. They show that DOOH increases the likelihood of viewing. For example, the factor for digital full motion spots for frontal motorist contacts is 1.25 and for frontal street pedestrian contacts is 1.16 for each spot in a loop that can be physically seen during a passage.

The factors, combined with the physical visibility of an advertising spot as a function of passage, spot and loop duration, now make it possible to calculate the contact and campaign performance for DOOH as a moving image in public space. This is not only based on advertising message "visible", but also on advertising message "seen".

In August 2018, the Research Advisory Council (RAC) of the Research Institute for Swiss Outdoor Advertising SPR+ released the research results of AM4DOOH (Audience Measurement for Digital Out of Home) for integration into the SPR+ model.

With the integration of DOOH into the SPR+ research system, the entire repertoire of OOH can be evaluated in the SPR+ Expert planning tool. The media performance of DOOH and OOH - separately and combined - in the SPR+ Expert planning tool can be planned.

Building on the existing and established visibility weighting for analogue outdoor advertising faces and expanding it to include the new international standard for visibility weighting of DOOH or what is really seen, there is now also a very hard currency in the digital world.

### 2.11.2 DOOH Integration

Digital advertising media offer the possibility of displaying different content in different temporal sequences. For example, six different pieces of content can be shown in a ten-second time interval each, and periodically over certain periods of the day.

Digital advertising media can achieve a much higher level of attention among passers-by than analogue ones. A study carried out on this (AM4DOOH) led to the result in the following table; the values indicate the factor with which a contact value changes, differentiated according to car drivers, pedestrians and object visitors and the presentation of the content - static (SD), animated (AD) and full motion (FM).

	Driver		Roadside pedestrian		Internal	
	Frontal	Parallel	Frontal	Parallel	Frontal	Parallel
SD/AD	1.10	1.81	1.04	0.98	0.89	0.82
FM	1.25	1.94	1.16	1.04	1.01	0.90

These factors go directly into the contact value calculation as "digital attraction multipliers" (DAM).

The variability of digital advertising media enables the display of periodic and aperiodic content. The "billposting times" are specified by the

- Spot length (duration of the image or spot shown in seconds)
- Loop length (duration of the period in seconds)
- First day of posting
- First second of the posting
- Last day of posting
- Last second of the posting

In order to be able to take the variability in the display into account, the visibility area concept was extended. The essential aspect here is the calculation of the duration during which people are in the visibility area. For example, if the duration is only a few seconds, it is not possible to perceive all the spots shown within a minute, but only a part of them. On the other hand, several spots can be perceived within one passage at the advertising medium, as long as the person stays long enough in the visibility area.

To determine the length of stay, the distance and speed with which a person passes through the visibility area are determined.

The distance is calculated from the geometric intersection of the visibility area with the Navteq network. The speed is determined from a data set from HERE, which shows average speeds of all road segments in quarter-hourly resolution for the different days of the week. For pedestrians, a speed of 1 m/s is assumed as a convention, as determined by the Research Advisory Council.

The duration enters the contact calculation as temporal visibility via the following formula:

$$\text{Time visibility} = \min\left(\frac{\text{Passage duration} + \text{Spot duration} - 2}{\text{Loop duration}}, 100\%\right)$$

The DAM is constant for one advertising face each and can thus be pre-calculated. Since loop length and spot length are only imported as evaluation parameters with the offer during the campaign calculation, the temporal visibility must be calculated for each advertising face considered at runtime.

## 2.12 Railway Stations

### 2.12.1 Object of Study

The SPR+ railway station study measures and evaluates the contacts of advertising faces in Swiss railway stations. For outdoor advertising campaigns, the media performance (net reach, OTS, GRP, etc.) is reported. A total of more than 600 Swiss railway stations are covered: 27 large stations, 44 medium-sized stations and more than 540 small stations. The station study was commissioned at SPR+ by the media company APG|SGA.

The station study is closely linked to the road study. This means that the results of the two studies are comparable and combined evaluations are possible.

### 2.12.2 Input Data

- SBB total station frequencies
- SBB boarders, alighters, transfer passengers
- SBB customer frequency measurement system data
- SPR+ edge frequency counts
- SPR+ vectorised station node edge models
- POI data on station models
- SBB passenger data
- SBB ticket office data
- Advertising face data
- Navteq road network

As part of the overall modelling, people are assigned paths. Some of these paths lead to or from the individual stations according to the object data. In this way, people are assigned to the individual objects in the corresponding number. These persons are used in the path model of the individual objects.

### 2.12.3 Path Model

The study structure and methodology are explained below using Zurich main station as an example. SPR+ creates a digital, vector-based path model for each station, which reflects all turn possibilities (nodes) and path sections (edges) in the station and is stored in a database.

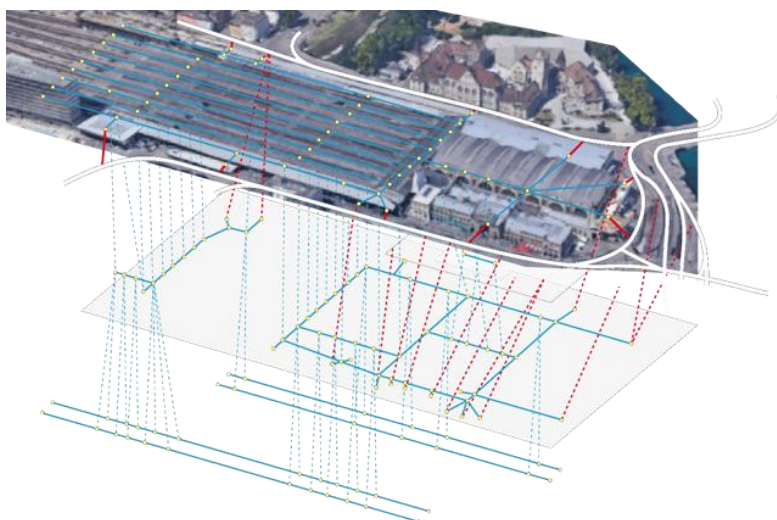


Fig. Route model of Zurich main station

To calculate the contact values of the advertising faces, the number of passages on the edges of the model is essentially decisive. However, for the calculation of the reach, the distances covered by the passers-by are particularly important, since multiple contacts of a person with the same campaign at different surfaces increase the reach less than if this number of contacts is achieved by several people. Therefore, an average daily frequency is calculated from the given data for each edge of the model and paths are generated for the individual persons. With the help of a linear model, a frequency is assigned to the generated paths and a person assignment is made according to this, in such a way that the previously calculated daily frequencies for the individual edges are matched as closely as possible. This gives assigned paths for all people entering the station, which are then used to calculate the performance values.

The SBB data, such as boarding, alighting and transferring passengers and edge frequencies, enter the linear model as conditions and are thus also taken into account in the allocation of paths.

#### 2.12.4 Digital Advertising Media

For digital advertising media in railway stations, the visibility area concept is used, which is also used for digital street surfaces. In contrast to static analogue faces, the duration of people's stay in the visibility area of the faces is included in the calculation here.

The models are enriched with additional information. Which POI's (meeting point, POS, etc.) are located in the vicinity of a path section? Which path sections lead to bus and tram stops? To which tracks does a platform belong?

#### 2.12.5 Results

The results of the station study are automatically available to all registered customers in SPR+ Expert. For the evaluation of outdoor advertising campaigns, all outdoor advertising faces of the examined railway stations are taken into account in addition to the street areas.

For mixed campaigns (combination of street and station faces) as well as for pure station campaigns, the contact value of each face and the campaign performance (net reach, OTS, GRP, CPM, etc.) can be calculated, analysed and documented.



### 2.13 Shopping Malls

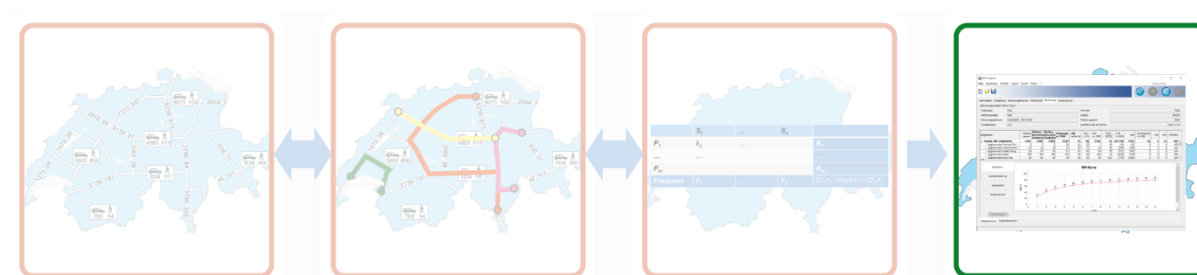
In addition to railway stations, SPR+ also evaluates indoor advertising faces in shopping malls. So far, four shopping malls have been modelled. Here, the same concept is applied as for the railway stations. A node-edge model of the respective mall is created and the advertising faces are positioned accordingly. In this way, as with all other surfaces, visibility areas and durations of stay can be calculated.

High-resolution frequency measurements are available for the entrances and exits. In addition, information on the movement of people within the malls (e.g. visit from which floor) was obtained via interviews, which then flow into the generation of the routes. The further procedure corresponds to what is described in the station study.

### 2.14 Updates

Face and network data as well as geographical data is updated two times per year always in June and December.

## 3 Planning Tool



### 3.1 User Focus

In contrast to the basic research, which is based on purely scientific criteria, the users were placed in the foreground during the development of the planning tool.

Since October 2006, the SPR+ Expert has been transparently presenting the results of years of research to the market as modern, practice-oriented software at the click of a mouse. The web-based software is constantly being developed and updated according to customer needs. The basis is a uniform database for all analogue outdoor advertising formats F12, F24, F200 F400 as well as for the digital formats D20, D40, D80 in Switzerland.

The concept for the SPR+ Expert was created on the basis of Swiss market needs, with the expertise of those involved and a large number of in-depth analyses. These include, in particular, an intensive examination of the strengths and weaknesses of the Out of Home medium. It goes without saying that the fulfilment of the obligation to provide performance data primarily proves the quantitative performance of the medium. However, the uniqueness of out-of-home advertising in the media landscape and its qualitative characteristics are only expressed to a limited extent. It is the task of the SPR+ Expert planning tool to offer the user the necessary support in taking these complex mechanisms into account.

For example, in an intermedia comparison, the question arises as to what is the advertising medium in outdoor advertising that is comparable to those of the other classic media. Is it the individual physical outdoor advertising face or is it the face that encompasses one or more individual faces, i.e. the target area? Only the latter is comparable, for example, with the performance data of a print title over which advertisements of different formats are distributed.

### 3.2 Three-Stage Performance Model

- The overall performance in the defined universe (classic performance)
- The performance in the selected target areas (classic performance)
- The performance contribution per outdoor advertising face (contact value)

In addition, the user is offered the option of calculating the performance universally and per target area on the basis of a selected contact class. The contact class defines in each case the minimum contact sum to be achieved by an individual for it to be taken into account in the net coverage calculation. If, for example, the user selects a contact class  $\geq 5$  in the planning tool, only persons whose sum of weighted advertising face contacts ( $0.15+0.5+\dots+0.8 \geq 5$ ) totals 5 or more will be included in the coverage. This performance record is called Coverage Contact Class (CCC).

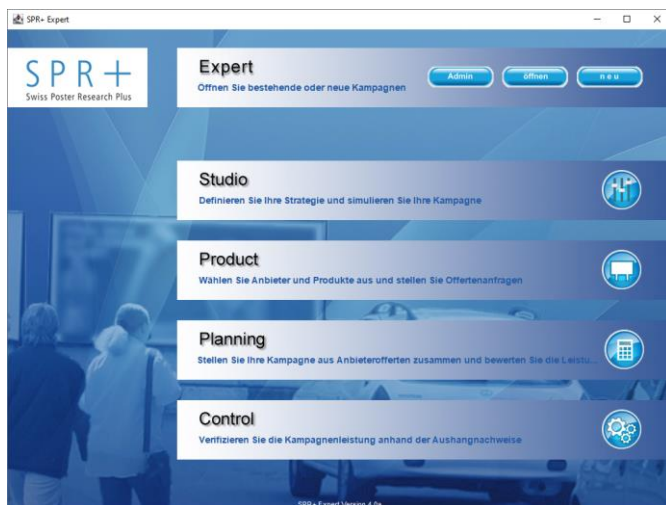
Besides net reach for campaigns and contact value per face/spot the system provides, gross reach, OTS, GRP, total cost, CPM, CPP and affinity.

The SPR+ Expert Tool is an umbrella tool that includes four components. The SPR+ Expert accesses an evaluation server via a web interface, which carries out the campaign calculation by means of the matrix.

These are structured in the same way as the usual planning process for an outdoor advertising campaign:

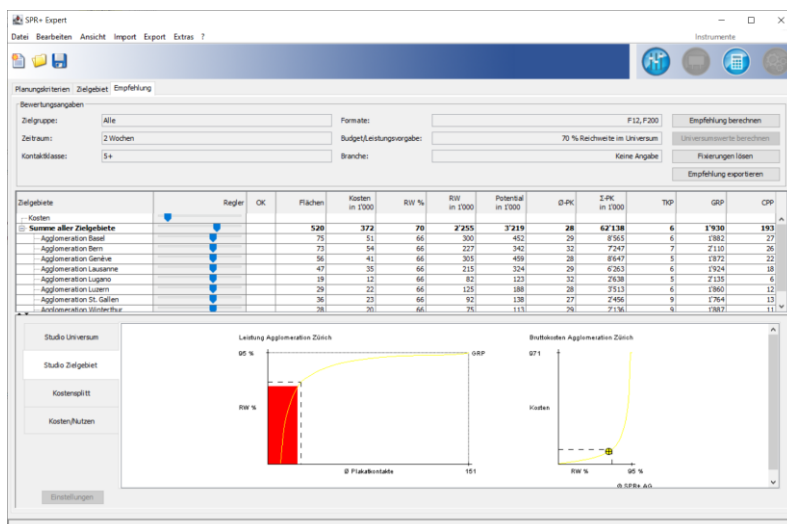


### 3.3 SPR+ Expert



#### 3.3.1 SPR+ Studio

At the beginning, the overall strategy is worked out, which includes the choice of media and, in the case of a media mix, the budget split. The SPR+ Studio supports the client and his media planners in this first step and in the subsequent intramedia outdoor advertising strategy. At this stage, the choice of target areas is usually still open and no specific selection of outdoor advertising faces has yet been made. Accordingly, the SPR+ Studio does not access the concrete performance values per face, but rather the average face values calculated from them per target area and universe. Depending on the planning criteria entered (target group, budget, performance specifications and format), the SPR+ Studio provides recommendations for the target areas and universes as well as the number of faces required per target area.



Customers who only want to use the planning tool on a strategic level can register for the free SPR+ Studio Basic. SPR+ Studio Basic offers valuable support in the rough planning and simulation of outdoor advertising campaigns and accesses the entire SPR+ research data. However, saving and exporting the recommendations and graphics is only possible with the Studio version, which requires a licence.

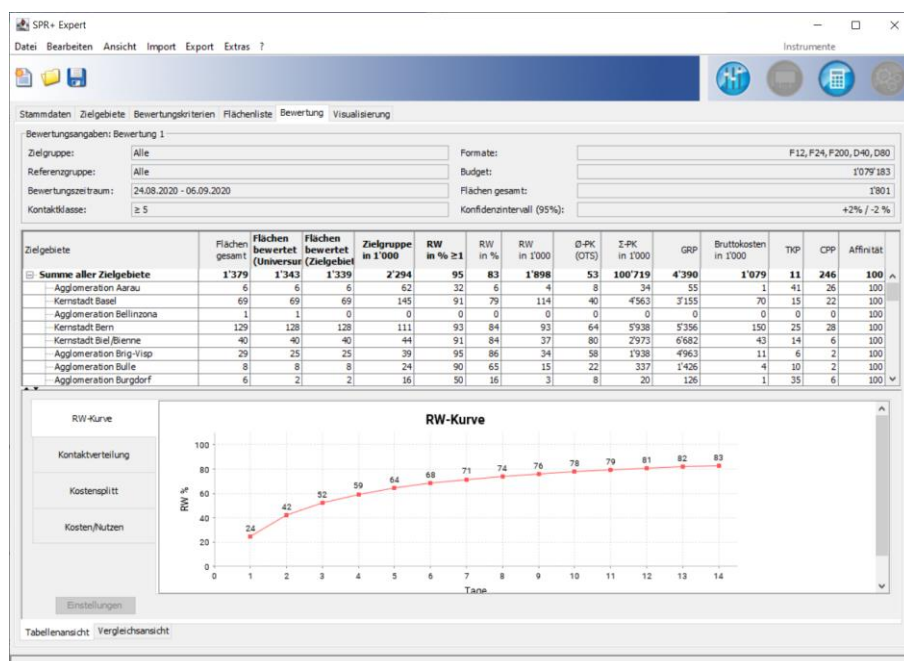
### 3.3.2 SPR+ Product

SPR+ Expert was originally designed not only as a planning tool, but also as a booking tool.

As long as the key players in the market do not provide interfaces for the availability of out-of-home positions, direct booking in the system is not possible.

### 3.3.3 SPR+ Planning

This module is the heart of the SPR+ Expert. It is used for the detailed planning of analogue and digital outdoor advertising campaigns. Offers created by OOH providers in XML format can be imported into SPR+ Planning with all the detailed information per face. Afterwards, all faces and face information are clearly available to the user in the so-called face list in the form of a table for further work. There, it is possible to sort and filter according to formats, costs and numerous panel information. In addition, the spatial distribution of the entire OOH campaign can be viewed on a map. Once the detailed planning has been completed and the user has defined the evaluation criteria, he can trigger the evaluation for the target group-based performance calculation and receives the performance data per face and classic performance values for the overall campaign across providers.



At any point in time, SPR+ Planning offers the flexibility to deactivate or delete individual volume faces or products for evaluation or to supplement the planning with newly imported offers. Other features include:

- Performance values for digital and analogue advertising faces including gross and net coverage
- Mapping of intra-agglomeration mobility (mobility behaviour of the population within the respective residential agglomeration) as well as inter- and extra-agglomeration mobility (mobility behaviour of the population between the agglomerations and outside the respective residential agglomeration) of the Swiss population
- Possibility to evaluate and optimise campaigns over a period of time from one day to one year
- Automatic creation of Excel schedules (incl. cost, performance and production overview) according to different aggregation levels and individual needs
- Historization of the entire campaign history

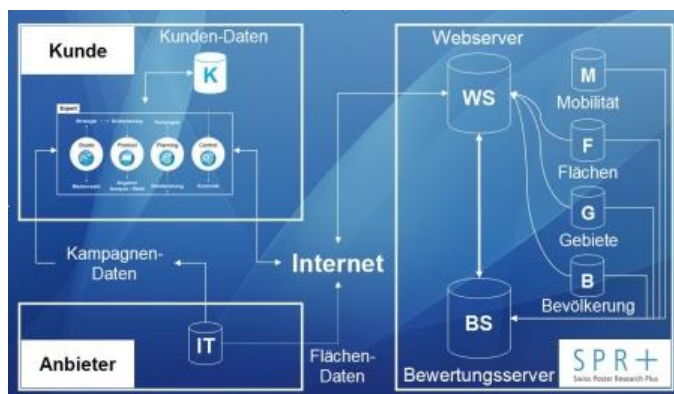
- Various export options
- Evaluation comparisons
- Diagrams (e.g. reach progression) and map tools
- Campaign visualisation based on Google Maps API
- JSON export

### 3.3.4 SPR+ Control

SPR+ Expert was originally designed not only as a planning tool, but also as a campaign evaluation tool, so that the performance of the actual billposting at the end of the billposting period can be shown with free space, sagging etc. However, as long as the key players in the market do not provide billposting records as xml files to their clients, the evaluation of the campaign after the end of the billposting period is not possible.

### 3.4 Technology and Architecture

SPR+ Expert is a web-based Java application that runs on all common operating systems. The choice of this architecture allows for clear data separation. The research data is kept at SPR+, while the sensitive campaign data is stored exclusively on the client's computer as a local file. In addition, the technology minimises the administrative effort for the user, as programme updates are carried out on the SPR+ server.



### 3.5 Licensing Models

The following licence models are available for the SPR+ Expert planning tool. SPR+ Expert licence agreements according to accesses per day and user:

Accesses	Description	Costs/excl.
10 accesses	This licence allows 10 accesses to "SPR+ Expert" within one year from the beginning of the term. The creation of additional users is not possible.	500.- CHF

50 accesses	This licence allows 50 accesses to "SPR+ Expert" within one year from the beginning of the term. The administrator has the possibility to create additional users.	2'000.- CHF
100 accesses	This licence allows 100 accesses to "SPR+ Expert" within one year from the beginning of the term. The administrator has the possibility to create further users.	3'000.- CHF
400 accesses	This licence allows 400 accesses to "SPR+ Expert" within one year from the beginning of the term. The administrator has the possibility to create additional users.	6'000.- CHF
1'200 accesses	This licence allows 1'200 accesses to "SPR+ Expert" within one year from the beginning of the term. The administrator has the possibility to create additional users.	12'000.- CHF
Studio Basic	Basic This licence allows free access to Studio Basic - rough planning for strategy definition and campaign simulation. The free version does not include import/export and copy/paste functionality.	free of charge

An access is defined by one or more logins of a user per organisation during one day (05:00 to 03:00). A user may only be logged in once at the same time. The year counts 365 days from the start of the licence.

### 3.6 Registration

Apply here for a licence for the planning tool SPR+ Expert or register for the free use of Studio Basic:  
<https://lizenzen.spr-plus.ch/>

## 4 Organisation

### 4.1 Who is SPR+

Swiss Poster Research Plus Ltd. is the scientific, neutral, transparent research institute for Swiss out-of-home media and mobility. It is supervised by the Research Advisory Council. Over 60'000 OOH and DOOH advertising faces of the providers APG|SGA, Clear Channel Schweiz, Neo Advertising, Alpenplakat, WWP Plakatwerbung and Baracom are recorded in the system. These faces are located on streets, railway stations and shopping centres. In the SPR+ Expert planning tool, OOH and DOOH campaigns can be simulated, planned, optimised and controlled. The SPR+ Expert delivers contacts per advertising face weighted by visibility as well as net reach, OTS, GRP, CPM, CPP and affinity for cross-provider outdoor advertising campaigns. The research model complies with ESOMAR's global guidelines for outdoor advertising research. Switch-on plans with cost, performance and panel

overviews can be created at the push of a button. SPR+ has a national mobility model including passenger frequencies for every road section in Switzerland.

#### **4.2 Research Advisory Council**

- Prof. Dr. Martial Pasquier, Vice Rector University of Lausanne (Chair)
- Beat Holenstein, APG|SGA
- Roland Ehrler, Director SWA-ASA
- Markus Fischer, Swisslos
- Stephan Küng, The whole Media AG
- Philipp Marquard, Federation of Migros Cooperatives
- Felix H. Mende, Swiss Poster Research Plus Ltd.
- Kathrin Petrow, Clear Channel Switzerland AG

#### **4.3 Contact**

Research company Swiss Poster Research Plus Ltd.:

- Felix H. Mende, Managing Director
- Lilian Brunner, Administration
- Daniel Wolf, Head of IT

#### 4.4 Development Partners

SPR+ works with technology leaders in their respective fields.



The renowned Fraunhofer Institute for Intelligent Analysis and Information Systems (IAIS) has been commissioned with the modelling.



The planning tool was programmed in a collaboration between the software developers of Karakun and the Fraunhofer Institute.



The recruitment of the test persons, the traffic counts and the field interviews are carried out by the market research institutes LINK and GfK Switzerland






The companies MGE DATA and Geosat are responsible for the state-of-the-art GPS technology and the related technical aspects.





#### 4.5 Memberships

	<p>Outdoor Advertising Switzerland</p>
	<p>ESOMAR</p>
	<p>World Out of Home Organization WOO (until 2019 FEPE International)</p>

#### 4.6 Scientific Publications

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