

## Case Study Amsterdam Airport Schiphol, The Netherlands

### Infologic's work and effort

Amsterdam Airport Schiphol is one of Infologic's major references. With almost 50 million passengers a year, she is a very important player in the international airport industry. As the gateway to Europe, she currently ranks as the fifth largest airport in Europe in terms of passengers and the third largest in terms of cargo volume. With the display of real-time flight information in combination with multimedia, the Schiphol is one of the most innovative airports in Europe.

Schiphol has become a customer in 1997, soon after the establishment of Infologic in 1995. A new Flight Information Display System was installed, connected to approximately 1,800 CRT displays. These displays showed real-time flight information to passengers in two alternating languages: English and Dutch. Highly skilled Schiphol staff in combination with the 24/7 support desk of Infologic guaranteed full and professional support and system availability. For over 10 years, Infologic faced almost zero

- 1997 Supply and installation of a new Flight Information Display System**
- 2002 Java-based selectable/public display software**
- 2002 FIDS Staff Pages. Approximately 400 staff clients**
- 2005 Supply and installation of a Content Management System**
- 2005 Delivery 1,850 Multimedia Display Controllers for the terminals**
- 2007 Completion Schiphol Dynamic Displays**
- 2008 Delivery 160 Multimedia Display Controllers for the baggage area**

### The dynamic of the new FIDS

#### "...What's it for?"

The FIDS controls the various presentation media for displaying public flight information. In other words, all the flight information monitors. In all, the airport has something like 1,800 monitors, including the split-flap boards. Like the CISS – of which it is a part – the old FIDS was no longer up to meeting modern demands and wishes, so it was a logical step to include its replacement in the FIS2000 project. Because it was possible for FIDS replacement to be carried out independently of CISS replacement, the operation was completed on schedule before the summer of 1998.

#### The supplier: an old friend

The new FIDS is being supplied by Infologic. SWITCh and Infologic have known each other since 1995, when both organizations were involved in the building and implementation of the flight information display system for the new passenger terminal at Brussels Airport. Another reason for choosing Infologic was that the company has experience of our old FIDS.

Infologic Nederland B.V. was set up in 1995 as a subsidiary of Infologic Pte. Ltd. (Singapore). Speciality: FIDSs. The Infologic FIDS is built up in such a way that it can be deployed at different locations swiftly and reliably. The philosophy behind it is that the customer's corporate identity must be assured at all times. The result is that the displays can be attuned to everyone's wishes and requirements and the system is extremely flexible. Other strong points in Infologic's favour are its excellent track record and familiarity with the airport environment.

#### Replacement tackled together

In December we started replacing the hardware (except for the monitors) and software for the FIDS. The A/HS/FIS department was responsible for furnishing all specifications and protocols, so that SWITCh and Infologic could start adapting the software. The FIS2000 project team looked after the procurement of the necessary hardware, after which implementation of the new system could start in January. The suppliers carried out initial testing at the end of March. A test installation had been arranged with 18 monitors which could either be set up as one or more clusters or could be controlled and tested as individual gate or check-in monitors. By mid April the suppliers were ready for acceptance testing by the FIS2000 project team. After a number of minor adjustments the product was approved, after which the thirty or so servers were installed. After that it was a matter of a phased move from the old to the new system in the period up to the end of May.

#### 1,800 new monitors

As a user you will not have seen much of the replacement of the FIDS. The functions available on the old system have been replaced one by one, so that nothing has changed in the screen layout. However, the new FIDS has vast potential: layouts can be dynamic, for example, which means that it is possible to show both advertising messages and foreign characters, enabling us to display texts in languages like Chinese or Arabic. However, this is not supported by our current monitors, which is why before the end of the year a start will be made with replacing all 1,800 monitors. The Functional Schedule of Requirements for these has already been completed. Only then will it be possible to make full use of the whole potential of the new FIDS.

In this way the A/HS/FIS department has been making a major contribution to the achievement of Amsterdam Airport Schiphol's quality goals. After all, reliable and clear flight information in modern packaging is one of an airport's most important hallmarks..."

*Published: July 1998, Newsletter FIS2000, Amsterdam Airport Schiphol*

Baggage belt 1			
Origin	Flight	Handler	Remarks
Berlin	KL 1822		First baggage on the belt
Paris ChdG	KL 1224		
London Gatw	BA 8113		First baggage on the belt
Tel Aviv	LY 337		First baggage on the belt
London City	KL 1558		
Istanbul	TK 1953		First baggage on the belt
Munich	LH 4694		First baggage on the belt
Pisa	HV 5424		

Problems with your baggage? Please go to the ground-handler's Baggage Service Desk

### Central Database

The Central Information System at Schiphol, also known as CISS, is the Central Database of Amsterdam Schiphol Airport. Through a specialized interface with CISS, Infologic retrieve real-time flight data and guarantee to display all updates within 1 second all over the airport. In 2002, Infologic evolved their display software into the Java technology, which provided them with a higher level of multimedia features to improve customer satisfaction and information provision. This was in fact the basis for the future Schiphol Dynamic Displays (SDD) project, displaying real-time flight information in combination with multimedia content. Java made it possible to use more commonly known pc based hardware and platform independency, Windows, Unix or Linux operating systems.

### Real-time information...

When Schiphol managed to display highly sophisticated flight information to their passengers, they focused on real-time information for airport staff. In 2002 Infologic supplied the Staff Pages solution to inform airport staff about flights, gate changes, baggage belt events, etc in specific information pages.

### ...and multimedia content in one display

In 2005 displays got a more commercial interpretation. Infologic started to organize workshops to provide Schiphol staff the opportunity to share their input and experience with our staff, in order to be able to improve our FIDS products based on their wishes. In addition, Infologic informed Schiphol staff about the latest development in the FIDS solution: a Content Management System. In combination with real-time flight information, Schiphol would be able to display multimedia content such as advertisements, movies and free text blocks, all in one display.

### Schiphol Dynamic Displays

At the end of 2005, Infologic realized a pilot project in the H-Pier, Schiphol's Point-to-Point Carrier Pier. Within the Schiphol Dynamic Display (SDD) project, new TFT-LCD displays were showing the latest Infologic's FIDS in combination with the new content module. In addition to the software based product line, Infologic launched a new hardware product, a cost effective yet high standard multimedia display controller, dedicated to display the FIDS flight information in combination with multimedia content. For this project a European tender procedure relating to the supply of display controllers was initiated, for which Infologic was selected by Amsterdam Schiphol Airport based on the best price-quality ratio of the products.

After the successful pilot, Schiphol started to complete the SDD project airport wide, and in November 2007 she celebrated the formal completion in all terminals. This year, in 2008, Schiphol replaces all displays in the baggage areas. In this project, all suppliers involved in the SDD project are reselected to participate, based on the successful completion of the former project. With the completion of this project, Infologic will have supplied over 2,000 display controllers to Amsterdam Schiphol Airport.

### Applications

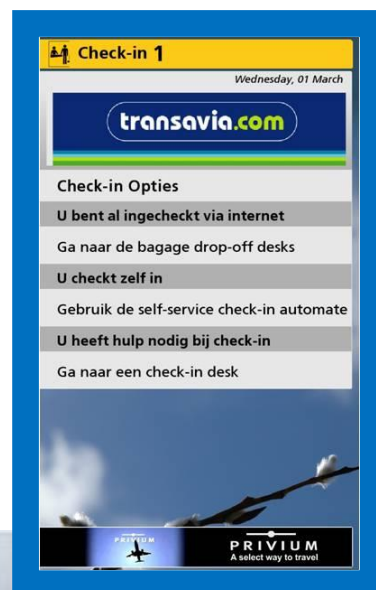
Within the SDD project, Schiphol provided tax free shops and other commercial advertisers with the possibility to display their offers in multimedia, including video clips and vivid text blocks. In addition, in case of emergencies, movies with safety regulations can be displayed to evacuate passengers to specific areas.

".. Flight information and more.

The dynamic displays simultaneously screen passenger flight information, passenger instructions, commercial information as well as infotainment. The screens have a clear layout and provide information specific to each location. In addition to the flight number, current arrival and departure times, check-in desk number or gate, information on the available facilities and services at Amsterdam Airport Schiphol, special offers at the airport shops or specific product commercials can be shown. Travel information, such as the weather or sightseeing attractions at the travel destination can also be made available on the screens.

Over 2000 screens inside Amsterdam Airport Schiphol's terminal will be replaced by 32", 40" en 46" Samsung TFT-LCD screens.

*Part of an article that was published in the Albatross, November 3, 2005*



## Partnership

In over 10 years of participation and partnership with Amsterdam Schiphol Airport, the Infologic FIDS integrated real-time flight information with advertisements and safety messages into a full featured suite of software solutions, to provide Schiphol with the means to serve passengers, airport staff and advertisers. And yet, the end is not in sight. Infologic will continue to provide new features to Schiphol, to extend their FIDS to any future demands and keep the system up to date.

## The right partners: Tol Plaatwerkindustrie and Samsung

Two other Dutch companies that were involved in the Schiphol Dynamic Display project are Tol Plaatwerkindustrie and Samsung. They are valuable partners for Infologic's turn-key projects.

For Amsterdam Airport Schiphol, Tol created custom-made mounting constructions and Samsung supplied all new 32, 40 and 46 inch TFT-LCD displays. Tol's construction includes a slide-in system for the Infologic display controller, which makes it easy to maintain and store the controller close to the display hardware.

In connection to the SDD project Infologic also provided Queen Beatrix Airport in Aruba, who has a strategic co-operation with Schiphol Group, with Tol's mounting constructions, Samsung TFT-LCD displays and Infologic's multimedia display controllers.

## Benefits

### Real-time

Infologic shows real-time flight data from CISS and displays updates within 1 second all over the airport.

### Cost effective, possible revenues through advertisement

Real-time flight information to airport staff reduces the operational costs, just like showing passenger instructions, i.e. the self check-in procedure of an airliner.

### Multilanguage

At Amsterdam Schiphol Airport all information on displays is alternated between English and Dutch languages.

### Up-to-date

The FIDS system has all latest software updates and upgrades, based on the latest technologies.

## For more information:

**Infologic Nederland B.V.**  
**Wieder 25**  
**1648 GA De Goorn**  
**The Netherlands**

**Tel. +31 229 548 854**  
**Fax +31 229 544 048**

**info@infologic.nl**  
**www.infologic.nl**