STAFF DISPLAY SUBSYSTEM
The Staff Display Subsystem is built around the Intranet concept. A centralized Web Server generates HTML pages containing staff information to be displayed on Staff Terminals. The resulting interface is therefore well known and user friendly.

SOFTWARE FEATURES
The main feature of SkyWay software is the integration of all tools which are needed to collect, store, and process flight-related data and to distribute them (in visual or audible form) to various users. The software is composed by several building blocks, which are tailored to Customer's requirements.

Several archives are handled, including permanent files, operational files and vocabularies. Optional modules provide advanced capabilities, including:

> System monitoring and diagnostics
> System reports
> Page design tools
> System configuration tools

USER INTERFACE
SkyWay takes advantage of the Windows APIs in order to provide a graphic user interface which is easy to understand and learn, thus reducing training cost. In such a way, it is also possible to provide interfaces in special languages, such as Arabic or Chinese. Several modules of SkyWay are also available with a web interface, so that the user can access them using a standard browser.

OPTIONAL AUDIO MODULES
> ASA 2000: public address subsystem
> ITA 2000: telephone inquiry subsystem

LINK TO EXTERNAL SYSTEMS
The open architecture of Skyway allows to exchange any kind of information with external systems. Connectivity to other hosts is achieved by means of optional gateway servers and software modules.

SkyWay is the new Solari's software architecture for the implementation of a state-of-the-art Flight Information Display System.

Skyway is an open environment which can be connected to External Systems and is based on a Local Area Network (LAN).

Skyway includes software packages running on multi-user, multi-tasking operating systems, such as Windows and Linux. This allows to achieve the best compromise in terms of high reliability, powerful functions and an easy-to-use interface.

Skyway offers a wealth of benefits:
> distributed architecture among several intelligent units
> very fast data updating
> easy, no-limits expandability
> reduced cabling cost
> wide use of standard hardware, such as IBM PC compatible computers
> availability of state-of-the-art technology, such as redundancy and load balancing
PURPOSE OF THE SYSTEM
The purpose of the system is to provide flight information to several users: public, staff and management. Information is stored and processed in a control system and displayed to users by means of a network of displays.

Skyway is a modular system composed by a kernel which performs basic functions and by optional modules which are added when needed, in order to implement advanced features according to Customer requirements.

FACILITIES FOR THE PUBLIC
> Wide range of displays based on most used technologies (LED, LCD, flap, monitors, plasma, TFT panels)
> Capability to display both flight information and advertising
> Web publishing and Videotext
> Audio applications (automatic announcements and telephone inquiries)

FACILITIES FOR THE STAFF
> Intelligent workstations with friendly user interface
> Staff monitors with page selection
> Push buttons and terminals for baggage and gate operation

FACILITIES FOR MANAGEMENT
> User and policy management
> Resource allocation
> Data collection and personnel attendance systems
> Control systems for access to restricted areas

NETWORKING
Skyway can take advantage of the most advanced and widespread networking technologies. Typical applications are based on standard 10/100 Ethernet. As the bandwidth requirements or geographical distances grow, more sophisticated solutions can be adopted, including Fiber Optic, Gigabit Ethernet and ATM.

CONTROL SYSTEM
SkyWay is based on a 3-level architecture:
> Database: includes database servers and storage devices
> Application: includes application servers which act as interface between database servers and clients
> Clients: includes displays and operator workstations

REDUNDANCY
The system can be optionally configured according to a hot stand-by architecture. In such a case, the database server is composed by two identical servers, one Master and one Slave. Only the Master unit is active at any time, but the Slave unit is always updated and is ready to play the role of the Master in case of failures.

The servers share a RAID unit in order to ensure data availability in case of failure. For more demanding applications, SAN storage based on fiber channel is also available.

LOAD BALANCING
Application servers can be optionally configured according to a Load Balancing Architecture. This allows to automatically assign client requests to available servers on the basis of load analysis. Moreover, in case of failure of one or more servers, the remaining servers can automatically take charge of the request coming from the clients.

OPERATING SYSTEM
In its basic version, Skyway software is based on Linux (servers) and Windows 2000 operating system (workstations). Other configurations are available on request. Several database management systems, including Oracle, can be adopted.

STAFF AND ADMINISTRATOR EQUIPMENT
The Control System can also include:
> Workstations, for system management, data entry and routine operations
> Graphics workstations, to edit artwork to be shown on display equipment (such as Airline Company logos)
> Printers

PUBLIC DISPLAY NETWORK
The public display network is composed by display devices based on different technologies. Each display is usually custom designed for the specific application, using the technology that best fits the particular requirements.

Displays can be connected directly to the system LAN or, through a serial line, to an Applications Server. The choice is related to the required display throughput (graphic displays require faster connections than text-only displays) and to installation constraints (distance, electromagnetic interference, etc.).