



> Technical Documentation

# DOCTIA

THE DOCUMENTATION  
ENVIRONMENT  
FOR TOMORROW

As part of its SLM concept, Sogitec proposes Doctia (see pages 2-4), an innovative product essential for partners involved in the joint development of a major program (aeronautics, automotive, transport...). →

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### → Doctia, the SLM Tool

Support activities now take place, like product design, in a concurrent engineering environment involving many partners. These industrial requirements require that the manufacturer and the partners organize support activities as soon as the project is launched.

Doctia addresses these requirements by allowing the implementation of collaborative support processes that are efficient in terms of cost, lead-time and quality.

In particular, Doctia provides the user with the following capacities:

- Reducing the cycle times and the development and validation costs, both for creation and updating,
- Integrating all the documentation and all the support processes in a single collaborative environment that interfaces with design systems and product configuration management.
- Complete management of source data, traceability and support data life cycle.
- Automatic procedures for the creation of publications, in the desired formats and configurations, in compliance with extreme quality and performance requirements,
- Quicker and more secure access to pertinent information that conforms to the product and configuration.

Doctia, as an integrated software package, provides SLM and its processes with tools: MSG3, LSA, Maintenance and Identification Documentation, User's Documentation.

Doctia allows the use of Word application as a structured editor.

A specific viewer, ViewTec, characterized by its high functionality and compliance with available resources, was developed for the distribution, consultation and annotation of support documentation.

These products are based on Sogitec's experience in specific technologies:

- Historic expertise in high-quality publication.
- XML expertise, including documentation use, structured documentation development and consultation. Sogitec is a pioneer in structured documentation.
- Collaborative processes and web technologies
- Re-use of graphic and PLM data.
- Compliance with SOA.

Sogitec adapts its offer to the specific requirements of each client; its architecture is designed to organize the collaboration of numerous partners over the Internet or over an Extranet. Doctia can be sold to a customer or offered as a service (Software as a Service). The setting-up of a documentation system can also be incorporated in a complete support documentation production package associated with an aircraft program.

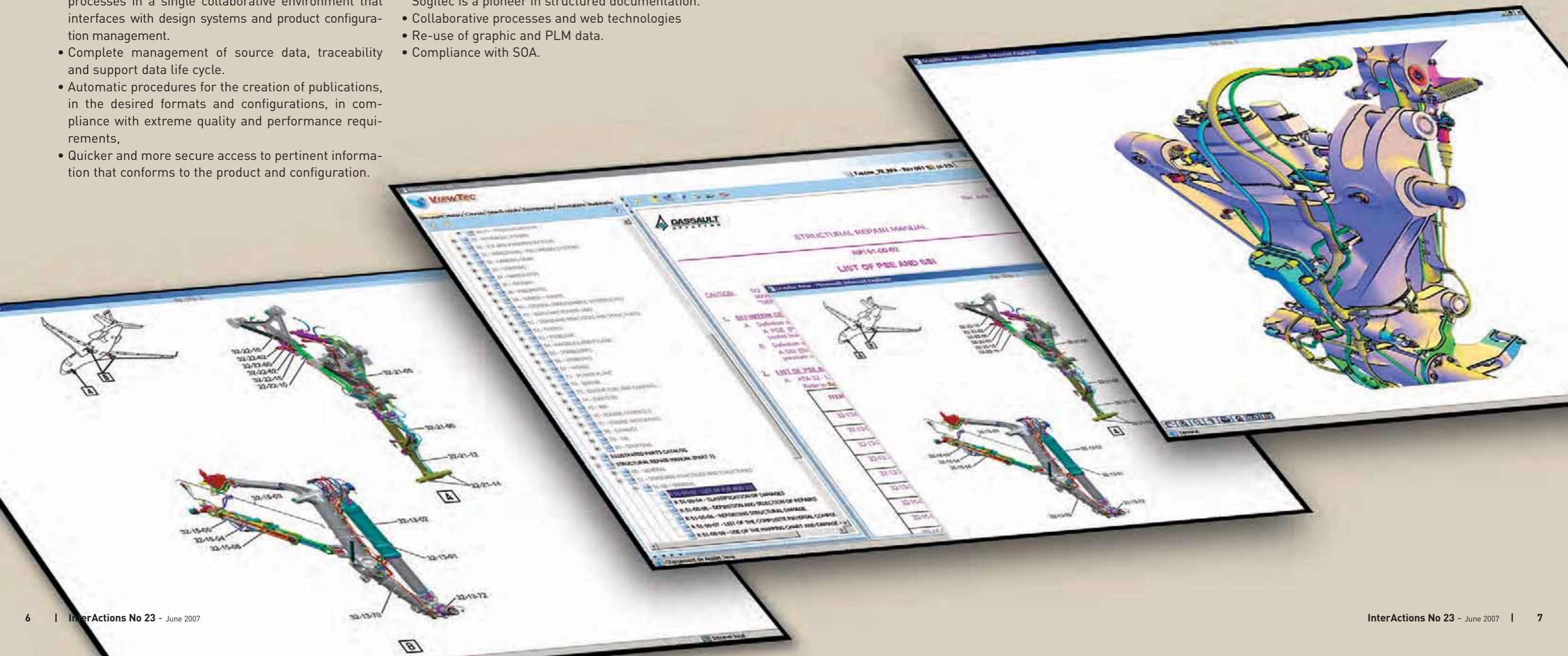
### Doctia, Mandatory for Partners

Based on this software package offer, Sogitec has organized and headed the collaboration of all the partners of the industrial architect as regards the documentation section of major projects: Sogitec has teams familiar with the methodology and technical infrastructure.

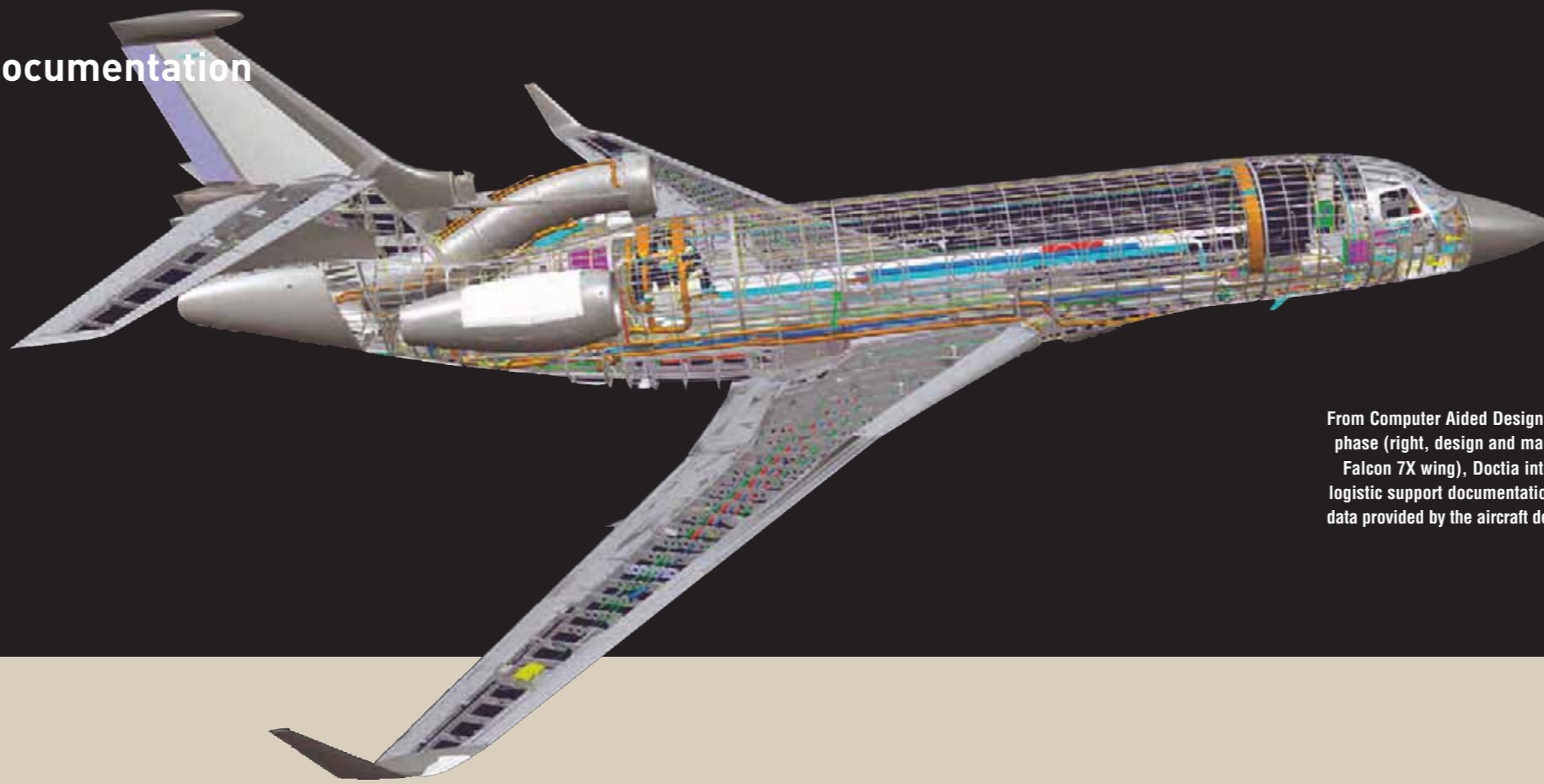
They know how to design the technical information system and provide their expertise in defining the support architecture and processes. Sogitec sets up complete, industrialized production processes in a self-contained facility tailored to the specificities of the program and manufacturer.

### Doctia Clients

In continuity with Rafale and Falcon 7X documentation projects, Sogitec carries on with the improvement of the support processes and technology. Doctia uses the latest technological innovations in compliance with the specifications of the support trades. →



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From Computer Aided Design to production phase (right, design and manufacturing of Falcon 7X wing), Doctia integrates in the logistic support documentation all relevant data provided by the aircraft design process.



### → The SLM Context

SLM data and services are mainly intended for the support departments of operators, independently of manufacturers; these departments have specific methods and resources. Support tools apply the specific characteristics of the operator processes.

SLM is at the junction between the product designer and support players. The SLM major functions are the development and transmission of smooth flowing, pertinent and configuration-managed information.

This support information is not simply documentation information.

In many cases, the information is incomplete and its transmission is under-automated and not very integrated in the information systems of designers and support players.

Consequently there is much room for progress in many fields by developing and supplying information:

- To the players providing the through-life support of products (e.g. airline company maintenance entities, service stations) that integrate a significant volume of manufacturer data in their own information systems, use and customize manufacturer documentation (maintenance procedure, etc.) or analyze flight recording data.
- To operators (for example airline companies) who customize the documentation of the designer according to their operating rules (maintenance program, etc.), or onto presentation media (EFB for a cockpit or paperless I&C interface).

- To training centers for operators and maintenance companies and to theoretical course providers in compliance with their teaching objectives (often regulated by standardization: JAA, FAA), their technical objectives (SCORM standardization) and IT infrastructure constraints.

- To simulator designers in the same conditions; it is worth noting that this information includes documentation information but also modeling subject to standards (JAA, FAA, AP2633).

Effective articulation between the manufacturer's information system and the systems of the many support players represents major stakes in reducing costs and maintaining the quality of support information.

### Fields of Application

The SLM requirements are particularly established in the aeronautics industry that must comply with strict regulations and rigorous procedures, along with extreme safety requirements. Other fields, like the automotive, space, and nuclear industries are also concerned. These fields have each their particular characteristics that require trade solutions and that can be developed in continuity with the aeronautics approach.

### Technological Development

DocTia complies with W3C standards in a natively service-oriented (SOA) and web-oriented architecture. The latest developments should improve communication between DocTia and the outside world by offering remote authoring, publication, configuration management, and administration services, etc. This will benefit both global cycle times and productivity. Doctia supports the S1000D specification and includes an LSA/MSG-3 module.

### Introduction of Multimedia (Text, 3D, Video, Sound)

Sogitec is developing the use of multimedia in documentation through interactions between the different representations of information. This approach covers four problems:

- Technical solutions:
  - viewer, IT resources and performance
  - introduction of the corresponding databases in the documentation
  - definition of new interaction modes
- Creation process: productivity and infrastructure
- Acceptability for the end-user
- Standards: regulations and the management of accountability impose a rigorous framework.

### Adaptation of Formatting to New Consultation Resources

The range of targeted information presentation systems (laptops, PC tablets, EFB, etc.) is expanding. Doctia easily adapts formatting to the physical characteristics of these resources that generate new presentation requirements.

### Doctia Is the Key to ILS Performance

The desire of players in the aeronautics industry to offer the best service prompts the SLM market to expand. New players are competing on very specific markets, i.e. rustic aircraft (Skylander), very light jets (Phenom, HondaJet, D-Jet, Eclipse 500, etc.), new helicopters (Z15, KHP) and Regional Jets (ARJ21, Superjet 100, M-Jet, C Series). Due to this increased competition, the performance of logistics support becomes a discriminating factor. Sogitec's applications provide these players with the means to progress. ■