



S1000D Return on Investment

HISTORY

The international specification S1000D was initially developed by a consortium of European military aircraft manufacturers to exchange technical information about the aircraft they were jointly building. The standard allows manufacturers to exchange information required by maintainers to fit, remove, diagnose, and repair systems and components of the aircraft.

Using the standard significantly improves data interchange and increases data interoperability to facilitate joint military operations. The adoption of S1000D by aerospace contractors allows them to improve product and content standardization across product lines by developing one set of documentation that can be delivered in multiple formats. Large commercial and defense manufactures across land sea and air in many countries have already migrated to S1000D as the primary content standard.

The S1000D standard provides a structured approach to developing and maintaining technical documentation. The standard includes business rules and common content information descriptions that allow the life cycle processes of technical data to follow a well-defined path.

From its roots in European Aerospace, S1000D is developed and maintained by an international community of business and technical experts from civil and defense aviation industries and the defense land and sea industries. Customers, suppliers, and solution providers are represented.

The three sponsoring organizations of S1000D are:

- **Aerospace and Defence Industries Association of Europe (ASD):** representing the interests of Europe (<http://www.asd-europe.org>).
- **Aerospace Industries Association (AIA):** representing the interests of the United States (<http://www.aia-aerospace.org>).

- **Air Transport Association of America (ATA):** representing the interests of the civil airline trade association (<http://www.airlines.org>).

BENEFITS

Companies of all sizes are encouraged to migrate to S1000D. When implemented, S1000D significantly reduces the products' overall management, repair, and operations. They do this because of the many benefits that come from migrating to the standard:

- **Enables Effective Content Reuse:** A significant driver to reducing content lifecycle costs, improving content quality, and reducing manufacturing risk is the modularization of content to enable and facilitate content reuse. The modularization of the content also tightly aligns with modern manufacturing modular architecture best practices that are designed to reduce overall manufacturing costs.
- **Enables interoperability between companies:** Perhaps one of the essential benefits to small and mid-size aerospace companies is that S1000D enables you to share content about your product (e.g., manuals) without having to maintain multiple variants for different clients. By tagging the data consistently in S1000D, you can exchange information seamlessly with partners using agreed business rules.
- **Content Lifecycle Cost Savings:** In an analysis by the U.S. Navy, companies claim to see a 30% - 75% reduction in the time and cost of updating manuals once they are in S1000D. The cost savings are highest for manufacturers who do not start in a digital format which is why implementing S1000D is critical. In these cases, it is possible to see the greaterest reduction in the time and cost to produce, update, and sustain content.

Contiem Services and Software to Increase your ROI

To fully realize the benefits, small and medium size aerospace manufacturers need both consulting services and software to assist in the transition. Contiem can provide the following services and software to help companies in their journey to S1000D. Our services and products include:

- **Content Strategy Assessment:** Contiem S1000D experts will examine the creation, management, review, reuse, and delivery of the information supporting your products or services. We look at the current people and processes and perform a detailed analysis of your content. Once we have defined the starting position, we can present a target Information Architecture to support the new business processes, software, and training for skills, as well as the roadmap of change to migrate to S1000D. The roadmap includes an assessment of short and long-term benefits and helps you to plan timescales and budget for implementation.
- **S1000D Training (student or an individual company session):** We provide modularized training in S1000D to meet your personnel's needs:
 - **Introduction to S1000D.** This one-day module is aimed at business managers, team leaders and technical publications team members. This module introduces the main principles and terminology of S1000D. We look at the use of data modules, how information is managed and delivered and, most importantly, the governance and integrity of data. This module explores the software requirements for working in S1000D: Common Source Database (CSDB), authoring, publishing and checking tools, and gives a summary of the implementation of Business Rules.
 - **Introduction to Structured Authoring.** This half-day module introduces technical authors to structured authoring using XML or SGML, before they go on to learn S1000D authoring. We cover the use of structured language as used in technical information – ie XML and SGML. This is a hands-on course, led by a tutor, with practice examples for students to undertake. This module also covers the benefits of structured languages, taxonomies, and pitfalls to avoid.

- **S1000D for Technical Authors.** This 2-day module is for technical authors and tech pubs team leaders. The module gives in-depth training to provide an author with the skills and knowledge necessary to edit content in S1000D. Using detailed examples of Descriptive and Procedural data modules (DMs), students produce content according to the latest issue of S1000D. The module is designed to tie in with a CSDB and covers integration and authoring in a governed environment throughout the lifecycle of a data module.

- **Common Source Database with BREX Checker:** In Aerospace and Defence, the most critical aspect of documentation is governance. Documentation supports the safety case for certification and operation. In S1000D, the nature of the modular content requires the ability to provide author control, version management, track links between related items, and support media content. notusCSDB helps you manage the content and the processes – for example, authors checking in documents, a formal review system, and history tracking. The CSDB also helps show relationships between items – for example, an illustration used in multiple data modules. This tracking can save vast amounts of time and improves safety and compliance by being able to identify exactly where every data module and media asset is published. notusCSDB is complemented by our range of authoring plug-ins for the popular technical authoring applications enabling authors to quickly create accurate, S1000D-compliant data modules.
- **Eclipse XML Editor Plug-ins:** Our XML Editor plug-ins are purpose built to reduce the time to create S1000D content. The work with your XML editor of choice and aid authors in the creation of standards driven content.

ABOUT CONTIEM

Contiem has been the trusted content partner of choice for companies and organizations such as BAE Systems, Boeing, Airbus, L3, and many more.

When you engage Contiem, we take the time to listen and develop an in-depth understanding of your immediate needs and longer-term challenges. Then, leveraging the capabilities that make us unique, we provide a solution designed to achieve your business goals.