



## Professional certification support

# Define, implement and improve DO-178C processes for single- and multi-core platforms

### Benefits

#### Increased efficiency

Optimize your processes, tools and methods to reduce costs and time without compromising quality.

#### Certifications for all applications

Re-use your software/systems and get your existing applications certified for the aerospace domain, even if they were developed for a different purpose.

#### Safety & security culture

Make your employee culture an asset for the company. Train them to be aware of safety and security risks and to have the right mindset for embedded software development.

#### Get your tools certified

Replace recurrent manual activities in favor of automation through the use of qualified tools.

#### Customized solution

Use our proven toolbox with ready-to-use solutions for a building-block approach matching exactly your needs to optimize your processes even more effectively.

We support your company in safety and security aspects during the entire airborne software lifecycle, optimizing your processes and helping you to obtain the RTCA-DO-178C certification cost-effectively without compromising quality.

The achievement of the RTCA-DO-178C certification for avionic systems is a complex process requiring specific knowledge and extensive know-how. We will support you in taking the right decisions about safety processes from the early stages and help you to properly manage the software lifecycle and select the best methodologies and technologies to respond to your company's needs:

- » *What is the right approach for your software development cycle?* Choose between a model-based approach with **SCADE** or **Simulink (DO-331)** or an object-oriented one with **UML** and **ADA95** or **C++ (DO-332)**. You can also choose to integrate both.
- » *Could you improve lifecycle procedures by introducing qualified tools or by leveraging on existing ones?* Make the most of automation and re-use your existing toolchain (**DO-330**).
- » *How can you guarantee determinism on modern multi-core platforms (CAST-32A)?* Define your verification process to prove that interferences are not affecting the required system behavior and plan your development to get the best from your **ARINC 653** architecture.
- » *How do you intend to guarantee a high level of application security?* Introduce cyber-security as part of the company culture by training people and introducing assets like checklists and specific tools (**DO-326**).

## Why TXT

### 30+ years of experience

Benefit from our team's expertise and experience obtained during long-term collaborations with OEM and tier-1 suppliers.

### Flexible support

Remotely or on site (yours or one of our premises all over the world), we guide the team in selecting the right approach to easily obtain a DO-178C certification.

### With you in all phases

An experienced team at your side supports you every step of the process, including when you have to face the authorities (SOI).

### Knowledge transfer

Become self-sufficient. We don't just deliver a solution but we constantly work with you to train you on how to get a DO-178C certification.



## TXT is with you all the way

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We help your company to define, implement and improve your RTCA-DO-178C processes. Whether you need us from the planning phase or only for optimizing the existing processes, we offer support during all the necessary steps to obtain a DO-178C certification:

**Planning:** We assess your needs, create plans and project standards, define the software lifecycle and its adoption by helping you to choose the best approach and application of agile methodologies. Everything tailored according to your organization.

**Development:** We comply with system requirements and internal standards starting from existing processes of your software factory:

- » Analysis of functional requirements and participation at internal reviews
- » Definition of the software requirements and architecture of single-core or multi-core platforms
- » Implementation and coding

**Verification:** We support your company in the verification process and the provision of all the necessary artifacts:

- » Data Coupling & Control Coupling, WCET analysis
- » Definition and execution of structural and functional tests, as well as any other necessary kind of verification
- » Verification of compliance between code, tests and requirements

**Support activities:** We assist you in setting up an adequate configuration and in implementing a strong quality management system.

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Get in touch with [aerosales@txtgroup.com](mailto:aerosales@txtgroup.com) or visit our website [www.txtgroup.com](http://www.txtgroup.com) to find out more

TXT e-solutions is an international, specialized provider of engineering software solutions supporting customers in high-tech markets in their mission- and business-critical core processes and throughout their product lifecycles.

**TXT**

Via Frigia, 27 | 20126 Milan | Italy | +39 02 257711 | [aerosales@txtgroup.com](mailto:aerosales@txtgroup.com) | [www.txtgroup.com](http://www.txtgroup.com)