

the safety maker in aviation

Certification of Aerodromes according to the Guidelines of EASA



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With the remission of the guidelines (EG) 216/2008 and (EU) 139/2014 and the ratification of the European Aviation Safety Agency's (EASA) related, concrete specifications, there are now designated common standards for planning, operating and conserving aerodromes in Europe. These common standards are obligatory for all member states. Until **December 31st, 2017** every single aerodrome operating under the responsibility of the EASA must have a certification. This certification will be granted by the responsible authority in accordance with EASA specifications. For instance, in Germany the aviation authorities at the Federal State level are responsible for this certification.

The most important requirements are about:

- **Infrastructure facilities** in accordance with Certification Specifications (CS) and Guidance Material (GM) for Aerodromes Design (CSADR-DSN) and
- **Organizational/operational aspects** in accordance with Acceptable Means of Compliance (AMC) and GM to Authority, Organisation and Operations

In case there are deviations from the certification base in accordance to the above-mentioned requirements, safe flight operations can be ensured through extensive measures and methods, for example through Special Condition (SC), Equivalent Level of Safety (ELOS) or Deviation Acceptance and Action Document (DAAD). These measures and methods help to compensate for possible deviations.

Specific methods for obtaining the certificate of EASA

GfL uses a procedure which observes the individual conditions of the aerodrome being examined and the individual demands of the aerodrome operator, ensuring flexible applicability, including:

- General project management
- Detailed test of infrastructure facilities and organizational/operational facilities on site
- Documentation of the test results in an EDV software application specifically developed for this purpose (Airport Conformance Monitor, ACM)

Status Analysis

- Determination of relevant assessment criteria
- Analysis of available documents
- Involvement of aerodrome's technical departments
- Consultation with competent authority

Detailed examination of infrastructure and organisation/operation

- Target/actual analysis based on available documents
- Additional on-site inspections (e.g., measurement procedures)

Processing and evaluation of results

- Documentation of detailed results in specific checklists
- Identification of compliant/non-compliant inspection results
- **Airport Conformance Monitor** as optional supporting tool

Management of deviations

- Evaluation of detected deviation concerning safety relevance
- Preparation of forms concerning SC, DAAD and ELOS including safety assessments
- Description of measures eliminate deviations
- **Case-based:** implementation of detailed safety assessments/*Aeronautical Studies*

Obtainment of the certificate

- Compilation and audit of necessary certification documents concerning
- Submission of certification documents to the competent authority

General sequence of certification

Our investigation includes a complete checklist, a presentation of necessary test and calculation specifications, as well as a final report summary. Furthermore, we offer extensive support for specific certification aspects (e.g., creation of the aerodrome manual or development of a risk evaluation scheme).

Moreover, GfL offers support with your application and consecutive certification processes and with potential negotiations involving the responsible authorities.

Airport Conformance Monitor (ACM)

Our Experiences:

GfL has over 20 years of experience specializing in planning aerodromes and providing safety analyses. Our expertise will guide you successfully through your EASA certification process.

In addition to other projects, GfL also supports the EASA certification process at the airports Cologne-Bonn, Frankfurt, Düsseldorf and Mannheim. Furthermore, our ACM software is already installed and in use at the Hannover and Braunschweig airports.

Airport Conformance Monitor

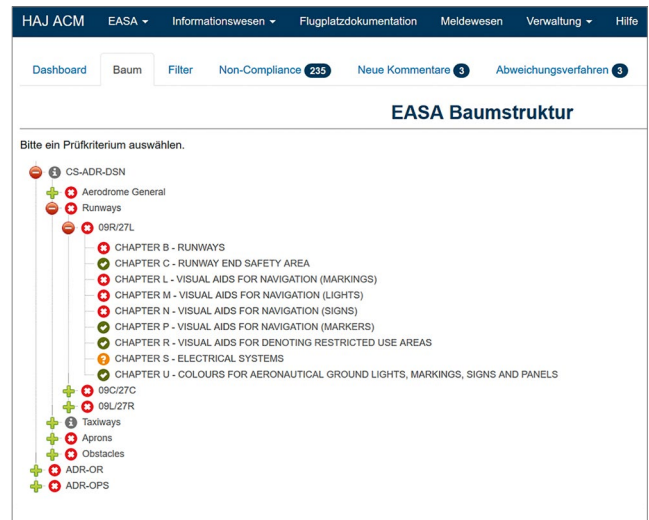
In order to operationally and organizationally support the certification process as well as accelerate it, GfL has developed software called Airport Conformance Monitor (ACM). The ACM is offered in the form of a web-based software solution: It can be installed independently in the company or it can be integrated like a module in an already installed GfL HTML SMS Tool.

The ACM includes the following features:

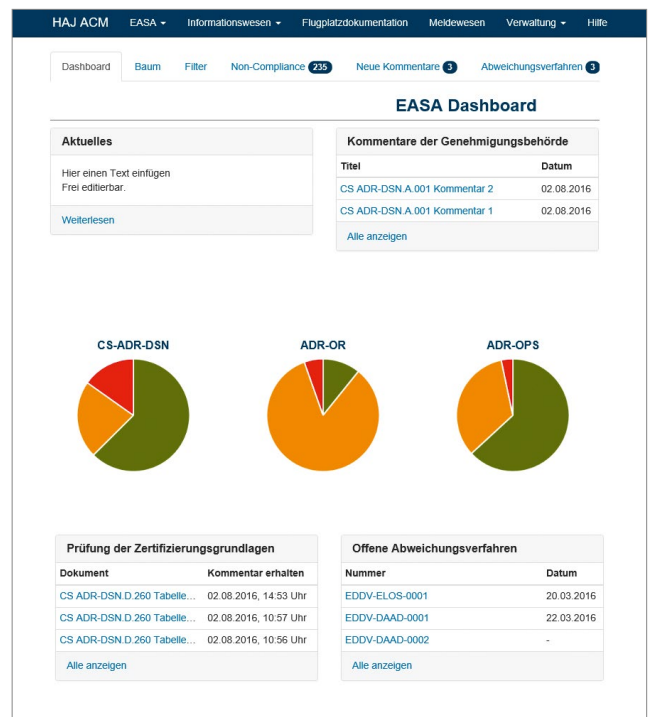
- Illustration of the EASA documentation organized in an easy to read tree structure which presents the test process based on traffic lights logic.
- Extensive administration of the documents (including version history) needed for certification.
- Automated illustration of the test process using reports, diagrams and an Airport Conformance Map.
- User-specific access to configurable areas in the tool, protected access for external users like regulatory authorities, and an additional comments function.
- Specific notification forms for the registration of ELOS, SC and DAAD.

The technical functions correspond to the following requirements:

- The Web-based HTML (PHP) browser application is installed cloud based or locally at the customer's network.
- Support of mobile devices.
- No additional licence costs. The software is based on Open-Source-Technology (Apache etc.), which is free of charge.
- Limited user requirements. The registered user only needs a web browser including JavaScript to use the software.



Tree structure (German version, English version available)



Dashboard (German version, English version available)

The advantages of the **Airport Conformance Monitor** in short:

- Easy to handle surface (WYSISWYG)
- Attractive and cost-effective multi-user licence
- Dashboard for a user specific overview about all relevant contents
- Central document management
- Transparent access to the test criteria
- Integration of external users (e.g., regulatory authorities) via protected access
- Support in the compliance monitoring
- Creation of an automated conformity report



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The GfL team looks forward to providing you with expert advice and solutions for your certification concerns according to EASA. For more information, find us at www.gfl-consult.de or contact directly at info@gfl-consult.de.