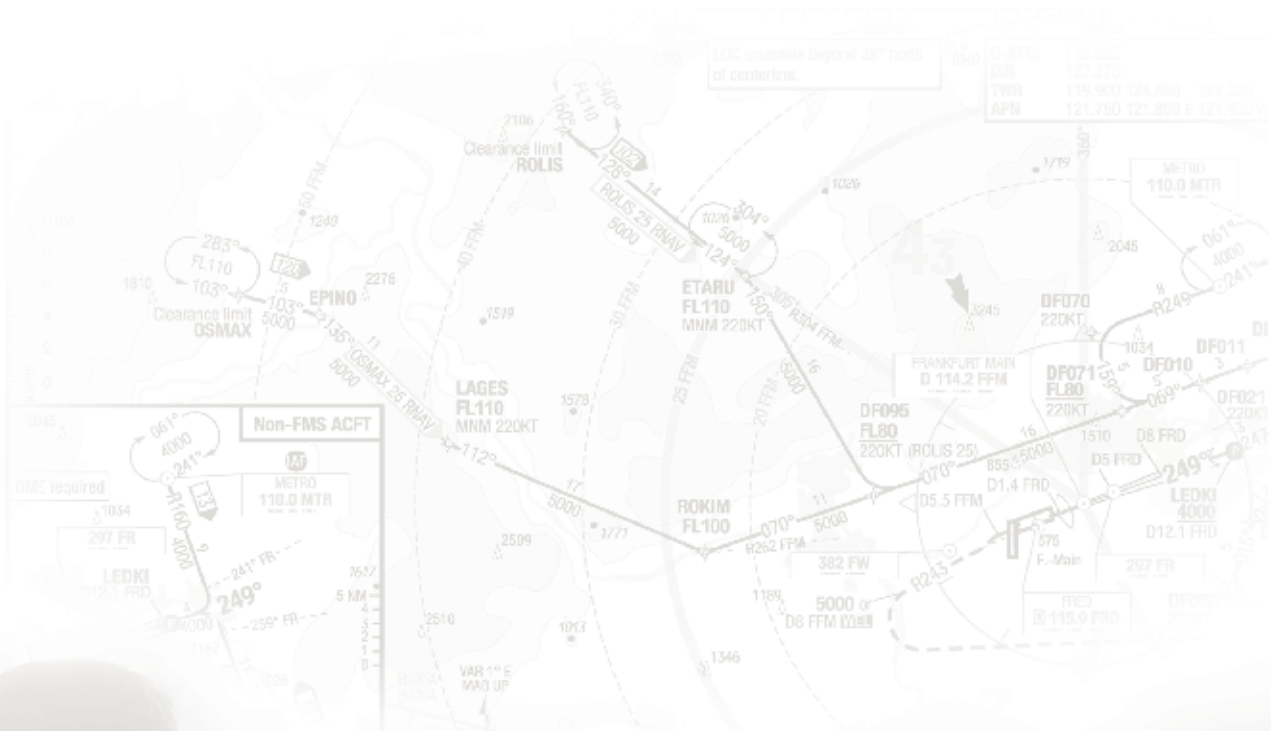
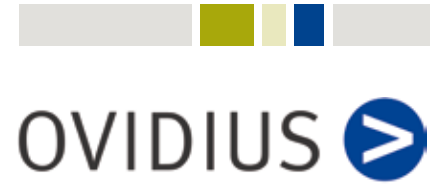




Aeronautical Information Management System



An innovative way to create high quality AIP



Aviation Safety: Of Reliable Data and Up-to-Date AIPs

Small error, devastating effect

Pilots all over the world put their faith into the accuracy of maps and aviation data in order to fly safely. But is this trust always well founded? Is the map material used by the pilot based on current data? Or, is it really possible to guarantee that no errors have occurred during data maintenance? In a nutshell: Who ensures that data used in Aeronautical Information Publication (AIP) are both correct and current?

The smallest inaccuracies can have dramatic effects. AIPs contain comprehensive information about a particular air space and are a crucial contribution to aviation safety. Essential to creating reliable AIPs are: data integrity, ensuring that data is current and correct, the possibility of tracking changes in the documents at any time, agreement between data in the textual parts and the charts, and finally, compliance to binding international standards.

Ovidius and NATS Provide for More Security in Air Traffic

The German specialist for technical documentation solutions, Ovidius, and NATS Services – which has been commissioned by the CAA (Civil Aviation Authority) with publication of the AIP – have jointly developed a system with which creation of the AIP is largely automated. The solution – the eAIP/eCarto system – is easily adaptable and able to facilitate the work of every AIP publisher.

The eAIP/eCarto system sets new standards – thanks to a strict workflow and guaranteed data integrity, AIP attains a new level for more air safety with considerably less expenditure and a greatly minimised risk of error.





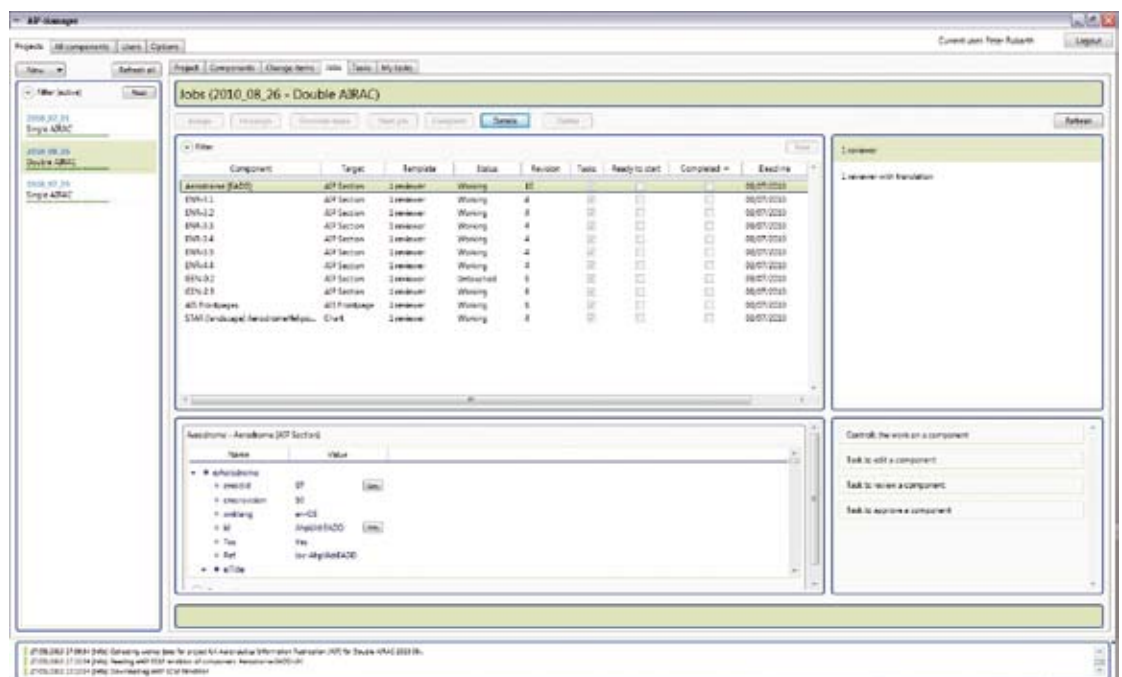
AIP Manager

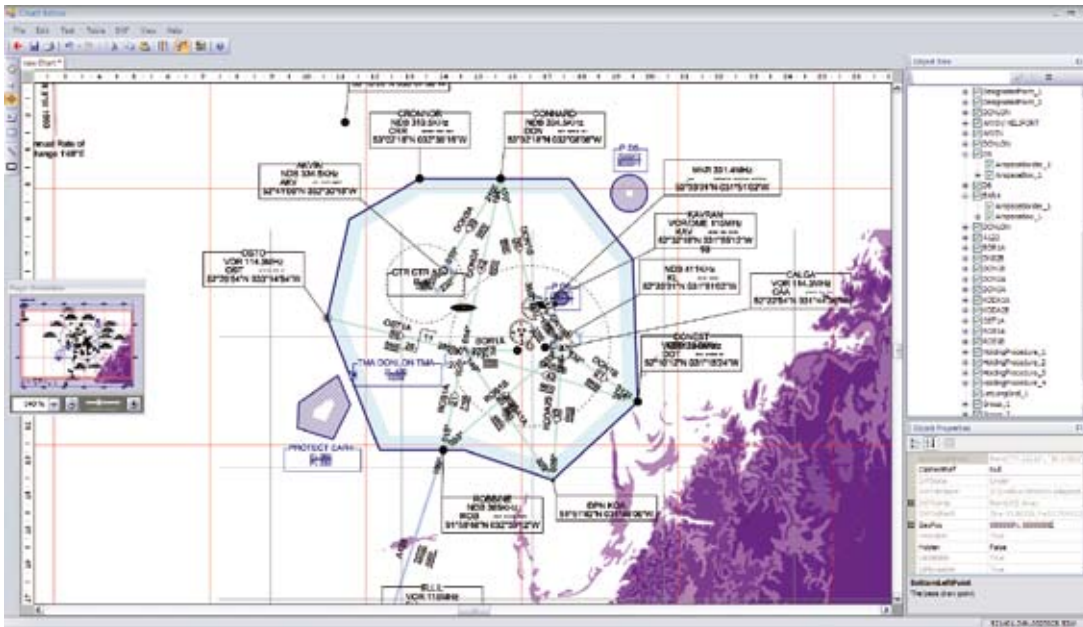
The AIP manager represents the heart of the application. It is used to create and track workflows as a workbench for all editing and review processes as well as for management of translation and publication processes. The powerful workflow management within the AIP manager provides for constant review of all ongoing and completed processes. The traceability and verifiability of all actions are the cornerstone for successful quality management.

In order to create a new issue of an AIP, the person responsible imports an AIXM snapshot that has been exported from the AIXM database for the corresponding date of validity. The application compares this snapshot with the previous version. With the help of the ascertained changes the text sections and maps of an AIP are then found that are affected by these changes. A job is created for each of the objects determined. Likewise, each job is assigned a workflow that must be completed. A workflow is represented by different tasks. Such tasks include, for example, editing, review, approval, translation and publishing. One or more persons can be assigned to each task as editors or reviewers.

The manager responsible for production of an AIP has a constant overview of the status of each individual job and each individual task.

The heart of the application: the AIP Manager





Equipped for every conceivable variation of aviation maps: the Chart Editor



Chart Editor

The Chart Editor is the tool for creating aviation maps and is fully customisable. As a result the ICAO map types relevant for a certain country can be configured just as well as the symbols, typefaces and colours used on the maps. The Chart Editor is therefore equipped for every conceivable variation of aviation maps.

However, editing maps does not mean that cartographers create maps as they would in a CAD system. All of the objects required for preparation of the maps are produced on the basis of data derived from the AIXM snapshot. Automatic object positioning makes suggestions about how objects are arranged without a geographically defined position in such a way that relevant information cannot be masked.

THE WORK OF THE CARTOGRAPHER IS NOW EASIER THAN EVER: HIS TASK IS SIMPLY TO

- review the chart which was generated automatically from AIXM data
- add or reposition information boxes
- load additional topographical information in the form of DXF or Bitmap files



XML Editor

XMetaL is used as an XML editor, and is closely linked with the processes of the AIP manager. In order to provide optimum support to authors and guarantee the highest data quality, XMetaL underwent extensive functional expansion for creation of the AIP. This updating utility is supported in a unique way – text authors always recognise when what information will become valid. The application prevents information that is static or already valid from being changed. Information that has lost its validity is also marked as such.

Translation Management

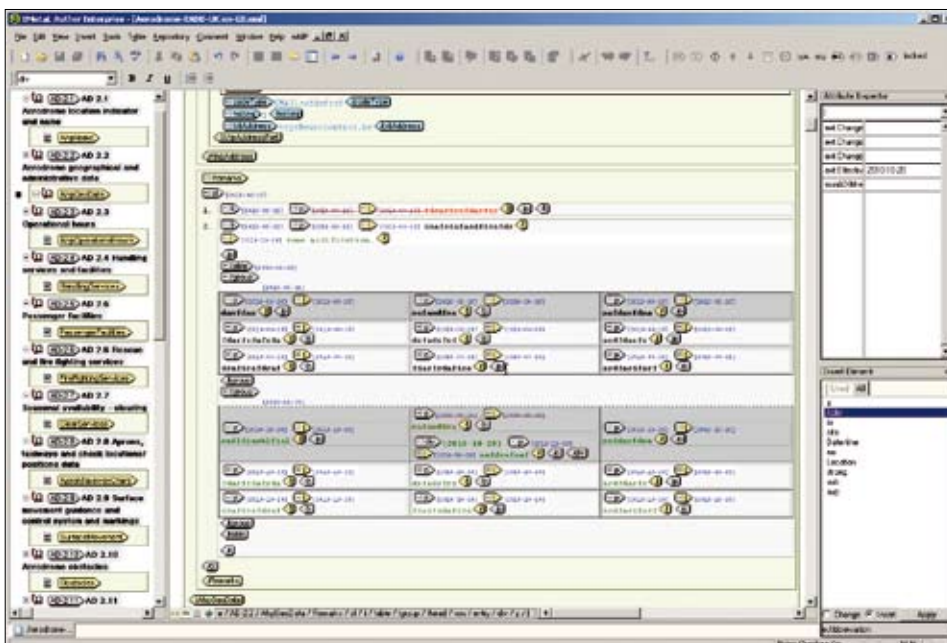
Some countries publish their AIPs in two languages: in English, and additionally in the national language. In order to support the processes for the creation of such publications, the AIP manager has a sophisticated translation management system which guarantees that the required translations can be planned, tracked and completed.

Paper Publication

In the eAIP/eCarto system both mono- and bilingual PDF publications can be produced. A complete publication and an incremental update can be automatically generated for both variants. If an AIP is published in two languages, both languages run on the same page in two columns. The information objects are kept synchronous in both columns. This means that the same information is always aligned in such a way that it begins at the same height.

If a new issue of an AIP is produced, then the changes made in comparison with the last issue are marked after an automatic comparison of the status of both issues by means of a revision bar. An automatically produced list of all changes facilitates the handling of an AIP.

To avoid having to always deliver the full scope of an AIP, the system can automatically produce a PDF document that contains only the pages on which changes are to be found. In addition, the package contains an updated table of contents, the list of changes, etc.



Changes are transparent: the XML Editor

So that there are no open questions.

NATS Services company profile

NATS Services is the leading provider of services in the sphere of aviation control in Great Britain. NATS Services is responsible for flight safety at sixteen of the most important British airports, including London Heathrow, Gatwick, Manchester and Edinburgh and thus provides for the safe transport of more than 200 million passengers per year. NATS Services publishes the AIP on behalf of the Civil Aviation Authority (CAA), the British counterpart to the German Federal Office of Civil Aviation.

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services

Ovidius company profile

Ovidius GmbH, with its principal place of business in Berlin (Germany), develops XML and SGML-based solutions for professional data management in the area of technical documentation. TCToolbox, the XML editing system from Ovidius, has been tried and proven in numerous technical editorial offices and optimises internal work operations as well as translation and publishing processes. EasyBrowse, a subsidiary of Ovidius GmbH, supplements the product portfolio with tools that have been perfected for electronic publication. Ovidius primarily aims its offer at the aviation and defence industry, the machinery and plant engineering industry, the automobile industry, the IT industry and any company with complex documentation requirements. Current reference customers include, among others, Siemens, Bosch and Eurocopter.

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