

PLX

PLanning eXtension



- » Web based Workflow Management, Integrity, process Traceability, system Auditing supporting Maintenance and Design of Aeronautical Information and Product Generation, integrated with Data Origination Portal.

Introduction:

PLX is a fully configurable web-based solution for the Controlled Processing of Aeronautical Data.

PLX ensures compliance with the Eurocontrol Controlled and Harmonized Aeronautical Information Network (CHAIN) model and requirements derived from aeronautical standards and regulations such as RTCA/200A, Eurocontrol - ADQ, SDP, ICAO Annex 15, Doc 8126 (AIS Manual), and EU Reg. 73/2010 with its subsequent updates.

With PLX the AIS-AIM Operators and NOF officers receive the Change Requests from Data Providers and can work in a digital environment with fully controlled digital flow and dedicated web pages for Tasks execution within customizable workflows encoded according to BPMN2.0 standard.

PLX supports AIS/AIM organizations in:

- processing of Work packages related to Change Requests submitted from the Data Origination Portal or via ad-hoc web service calls
- dispatching Work packages and Tasks (History included) to AIS-AIM stakeholders in the process models
- receiving right information in the right place and tool, at the right time during the process
- integrating Tasks in IDS AirNav web/desktop tools by means of the PLX plugin
- exchanging digitally the structured data for importing into AeroDB, for a given target Effective Date
- tracing even processes for Design, Chart Production, Publication Production and more

The system keeps track of the actions performed and decisions taken during the process both at Workflow Level and/or system level.

The integrity within the Lifecycle of Change Requests and related Tasks is monitored via CRC32 algorithm as required by ICAO.

The configuration of the system can be tuned, tailored when or where required to match the new needs of the AIS.AIM organization.

Features

PLX assists the data providers in the upstream data process from the Data Providers to the AIS/AIM.

- Originators have a dedicated Portal where can create and submit requests for changes over static and dynamic aeronautical information in terms of:
 - structured data (AIXM 5.1),
 - textual information (via integration with the WePub product)
 - Notam proposals (via integration with the CRONOS product)
 - unstructured data as files attached to change requests, for less expert stakeholders.
- AIS AIM operators can digitally process the submitted data via workflows defined in the system
- Workflows can be designed, preconfigured and deployed using an integrated Workbench.
- Submitted Requests can be approved, rejected or even suspended during a Workflow
- Originators are enabled to edit, complete and re-submit the requests whose processing requires rework

PLX fully supports the PLX users (AIS actors) involved during the processing of submitted requests:

- the system dispatches the right information to the right users as per Workflow configuration, by means of Tasks for the operators belonging to groups (Workflow Roles); each Task is configurable in terms of mandatory, optional, or not required metadata and remarks
- each operator can inspect data, metadata, attachments and web forms to check them for completeness, correctness etc. prior to release them for further processing (or rejecting / suspending the requests).

PLX is integrated with other IDS AirNav Applications via the PLX Plugin: the system can deliver Tasks and information directly to the compliant applications

- structured data can be digitally transferred using the PLX plugin straight to the compatible IDS AirNav applications for any appropriately configured Task, prior to process them, importing and committing into the Aeronautical Database
- with the PLX plugin there is no need for manual interaction with these data

PLX can send email notifications to accredited users for a variety of events, among them, upon Submission of Change Requests with Raw Data and when new Tasks are dispatched to PLX user groups.

PLX is flexible and fully configurable (It allows to configure Workflows, Workflow Roles, Tasks, Applications involved per Task and the access policy for each Application within each Task)

PLX keeps track of the process history during the Lifecycle of the requests at any time, via dedicated GUIs:

- it is possible to inspect the history of a processing for each Change Request and the Task details at any time (Workflow Tracking)
- it is possible to query the Auditing database where all the history of the system actions is stored

PLX implements Search and Reporting functionalities, to search for any information in PLX and generate Business Reports, Search Reports, for one or more selected requests.

Benefits

PLX is a framework for the full digital processing of change requests over aeronautical data, information and products fully configurable as needed while still maintaining compliance with the RTCA/200A, Eurocontrol - ADQ, CHAIN, SDP, ICAO Annex 15, Doc 8126 (AIS Manual). This flexibility allows to:

- have access to the PLX pages from remote locations at any time - for authorized users
- dispatch of the right information to the right users at the right time
- easily create and submit and process Change Requests
- help the AIS-AIM operators in the processing of change requests
- operate concurrently on a number of processes: it supports concurrent sessions and workflows
- use a controlled processing with full Traceability
- eliminate conflicts of responsibilities thanks to workflows and automatic Task assignment
- reduce the effort for the retrieval of information by means of search, filters, reports
- virtually eliminate the need for traditional media during the processing (calls, faxes, emails)
- monitor the Integrity of the Information processed with PLX
- prevent a direct interaction with the aeronautical database – which is kept safe during the processing
- monitor the PLX activities at system level / Workflow level with Traceability and Auditing capabilities
- easily integrate the Workflow and Tasks in IDS AirNav compatible Applications via PLX plugin.

As per the highlighted points, the PLX solution allows to:

- significantly increase the efficiency of the AIS Data process
- dramatically reduce the costs for the validation of Data and Change Requests
- obtain an unprecedented quality of the aeronautical processes

