

Change ID: 5.1-26

New feature - RulesProcedures

Summary

It is proposed to add a new RulesProcedures feature in the model providing support for (textual) rules, procedures, regulations, etc. that are part of the aeronautical information package published by the States.

Background

The AIXM 5.0 model contains definitions of classes that model primarily the information provided in tabular form, in numerical form and/or compliant with fixed lists of values.

Rationale for the change

Some parts of the Aeronautical Information Publications (AIP) contain textual descriptions of procedures, rules and regulations. Example: national regulations for entry/exit/landing instructions, local traffic regulations at the airport, etc. These are currently not covered by AIXM and it implies that another data source has to be used.

Empowering AIXM to include the text of the rules and procedures published in the AIP and related/similar documents would provide its capabilities as a "truly digital" AIP. Users of the digital AIXM information would no longer have to consult additional information sources (the AIP/eAIP document) in order to get information that could be easily conveyed by AIXM. This change would also facilitate the use of AIXM for applications and by users who need to provide text for incorporation in AIP or other similar documents.

The proposed change is relatively small: introduce a single generic feature in the model, named "RulesProcedures" with attributes that allow to qualify the textual piece of information and to provide it's content:

- category - open codelist, containing values such as "rule", "procedure", "ICAO difference", etc.
- title - an open codelist, using the relevant AIP sub-section titles(for example, "Entry requirements for cargo");
- content - XHTML formatted text;
 - Note: from the work on the eAIP Specification, it has been identified that the format is frequently considered critical for the comprehensibility of the text and therefore it is proposed that this attribute supports XHTML formatted content, as a way to provide support for more than just plain text;
- association with Airport or Airspace - indicating the geographical area where the procedure/rule is applied.

This change proposal shall be considered as a first step in this direction, future versions of the model being likely to refine it.

Change proposal details

New Class - RulesProcedures

Insert a new "feature" class in the model named "RulesProcedures" with the following characteristics:

- definition = " *The definition of an instruction or regulation that needs to be considered by personnel involved in flight operations in relation with an airport/heliport or an airspace*".
- attributes:
 - category = " *An indication of the purpose of the rule or procedure*", data type CodeRuleProcedureType

- title = " *A general heading by which the rule or procedure is usually identified in the Aeronautical Information Publications (AIP) or similar/related documents*", data type CodeRuleProcedureTitleType;
- content = " *The definition of the actual content of the rule or procedure*", data type TextXHTMLType
- associations:
 - appliesAt 0..* AirportHeliport (role="affectedLocation")
 - appliesWithin 0..* Airspace (role="affectedArea")

New Codelist CodeRuleProcedureType

Insert a new "codelist" CodeRuleProcedureType data type class:

- definition = " *An open coded list of values indicating the purpose of a rule or procedure.*"
- list of values (open)
 - RULE = A prescribed guide for conduct or action;
 - LAW = A binding rule, enforced by the national/international legislation;
 - PROCEDURE = A particular way of accomplishing something or of acting;
 - PRACTICE = The usual way of doing something, even if it is not formally prescribed;
 - ICAO_DIFF = A difference between the national rules/procedures and the ICAO Standards, Recommended Practices and Procedures

New Codelist CodeRuleProcedureTitleType

Insert a new "codelist" CodeRuleProcedureTitleType data type class:

- definition = " *An open list of values indicating a general heading by which a rule or procedure is usually identified in the Aeronautical Information Publications (AIP) or similar/related documents.*"
- list of values (open)
 - ENTRY_TRANSIT_DEPARTURE_OF_AIRCRAFT = Rules and procedures governing the entry, transit and departure of aircraft
 - ENTRY_TRANSIT_DEPARTURE_SCHEDULED = Rules and procedures governing the entry, transit and departure of scheduled flights
 - ENTRY_TRANSIT_DEPARTURE_NON_SCHEDULED = Rules and procedures governing the entry, transit and departure of non-scheduled flights
 - ENTRY_TRANSIT_DEPARTURE_PRIVATE = Rules and procedures governing the entry, transit and departure of private flights
 - PUBLIC_HEALTH_MEASURES_AIRCRAFT = Public health measures applied to arriving, departing or transit aircraft
 - CUSTOMS_REQUIREMENTS = Customs formalities for passengers and crew
 - IMMIGRATION_REQUIREMENTS = Immigration formalities for passengers and crew
 - PUBLIC_HEALTH_MEASURES_PASSENGERS = Public health measures applied to disembarking or departing passengers and crew
 - ENTRY_TRANSIT_DEPARTURE_CARGO = Regulations concerning entry, transit and departure of cargo.
 - AIRCRAFT_INSTRUMENTS_EQUIPMENT_FLIGHT_DOCUMENTS = Aircraft instruments, equipment and flight documents to be carried on aircraft.
 - NATIONAL_REGULATIONS = National regulations affecting air navigation.
 - INTERNATIONAL_AGREEMENTS_CONVENTIONS = International agreements in which the State is part and which affect air navigation.
 - DIFFERENCES_ICAO_STANDARDS_RECOMMENDED_PRACTICES_PROCEDURES = Significant differences between national regulations and practices of the State and related ICAO provisions.
 - MEASURING_SYSTEM_AIRCRAFT_MARKINGS_HOLIDAYS = A table of units of measurement, calendar, time systems, geodetic reference system, EGM-96 and public holidays.
 - ABBREVIATIONS_AIS_PUBLICATIONS = A list of alphabetically arranged abbreviations used by the State in its AIP
 - AERODROME_HELIPORT_CHARGES = Type of charges which may be applicable at aerodromes/ heliports.
 - AIR_NAVIGATION_SERVICES_CHARGES = Charges which may be applicable to air navigation services provided for international use, approach control, route air navigation services.
 - FLIGHT_RULES_GENERAL = General flight rules as applied within the State.
 - VISUAL_FLIGHT_RULES = Visual flight rules as applied within the State.
 - INSTRUMENT_FLIGHT_RULES = Instrument flight rules as applied within the State.

- **ATS_AIRSPACE_CLASSIFICATION** = Description of ATS airspace classes as applied within the State.
- **HOLDING_APPROACH_DEPARTURE_PROCEDURES** = The criteria on which holding, approach and departure procedures are established for arriving flights and departing flights from any aerodrome/heliport.
- **ATS_SURVEILLANCE_SERVICES_PROCEDURES** = Primary radar services and procedures, secondary surveillance radar (SSR) operating procedures and automatic dependent surveillance - broadcast (ADS-B) coverage.
- **ALTIMETER_SETTING_PROCEDURES** = Altimeter setting procedures in use, containing procedures applicable to operators and cruising levels.
- **REGIONAL_SUPPLEMENTARY_PROCEDURES** = Regional supplementary procedures (SUPPS) affecting the entire area of State responsibility.
- **AIR_TRAFFIC_FLOW_MANAGEMENT** = ATFM structure types of flow messages and procedures applicable for departing flights, flight plan requirements and slot allocations.
- **FLIGHT_PLANNING** = Procedures for the submission of a flight plan; repetitive flight plan system; and changes to the submitted flight plan.
- **ADDRESSING_FLIGHT_PLAN_MESSAGES** = Addresses allocated to flight plans, showing: category of flight (IFR, VFR or both), route and message address.
- **INTERCEPTION_CIVIL_AIRCRAFT** = Interception procedures and visual signals to be used.
- **UNLAWFUL_INTERFERENCE** = Procedures to be applied in case of unlawful interference.
- **AIR_TRAFFIC_INCIDENTS** = Definition of air traffic incidents, use of the "Air Traffic Incident Reporting Form", reporting procedures and purpose of reporting and handling of the form.
- **AERODROME_HELIPORT_AVAILABILITY** = The general conditions of the State's designated authority responsible for aerodromes and heliports availability.
- **LOCAL_TRAFFIC_REGULATIONS** = Standard routes for taxiing aircraft, parking regulations, school and training flights and similar but excluding flight procedures.
- **NOISE_ABATEMENT_PROCEDURES** = Detailed description of noise abatement procedures established at the aerodrome.
- **AERODROME_FLIGHT_PROCEDURES** = The conditions and flight procedures, including radar and low visibility procedures at the aerodrome and associated equipment authorized for use under these conditions.
- **AERODROME_BIRD_CONCENTRATION** = Indication of bird concentrations at the aerodrome.

New datatype TextXHTMLType

Insert a new "datatype" TextXHTMLType class:

- definition = " *A structured XHTML document, compliant with <http://www.w3.org/1999/xhtml>*"
- in XML, this shall be implemented as:

```
<element name="htmlExample">
  <complexType>
    <sequence>
      <any namespace="http://www.w3.org/1999/xhtml"
          minOccurs="1" maxOccurs="unbounded"
          processContents="skip"/>
    </sequence>
  </complexType>
</element>
```