

Coding scenarios

Purpose

The coding and decoding rules for Digital NOTAM are presented under predefined scenarios. Scenarios correspond to common situations that occur in the aeronautical information domain and which are usually notified by NOTAM, such as runway closures, airspace activation, etc. The advantage of defining scenarios is that it enables capturing specific coding rules, which can be used for verifying the correctness and the completeness of the coding. This also facilitates that data downstream, for example by enabling to sort the events by the subject affected and by its condition. This can also facilitate the detection of data which is relevant for specific use cases, such as detecting runway events and temporary obstacles that are relevant for aircraft take-off performance calculation.

Each event scenario contains a description of the applicable rules for encoding the data using the AIXM model and also the rules that may be applied in order to automatically generate the ICAO compliant text NOTAM.

Scenario identification

Each Digital NOTAM coding scenario has a unique identifier that is intended to be human readable. It is composed of two groups of letters:

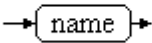
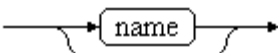
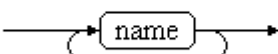
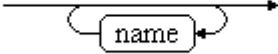
- *subject* - a short abbreviation identifying the main aeronautical feature affected, such as AD - aerodrome, RTE - route, etc.
- *condition* - the second group identifies the situation affecting the feature, such as CLS - closure, NEW - new object of that kind, etc.

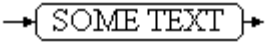
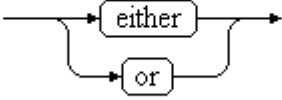
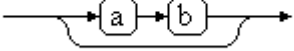
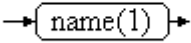


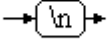
These identifiers are included in the title of section that describes each event scenario. For example, "AD.CLS" identifies the scenario that deals with the temporary closure of an aerodrome/heliport.

In an AIXM file that contains Digital NOTAM data, this identifier shall be put in the "scenario" attribute of the Event feature. In addition, the version of the Digital NOTAM Specification according to which the encoding was done shall also be specified.

Graphical notation

The data usually provided by the data originators for each event category is presented in the form of an "input" diagram, using EBNF (Extended Backus Naur Form). The same notation is used for the production rule for the E item of the NOTAM text. The document includes graphical representations of the EBNF rules and some specific graphical elements, as described below.

| <i>Graphical Element</i> | <i>Interpretation</i> |
|--|--|
| mandatory  | Indicates a mandatory element (exactly 1). The name of the element is written in lowercase. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules. |
| optional  | Indicates an optional element (0 or 1). The name of the element is written in lowercase. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules. |
| mandatory_multiple  | Indicates a mandatory element, which may occur several times (1 or more). The name of the element is written in lowercase. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules. |
| optional_multiple  | Indicates an optional element, but which may occur several times (0, 1 or more). The name of the element is written in lowercase. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules. |

| | |
|---|---|
| <p>text</p>  | <p>Denotes a piece of text that should be inserted as such in the production of the NOTAM text.</p> |
| <p>choice</p>  | <p>Indicates a choice between two elements. Either one or the other one must be used. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules.</p> |
| <p>branch</p>  | <p>More than one element can appear on an optional, choice or mandatory branch. It is used both in diagrams that indicate data required for a scenario and in diagrams that provide NOTAM text production rules.</p> |
| <p>rule</p>  | <p>The number in brackets “(1)” references a rule or an explanation provided in relation with that element. It is used especially in diagrams that provide text NOTAM production rules. It can also occur on text elements and even on complete branches.</p> |
| <p>full_stop</p>  | <p>Indicates that a punctuation mark (period) shall be inserted at that place, as end of a sentence. It is used in diagrams that provide text NOTAM production rules.</p> |
| <p>comma</p>  | <p>Indicates that a comma shall be inserted at that place, as punctuation mark. It is used in diagrams that provide text NOTAM production rules.</p> |
| <p>new_line</p>  | <p>Indicates that a new line shall be inserted at that place, in order to improve the readability of the NOTAM text. It is used in diagrams that provide text NOTAM production rules.</p> |

Notes:

- Further in the document, the EBNF source file is provided below each diagram concerned.
- The graphical representation of the EBNF rules was created with the free [EBNF Visualizer 1.1](#).