(SAAS) Annex-15 to Annex-14 OLS



Use Case: Name:	Convert Annex-15 Area-2ABC into Annex-14 OLS
ASBU:	DAIM-B1/4: Provision of digital obstacle data sets
PANS-AIM ADC:	Table A1-6 Obstacle data; Table A1-7 Geographic data; Table A1-8 Terrain data;
Actors:	AIM Organization (primary), TFG-SAAS on AWS (secondary)
Summary Description	Allow any AIM user possessing Annex-15 Area-2 Terrain & Obstacle data to document the penetrations of the Annex-14 Obstacle Limitation Surfaces
Pre-Condition	Terrain & Obstacles have been analyzed according to Annex-15 Area-2 criteria, and physically formatted in DO-276/ED-99 database schema
Post-Condition	Origination of geospatial subset of the Annex-15 Terrain & Obstacles that solely penetrate the Annex-14 OLS
Basic Path	 The TFG-SAAS verifies that this is a valid customer in the S3 Cloud. The AIM Org uploads the .zip up to the TFG-SAAS, in AWS S3. The TFG-SAAS verifies that the .zip file contains the Parameter .XLS The TFG-SAAS verifies that the .zip file contains DO-276 Shapefiles of PointObtacle, LineObstacle, PolygonObstacle The TFG-SAAS identifies existence of DO-272 AerodromeReferencePoint and RunwayThresholds, and optionally RunwayDisplacedArea, Stopway. The TFG-SAAS identifies correct ICAO Runway Code, and type of Procedure (Non-Instrument, Non-Precision, PrecisionCat-I, Cat-II/III The TFG-SAAS constructs Annex-14 OLS surfaces as requested in MATLAB The TFG-SAAS evaluates if the input Obstacles penetrate the OLS The TFG-SAAS records the obstacles, categorized by OLS and penetration.

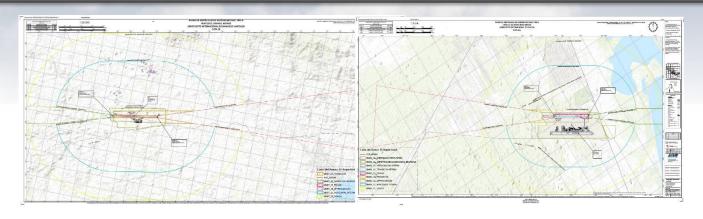
THE FANS GROUP LLC (2017) URL: www.thefansgroup.aero

Westminster, Colorado, USA 80031 Email: <u>inquiries@thefansgroup.aero</u>

Tel. WESTERN Hemisphere:



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Alternative Path	1a. The entity trying to upload the .zip file is not a valid customer 2a. The .zip file is not readable or does not pass a Virus Scan 3a The .zip file does not contain the Parameter .XLS 4a The .zip file does not contain any DO-276 Obstacles or DO-276 Terrain 5a The .zip file does not contain the AerodromeReferrencePoint or RunwayThreshold shapefiles 5b The .zip file does not contain proper Stopways or DisplacedArea 6a The ICAO Runway Code is not valid or does not define a valid Approach 7a The RunwayThreshold, Stopway, DisplacedArea coordinates lack 3D.
Business Rules	B1: Point, Line, Polygon Obstacles do not meet DO-276/DO-291 Schema B2: Point, Line, Polygon Obstacles do not meet DO-276 Geometry B3: Point, Line, Polygon Obstacles do not meet DO-276 OBST business rules B4: Terrain Obstacle database does not meet DO-276 TERR business rules B5: Point, Line, Polygon or Terrain Data lack ICAO Doc 10066 Metadata B6: Point, Line, Polygon or Terrain Data lack Temporal Metadata
Non-Functional Requirements	NF1: Time for complete Analysis on AWS ESRI Instance NF2: Security for customer access NF3: Time to create (optional) OLS POV-Ray graphics NF4: Language support for translation of Obstacle Types NF5: VPN or IP Address incompatible with Security requirements

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