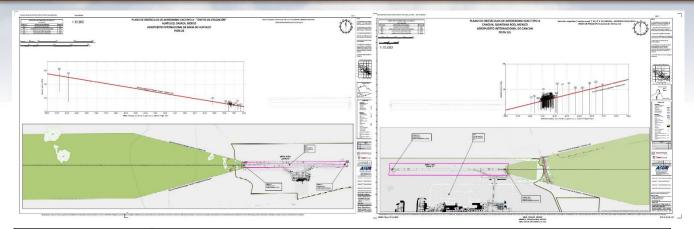
## (SAAS) Annex-15 to Annex-4 ToFPA

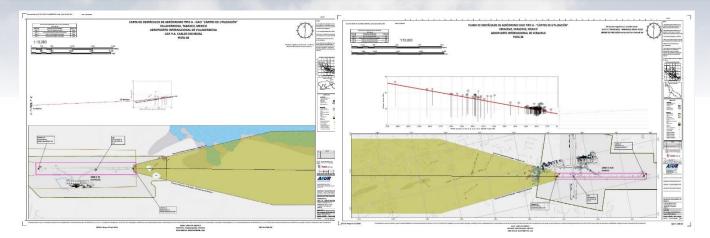


Use Case: Name:	Convert Annex-15 Area-2ABC into Annex-4 Take-Off Flight Path Area
ASBU:	DAIM-B1/4: Provision of digital obstacle data sets
PANS-AIM ADC:	Table A1-6 Obstacle data; Table A1-7 Geographic data; Table A1-8 Terrain data;
Actors:	AIM Organization (primary), TFG-SAAS on AWS (secondary)
Summary Description	Allow any AIM user possessing Annex-15 Area-2 Terrain & Obstacle data to document penetrations of the Annex-4 Take Off Flight Path Area (Type-A)
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-4, Chapter 3, ICAO Type A
Basic Path	<ol> <li>The TFG-SAAS verifies that this is a valid customer in the S3 Cloud.</li> <li>The AIM Org uploads the .zip up to the TFG-SAAS, in AWS S3.</li> <li>The TFG-SAAS verifies that the .zip file contains the Parameter .XLS</li> <li>The TFG-SAAS verifies that the .zip file contains DO-276 Shapefiles of PointObtacle, LineObstacle, PolygonObstacle</li> <li>The TFG-SAAS identifies existence of DO-272 AerodromeReferencePoint and RunwayThresholds, and optionally RunwayDisplacedArea, Stopway.</li> <li>The TFG-SAAS identifies correct RunwayThreshold, so that it may compute the Take-Off Flight Path Area, as defined in Annex-4, Sec: 3.8.2</li> <li>The TFG-SAAS evaluates if the input Obstacles penetrate the ToFPA</li> <li>The TFG-SAAS records the obstacles and/or terrain penetrating ToFPA.</li> </ol>
THE FANS GROUP L Westminster, Colorad Email: inquiries@the	do, USA 80031
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## (SAAS) Annex-15 to Annex-14 OLS



Use Case: Name:	Convert Annex-15 Area-2ABC into Annex-14 OLS
Alternative Path	<ul> <li>1a. The entity trying to upload the .zip file is not a valid customer</li> <li>2a. The .zip file is not readable or does not pass a Virus Scan</li> <li>3a The .zip file does not contain the Parameter .XLS</li> <li>4a The .zip file does not contain any DO-276 Obstacles or DO-276 Terrain</li> <li>5a The .zip file does not contain the AerodromeReferrencePoint or RunwayThreshold shapefiles</li> <li>5b The .zip file does not contain proper Stopways or DisplacedArea</li> <li>6a The ICAO Runway Code is not valid</li> <li>7a The RunwayThreshold, Stopway, DisplacedArea coordinates lack 3D.</li> </ul>
Business Rules	<ul> <li>B1: Point, Line, Polygon Obstacles do not meet DO-276/DO-291 Schema</li> <li>B2: Point, Line, Polygon Obstacles do not meet DO-276 Geometry</li> <li>B3: Point, Line, Polygon Obstacles do not meet DO-276 OBST business rules</li> <li>B4: Terrain Obstacle database does not meet DO-276 TERR business rules</li> <li>B5: Point, Line, Polygon or Terrain Data lack ICAO Doc 10066 Metadata</li> <li>B6: Point, Line, Polygon or Terrain Data lack Temporal Metadata</li> </ul>
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

