

# Delete Aliases from the FIXM Logical Model

<b>CR Number (ID):</b> 147		<b>Submission Date:</b> Click or tap to enter a date	
<b>GENERAL INFORMATION (AUTHOR TO COMPLETE)</b>			
Author	LEPORI Hubert		
Brief Description (Subject)	This CR proposes to delete the information contained in UML Aliases from the FIXM Logical Model, as this information is not maintained and used, does not bring value in most cases, and is occasionally incorrect.		
Priority*	<input type="checkbox"/> Immediate	<input type="checkbox"/> High	<input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low
Scale*	<input type="checkbox"/> Major	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> Minor
Expected Impact to Implementers*	<input type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low <input checked="" type="checkbox"/> None
Target FIXM Component(s)	<input checked="" type="checkbox"/> FIXM Logical Model <input type="checkbox"/> FIXM Application <input type="checkbox"/> FIXM XML Schemas <input type="checkbox"/> Other Specify...		
Target FIXM Release	<input checked="" type="checkbox"/> FIXM Core Version 4.3.0 <input type="checkbox"/> Application Version		
Related FIXM CRs			
Motivation / Change Reason	<input type="checkbox"/> Requirement <input type="checkbox"/> Functionality/Operability <input type="checkbox"/> Maintenance <input type="checkbox"/> Defect <input checked="" type="checkbox"/> Other Specify.... Model clean-up		

\* Optional fields; FIXM Secretariat may update during review

## MOTIVATION / CHANGE REASON DESCRIPTION (AUTHOR TO COMPLETE)

Similar to CR 142 and CR 143, this CR proposes a FIXM model clean-up aiming to remove information captured historically in Aliases in the FIXM Logical Model, which does not seem to be used any longer.

## PROPOSED CHANGE (AUTHOR TO COMPLETE)

The Alias is a field that can be populated for a UML class, attribute or role. Usually, this field is used to capture an alternative name for a model element.

There are 83 Aliases captured in the Logical Model of FIXM Core 4.2.0 (see full list below). Among these 83 Aliases:

- 34 Aliases (41%) only add space characters to the model element name. Examples:

FIXM Model element	Alias
EnRouteDelay	En Route Delay
AirWaybillNumber	Air Waybill Number
LifeJacketType	Life Jacket Type

- 18 Aliases (22%) provide alternative names that do not bring value, commonly adding/removing a suffix, using a plural or changing the order the words. Examples:

FIXM Model element	Alias
EstimatedElapsedTime	.Elapsed Time - Estimated
DatalinkCommunicationCapabilityCode	Data Link Communication Capabilities
RadioactiveMaterial	Radioactive Materials
TypeOfFlight	Flight Type

- 11 Aliases (13%) provide mapping between FIXM codelist values and legacy (ATS Messages) codelist values. These mappings are all indirectly covered in the FIXM User Manual at

<https://docs.fixm.aero/#/ats-message-to-fixm-mapping/mapping-of-ats-fields-to-fixm?id=field-19>

Examples:

FIXM Model element	Alias
LifeJacketType.FLUORESCENCE	F
LifeJacketType.LIGHTS	L
LifeJacketType.ULTRA_HIGH_FREQUENCY	U
LifeJacketType.VERY_HIGH_FREQUENCY	V

- 10 Aliases (12%) provide alternative names that may be incorrect.

Model element	Alias	Notes
AircraftApproachCategory	Aircraft Performance Category	"Aircraft Landing Category" would be a valid synonym for Aircraft Approach Category (see <a href="#">here</a> ). It is unclear whether "Aircraft Performance Category" would be a valid synonym.
AircraftOperator	FlightPlanFiler	FlightPlanFiler is not a synonym of AircraftOperator
AltitudeInTransition	Boundary Crossing Level - Transition/Coordinated	Altitude and Level are not synonyms.
Count	Hazard Class and Division	Count and Hazard Class and Division are not synonyms.

CruisingLevelChange	Level or Altitude Change	CruisingLevelChange and Level or Altitude Change are not synonym. CruisingLevelChange is narrower than Level or Altitude Change - the Alias could be misleading.
CruisingSpeedChange	Speed Change	CruisingSpeedChange and Speed Change are not synonym. CruisingSpeedChange is narrower than Speed Change - the Alias could be misleading.
CruisingSpeedChange.speed	Speed Change	See above
LevelConstraint	Altitude Constraint	Altitude and Level are not synonyms.
ProfilePoint.level	Profile Altitude	Altitude and Level are not synonyms.
RouteTrajectoryElement	Trajectory Point, Route Element	RouteTrajectoryElement is not a synonym of TrajectoryPoint

- 4 Aliases (5%) provide traceability to external inputs.

FIXM Model element	Alias
DangerousGoods	IATA Shipper's Declaration For Dangerous Goods, Shipper's Declaration For Dangerous Header, Shipper's Declaration For Dangerous Goods Summary
DangerousGoodsPackage	Dangerous Goods List of Overpack Details, Dangerous Goods List of Package Detail, Shipper's Declaration For Dangerous Goods Line Item Details, Shipper's Declaration, Shipper's Declaration For Dangerous Goods Packaging Detail
DangerousGoodsPackageGroup	Dangerous Goods Package Details, Shipper's Declaration For Dangerous * Packaging Detail
HazardClass	Hazard Class and Division, Subsidiary Hazard Class and Division

- Only 6 Aliases (7%) may capture either a valid alternate name, or may indicate that the name/definition of the FIXM model element may need clarification

Model element	Alias	Notes
AircraftRegistration	Aircraft Registration Mark	Valid synonym?
DinghyCoverIndicator	Dinghy Cover Status	Valid synonym?
LastPositionReport	Last Known Position Report	Valid synonym?
TrajectoryPoint4D	4D Point	Valid synonym?
TrajectoryPoint4D.altimeterSetting	Assumed Altimeter Setting	The Alias used the qualifier "Assumed". Is it a qualifier that the model element should have as well?
TrajectoryPoint4D.verticalRange	Point Range	Valid synonym?

Considering that the current FIXM Alias information is not translated into the FIXM XML Schemas, is used for different purposes, does not bring added value in many cases, may be misleading or incorrect in some cases, it is proposed to delete this information from the UML model.

If, on a case-by-case basis, a valid synonym is identified based on current Alias content, it is proposed:

- To capture the valid synonym into the model element notes, so that the information is captured in the annotations of the FIXM XML Schemas.
- To promote this synonym to the AIRM, which natively supports synonyms for terms (see example [here](#)).

The full list of Aliases currently captured in the FIXM Logical Model is provided below, for reference.

FIXM Model element	Alias
AircraftApproachCategory	Aircraft Performance Category
AircraftOperator	FlightPlanFiler
AircraftRegistration	Aircraft Registration Mark
AircraftTypeChoice	Aircraft Type
AirWaybillNumber	Air Waybill Number
AllPackedInOne	All Packed In One
AltitudeInTransition	Boundary Crossing Level - Transition/Coordinated
CommunicationCapabilities	Communications Capabilities
CompatibilityGroup	Compatibility Group
Count	Hazard Class and Division
CruiseClimbStart	Cruise Climb Start
CruisingLevelChange	Level or Altitude Change
CruisingSpeedChange	Speed Change
CruisingSpeedChange.speed	Speed Change
DangerousGoods	IATA Shipper's Declaration For Dangerous Goods,Shipper's Declaration For Dangerous Header,Shipper's Declaration For Dangerous Goods Summary
DangerousGoods.onboardLocation	On Board Dangerous Goods Location
DangerousGoodsPackage	Dangerous Goods List of Overpack Details,Dangerous Goods List of Package Detail, Shipper's Declaration For Dangerous Goods Line Item Details, Shipper's Declaration, Shipper's Declaration For Dangerous Goods Packaging Detai
DangerousGoodsPackage.dangerousGoodsQuantity	Dangerous Goods Quantity
DangerousGoodsPackage.properShippingName	Proper Shipping Name
DangerousGoodsPackageGroup	Dangerous Goods Package Details,Shipper's Declaration For Dangerous * Packaging Detail
DatalinkCommunicationCapabilityCode	Data Link Communication Capabilities
DinghyCoverIndicator	Dinghy Cover Status
EmergencyPhase	Emergency Phase
EmergencyRadioCapabilityType	Emergency Radio Transmitter Type
EmergencyRadioCapabilityType.EMERGENCY_LOCATOR_TRANSMITTER	E
EmergencyRadioCapabilityType.ULTRA_HIGH_FREQUENCY	U
EmergencyRadioCapabilityType.VERY_HIGH_FREQUENCY	V
EnRouteDelay	En Route Delay
EnRouteDelay.delayReference	En Route Delay Reference
EnRouteDelay.delayValue	En Route Delay Value
EnRouteDelayType	En Route Delay Type
EstimatedElapsedTime	.Elapsed Time - Estimated
HazardClass	Hazard Class and Division, Subsidiary Hazard Class and Division
LastPositionReport	Last Known Position Report
LastPositionReport.determinationMethod	Last Known Position Report - Determination Method
LevelConstraint	Altitude Constraint
LifeJacketType	Life Jacket Type
LifeJacketType.FLUORESCENCE	F
LifeJacketType.LIGHTS	L
LifeJacketType.ULTRA_HIGH_FREQUENCY	U
LifeJacketType.VERY_HIGH_FREQUENCY	V
MeteorologicalData	Meteorological Data
MeteorologicalData.temperature	Temperature
MeteorologicalData.windDirection	Wind Direction
MeteorologicalData.windSpeed	Wind Speed
ModifiedRouteItemIndicator	Modified Route Item
NavigationCapabilities	Navigation Capabilities
PerformanceBasedNavigationCapabilityCode	Performance-Based Navigation Capabilities
PerformanceProfile	Performance Climb Profile, Performance Descent Profile
ProfilePoint	Profile Point
ProfilePoint.airspeed	Profile True Airspeed
ProfilePoint.distance	Profile Distance
ProfilePoint.level	Profile Altitude
ProfilePoint.time	Profile Time

RadioactiveMaterial	Radioactive Materials
RadioCommunicationFailure	RadioCommunicationFailureType
RadioCommunicationFailure.radioFailureRemarks	Radio Failure Remarks
RadioCommunicationFailure.remainingComCapability	Remaining Communication Capabilities
RankedTrajectory	Ranked 4D Trajectory, Ranked 4D Route
RouteTrajectoryElement	Trajectory Point, Route Element
RouteTrajectoryElement.alongRouteDistance	Along Route Distance
SelectiveCallingCode	Selective Calling Code
SpecialHandlingReasonCode	Special Handling Reason
SpeedConstraint	Speed Constraint
SpeedSchedule	Speed Schedule - *
StandardCapabilitiesIndicator	Standard Capabilities Indicator
SurveillanceCapabilities	Surveillance Capabilities
SurvivalEquipmentType	Survival Equipment Type
SurvivalEquipmentType.DESERT	D
SurvivalEquipmentType.JUNGLE	J
SurvivalEquipmentType.MARITIME	M
SurvivalEquipmentType.POLAR	P
TimeConstraint	Time Constraint
TrajectoryPoint4D	4D Point
TrajectoryPoint4D.altimeterSetting	Assumed Altimeter Setting
TrajectoryPoint4D.predictedAirspeed	Airspeed - Predicted
TrajectoryPoint4D.predictedGroundspeed	Ground Speed - Predicted
TrajectoryPoint4D.verticalRange	Point Range
TrajectoryPointProperty	Trajectory Point Property
TrajectoryPointPropertyType	Trajectory Point Property
TrajectoryPointReference	Trajectory Point Reference
TypeOfFlight	Flight Type
WakeTurbulenceCategory	Wake Turbulence Category

CCB SECRETARIAT	
External Standard Consistency Checked	<input type="checkbox"/> AIDX <input type="checkbox"/> AIRM
CR Status	<input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Implemented <input type="checkbox"/> Withdrawn <input type="checkbox"/> Rejected
Decision Date	Click or tap to enter a date
Implemented in	Enter version in which this CR is first implemented.
Comments	Click or tap here to add any additional information or comments.

### IMPLEMENTATION NOTES (CCB SECRETARIAT TO COMPLETE)

There appeared to be more aliases present in the model than listed in this CR. An attempt was made to find and remove them all.