

IFC 4.3 Implementation & Validation Report

Appendix C – Coverage Table

Specification of coverage of testing for IFC 4.3

<i>Version:</i>	<i>1.0</i>
<i>Status:</i>	<i>Final</i>
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1 Introduction

This document is built to specify the coverage of IFC files created in the IFC Infrastructure Extension Deployment project and IFC Rail Phase 2 project. It is part of the official deliverables of the report for implementation and validation of IFC 4.3, also a part of IFC Rail Phase 2 final deliverables. Please refer to the *IFC Rail Phase 2 Final Report – Executive Summary* for further details.

2 Coverage

In all the IFC files created by IFC Infrastructure Extension Deployment project and IFC Rail Phase 2 project, the covered IFC entities are listed below.

Colour legend is applied as:

- Black indicates an existing entity,
- Red indicates a new or modified entity, and
- Blue indicates an existing IfcObjectDefinition subtype that has extended or modified predefined types¹².

These IFC entities and types are instantiated:

- IfcActorRole
- IfcAlignment
- IfcAlignmentCant
- IfcAlignmentCantSegment
- IfcAlignmentHorizontal
- IfcAlignmentHorizontalSegment
- IfcAlignmentSegment
- IfcAlignmentVertical
- IfcAlignmentVerticalSegment
- IfcAnnotation
- IfcApplication
- IfcArbitraryClosedProfileDef
- IfcArbitraryProfileDefWithVoids
- IfcAsset
- IfcAsymmetricIShapeProfileDef
- IfcAxis2Placement2D
- IfcAxis2Placement3D
- IfcAxis2PlacementLinear
- IfcBeam
- IfcBoolean
- IfcBorehole
- IfcBoundingBox
- IfcBridge
- IfcBridgePartTypeEnum
- IfcBuilding
- IfcBuildingElementProxy
- IfcBuildingStorey
- IfcBuiltElement
- IfcBuiltElementType

¹ New or modified subtypes of IfcObjectDefinition is marked Red

² Existing, new, modified, extended are in respect of IFC 4.2

- IfcCableCarrierSegment
- IfcCableSegment
- IfcCableSegmentType
- IfcCartesianPoint
- IfcCartesianPointList2D
- IfcCartesianPointList3D
- IfcCartesianTransformationOperator2D
- IfcCartesianTransformationOperator3D
- IfcCircle
- IfcCircleHollowProfileDef
- IfcCircleProfileDef
- IfcClassification
- IfcClassificationReference
- IfcClosedShell
- IfcClothoid
- IfcColourRgb
- IfcColourRgbList
- IfcCommunicationsAppliance
- IfcCommunicationsApplianceType
- IfcComplexProperty
- IfcCompositeCurve
- IfcCompositeCurveSegment
- IfcConnectedFaceSet
- IfcController
- IfcConversionBasedUnit
- IfcConversionBasedUnitWithOffset
- IfcCosine
- IfcCourse
- IfcCurveSegment
- IfcCurveStyle
- IfcDate
- IfcDerivedProfileDef
- IfcDerivedUnit
- IfcDerivedUnitElement
- IfcDimensionalExponents
- IfcDirection
- IfcDiscreteAccessory
- IfcDistributionChamberElement
- IfcDistributionPort
- IfcDistributionSystem
- IfcDoor
- IfcDoorStyle
- IfcEarthworksCut
- IfcEarthworksFill
- IfcElementAssembly
- IfcElementAssemblyType

- IfcElementQuantity
- IfcExternalReferenceRelationship
- IfcExtrudedAreaSolid
- IfcFace
- IfcFaceBasedSurfaceModel
- IfcFaceBound
- IfcFaceOuterBound
- IfcFacetedBrep
- IfcFacility
- IfcFacilityPart
- IfcFacilityPartCommonTypeEnum
- IfcFixedReferenceSweptAreaSolid
- IfcFooting
- IfcFurniture
- IfcGeometricCurveSet
- IfcGeometricRepresentationContext
- IfcGeometricRepresentationSubContext
- IfcGeometricSet
- IfcGradientCurve
- IfcGroup
- IfcIdentifier
- IfcIndexedColourMap
- IfcIndexedPolyCurve
- IfcIndexedPolygonalFace
- IfcIndexedPolygonalFaceWithVoids
- IfcJunctionBox
- IfcLabel
- IfcLengthMeasure
- IfcLine
- IfcLineIndex
- IfcLinearPlacement
- IfcLocalPlacement
- IfcMapConversion
- IfcMappedItem
- IfcMarineFacility
- IfcMarinePartTypeEnum
- IfcMaterial
- IfcMaterialConstituent
- IfcMaterialConstituentSet
- IfcMaterialDefinitionRepresentation
- IfcMaterialLayer
- IfcMaterialLayerSet
- IfcMaterialLayerSetUsage
- IfcMeasureWithUnit
- IfcMember
- IfcMirroredProfileDef

- IfcMobileTelecommunicationsAppliance
- IfcMonetaryUnit
- IfcNonNegativeLengthMeasure
- IfcNormalizedRatioMeasure
- IfcOffsetCurveByDistances
- IfcOrganization
- IfcOwnerHistory
- IfcParameterValue
- IfcPavement
- IfcPerson
- IfcPersonAndOrganization
- IfcPipeSegment
- IfcPipeSegmentType
- IfcPlaneAngleMeasure
- IfcPointByDistanceExpression
- IfcPolyLoop
- IfcPolygonalFaceSet
- IfcPolyline
- IfcPolynomialCurve
- IfcPositiveLengthMeasure
- IfcPostalAddress
- IfcPresentationLayerAssignment
- IfcPresentationLayerWithStyle
- IfcProductDefinitionShape
- IfcProject
- IfcProjectedCRS
- IfcPropertyBoundedValue
- IfcPropertyEnumeratedValue
- IfcPropertyEnumeration
- IfcPropertyListValue
- IfcPropertySet
- IfcPropertySingleValue
- IfcPropertyTableValue
- IfcQuantityArea
- IfcQuantityLength
- IfcQuantityVolume
- IfcRail
- IfcRailType
- IfcRailing
- IfcRailway
- IfcRailwayPartTypeEnum
- IfcRatioMeasure
- IfcReal
- IfcRectangleProfileDef
- IfcReferent
- IfcRelAggregates

- IfcRelAssignsToGroup
- IfcRelAssociatesMaterial
- IfcRelConnectsElements
- IfcRelConnectsPathElements
- IfcRelConnectsPorts
- IfcRelContainedInSpatialStructure
- IfcRelDeclares
- IfcRelDefinesByProperties
- IfcRelDefinesByType
- IfcRelInterferesElements
- IfcRelNests
- IfcRelPositions
- IfcRelReferencedInSpatialStructure
- IfcRelVoidsElements
- IfcRepresentationMap
- IfcRoad
- IfcRoadPartTypeEnum
- IfcRoundedRectangleProfileDef
- IfcSIUnit
- IfcSecondOrderPolynomialSpiral
- IfcSectionedSolidHorizontal
- IfcSegmentedReferenceCurve
- IfcSensor
- IfcSeventhOrderPolynomialSpiral
- IfcShapeRepresentation
- IfcShellBasedSurfaceModel
- IfcSign
- IfcSignal
- IfcSignalType
- IfcSine
- IfcSite
- IfcSlab
- IfcSlabType
- IfcSolidStratum
- IfcSpace
- IfcSpatialZone
- IfcSpecularExponent
- IfcSphere
- IfcStair
- IfcStyledItem
- IfcStyledRepresentation
- IfcSurfaceFeature
- IfcSurfaceStyle
- IfcSurfaceStyleRendering
- IfcSurfaceStyleShading
- IfcSwitchingDevice

- IfcSystem
- IfcSystemFurnitureElement
- IfcTelecomAddress
- IfcText
- IfcThermalTransmittanceMeasure
- IfcThirdOrderPolynomialSpiral
- IfcTrackElement
- IfcTrackElementType
- IfcTransportElement
- IfcTransportElementNonFixedTypeEnum
- IfcTransportElementType
- IfcTriangulatedFaceSet
- IfcTriangulatedIrregularNetwork
- IfcTrimmedCurve
- IfcUnitAssignment
- IfcUnitaryControlElement
- IfcVector
- IfcWall
- IfcWaterStratum
- IfcZone