File	Changes made	Comment
IRappBaseClasses.xsd	The following element type are changed from **xsd:dateTime** to **xsd:duration** • Mworking • WaitProcess • WaitOperator • WaitRepair • WaitSupplies • TurnedOff	These parameters are used to describe duration of time periods.
IRappBaseClasses.xsd	The following complex types are added: • IRcontourBaseType • IRdrillPlanBaseType	These complex types include ID information and left and right width of a tunnel contour.
IRcoordNav.xsd	**IRcurvePointType** definition updated. (still compatible with previous versions)	ContourIdTable, DrillPlanIdTable, and EquipmentData added (optional occurrence).
IRtypes.xsd	**IRangle** range changed from 0 – 360 to -360 – 360	Negative angles may be needed.
IRcoordNav.xsd	Schema Include **IRappBaseClasses.xsd**	
IRCuO.xsd	This is a newly added file to the package	This is an intermediate file to include all files in Commonly Used Objects (CuO). This file is created because some compilers do not recognize more imports from the same namespace.
DRbaseClasses.xsd	The following complex type or element name is changed: • DRigRefType to **DRrefType** • DRbitType to **DrillBitType** • Coordsystem to **CoordSystem**	Only name is altered. Content not changed.
DrillRig.xsd	**PointDepth** element is added to **PositionQuality** in **DRPQual**	
DrillRig.xsd	Restriction to **NumStops** element in HoleQualityData in DRPQual is added	
DrillRig.xsd	New elements added to **DRMWD**: • ReferenceData • PositionQuality	• ReferenceData: Quality reference data which matches the corresponding DRPLrefData object if IREDES Drill plan is used • PositionQuality: Local position used. That is: position of face (tunneling) or position of the plan (mining)

DrillRig.xsd	maxOccurs of **DetailedMWDdata** in DRMWD is set to unbounded instead of 5000	
DrillRig.xsd	Elements **FixPointIdTable** and **EquipmentData** are added to DRTunnelLine	
DrillRig.xsd	maxOccurs of **LaserTable** element in DRLaserLine is removed	
DrillRig.xsd	**TunnelIdRef** element is added under element LaserTable	Reference to the tunnel line where the laser is used.
DrillRig.xsd	Element **PegRange** under LaserTable of DRLaserLine is changed to PointDepthRange	This tag describes in what part of the tunnel the laser is valid.
DrillRig.xsd	**DRContour** and **DRFixPoints** elements are added to the schema	Main update of this version of schema
DrillRig.xsd	The following element types are modified from xsd:dateTime to xsd:duration: (corresponding line numbers are listed in brackets) • TimeRun (177) • TimeTram (182) • TimeHydPumpOn (222) • TimePos (227) • TimePerc (232) • TimeRodH (237) • TimeChBit (242) • TimeIdle (247) • TimeBolting (252) • TimePos (470) • TimeCollaring (475) • TimePerc (480) • TimeDrill (485) • TimeRodH (490) • TimeCoupling (495) • TimeUnCoupling (500) • TimeChBit (505) • TimeStop (510)	These elements are used to describe time durations. xsd:duration is more appropriate for these situations.
DrillRig.xsd	**DRMaint** element type content data changed from xsd:sequence to xsd:choice with minOccurs="1" (default) and maxOccurs="unbounded"	To regulate that "at least one" of the child elements is shown