



**Proposal for IREDES Drill Rig Profile Update V0.2- 24.09.2019**

VERSION 1.3	DISCUSSION VERSION 2.0	DESCRIPTION
<b>DRP...VERSION : IRVERSION</b> <b>DRP...DOWNWCOMP : IRVERSION</b> <b>„...“ EACH ELEMENT TYPE</b>	<b>DRPVersion : IRVersion</b> <b>DRPDownwcomp : IRVersion</b>	No changes of individual elements without changing the entire Profile version. In order to reduce the IREDES profile header, reduction to only one version and downwards compatibility description.
<b>DRPPLAN : IRPLANGENTYPE</b> <b>DRPLREFDATA : DREFTYPE (MAND)</b> <b>TUNLINEREF : IRTEXTLONG (OPT)</b> <b>LASERREF : IRTEXTLONG (OPT)</b> <b>SCREENINFO (OPT)</b> <b>SCREENTYPE : IRTEXT (OPT)</b> <b>SCREENSIZE : IRTEXT (OPT)</b>		Why parental element DRPLRefData mandatory, if all subsequent elements optional? ScreenInfo optional; Still Drill Rigs without HMIs sold in 2020?
<b>DRPPLAN : IRPLANGENTYPE</b> <b>POSITIONDATA : DRPOSITIONTYPE</b> <b>POSITIONID : IRTEXT (OPT)</b>		Make PositionID mandatory for clear assignment of work performed at future analysis.
<b>DRPPLAN : IRPLANGENTYPE</b> <b>DRILLPLAN</b> <b>HOLE : DRHOLETYPE</b> <b>TYPEOFHOLE : &lt;NONE&gt; (OPT)</b> <b>DRILLBITDIA : UNSIGNED SHORT (OPT)</b> <b>DRILLBITTYPE : &lt;NONE&gt; (OPT)</b>	<b>DRPPLAN : IRPlanGenType</b> DrillPlan Hole : DRHoleType TypeOfHole : <None> (Mand) DrillBit : DRDrillBitSelect (Mand) DrillBitDia : UnsignedShort (Mand) DrillBitType : <None> (Mand)	Make TypeOfHole mandatory for clear assignment of work performed at future analysis. Make Drill Bit Selection with subsequent elements mandatory for clear assignment of work performed at future analysis. Remove at Drill Bit Type selection element “undefined”, as already fulfilled with



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		selection option “others” Introduction of own Drill Bit selection type. Introduced as required for determination of Drill Hole Type and operational boom charging.
DRPPLAN : IRPLANGENTYPE DRILLPLAN BOOMSEQ BOOMID : DRBOOMID		1..100 required or 1..10 sufficient? #Make IREDES more performant for M2M communication.
DRPPLAN : IRPLANGENTYPE DRILLPLAN BOOMSEQ SEQUENCE		1..1000 required or 1..100 sufficient? #Make IREDES more performant for M2M communication.
DRPPLAN : IRPLANGENTYPE DRILLPLAN LINETABLE		1...100 required or 1..100 sufficient? #Make IREDES more performant for M2M communication.
DRPPLAN : IRPLANGENTYPE DRILLPLAN DRILLBITS		1..* required or 1..100 sufficient? #Make IREDES more performant for M2M communication.
DRPPLAN : IRPLANGENTYPE DRILLPLAN DRILLBITS BIT BITCHANGERECOMM : <NONE> BITCHANGED : <NONE>	DRPPlan : IRPlanGenType DrillPlan DrillBits Bit BoomId : <None> DrillBit : DRDrillBitSelect	Making description of Drill Bit application more clear. Information on Bit Changed finds no application while drill planning. Bit Change Recommendation requires a clear definition for which instances a change is recommended.



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<p><b>BOOMID : &lt;NONE&gt;</b></p>	<p>DrillBitDia : UnsignedShort                      DrillBitType : &lt;None&gt;                      BitChangeRecomm : &lt;None&gt;</p>	
<p><b>DRPQUAL : IRPLANGENTYPE</b>  <b>POSITIONQUALITY : DRPOSITIONTYPE</b>  <b>SETUPTYPE : IRTEXTSHORT</b>  <b>POINTDEPTH : DOUBLE</b></p>		<p>Which additional information / application use is generated by these values?</p>
<p><b>DRPQUAL : IRPQUALGENTYPE</b>  <b>DRILLQUALITY (OPT)</b>  <b>HOLEQUALITYDATA (MAND)</b>  <b>HOLE : DRHOLETYPE (MAND)</b>  <b>BOOMID : DRBOOMID (OPT)</b>  <b>FLUSHMODE : &lt;NONE&gt; (OPT)</b>  <b>DRILLSEQ : UNSIGNEDSHORT (OPT)</b></p>	<p>DRPQual : IRPQualGenType                      DrillQuality (Opt)                      HoleQualityData (Mand)                      OperationalParameters (Mand)                      BoomID : DRBoomID (Mand)                      Flushmode : &lt;None&gt; (Mand)                      DrillSeq : UnsignedShort (Mand)</p>	<p>Introduction of new parental element “Operational Parameters” for better classification. Subordinated parameters do not belong directly to Drill Hole Type definition.                      Flushmode provides selection mode “Others” + “Undefined”. Delete “Undefined”.                      Make operational parameters available.                      #Make IREDES provide a sharper profile in what is going to be delivered as basic information.</p>
<p><b>DRPQUAL : IRPQUALGENTYPE</b>  <b>DRILLQUALITY</b>  <b>HOLEQUALITYDATA</b>  <b>STARTHOLETIME : DATETIME</b>  <b>ENDHOLETIME : DATETIME</b></p>	<p>DRPQual : IRPQualGenType                      DrillQuality                      HoleTimingData                      ActivityTime                      StartHoleTime : DateTime                      EndHoleTime : DateTime</p>	<p>Introduction of a new parental activity timing element. Relocation of Start Hole Time and End Hole Time to Hole Timing Data for better suitability.</p>



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<p><b>DRPQUAL : IRPQUALGENTYPE</b>  <b>DRILLQUALITY</b>  <b>HOLEQUALITYDATA</b>  <b>HOLETIMINGDATA</b>                      ...  <b>JAMMING : UNSIGNEDSHORT</b>  <b>AVGPENETRATION : IRVELOCITY</b>  <b>HSTATUS : &lt;NONE&gt;</b>  <b>NUMSTOPS : UNSIGNEDSHORT</b>  <b>DRILLEDINROCK : FLOAT</b>  <b>PLANTOROCK : FLOAT</b></p>	<p>DRPQual : IRPQualGenType                      DrillQuality                      HoleQualityData                      QualityFeedback (Opt)                      Jamming : unsignedShort                      AvgPenetration : IRvelocity                      Hstatus : &lt;None&gt;                      NumStops : unsignedShort                      DrilledInRock : float                      PlanToRock : float</p>	<p>Introduction of a new parental element Quality Feedback, as listed values do not belong to timing data.</p>
<p><b>DRPQUAL : IRPQUALGENTYPE</b>  <b>DRILLQUALITY</b>  <b>HOLEQUALITYDATA</b>  <b>HOLETIMINGDATA</b>  <b>BOLTINFORMATION : DRBOLTTYPE</b>  <b>BOLTTYPE : &lt;NONE&gt;</b>                      ...  <b>BOLTINSTSTART : DATETIME</b>  <b>BOLTINSTSTOP : DATETIME</b></p>	<p>DRPBolt : IRPBoltGenType                      BoltQuality                      BoltInformation : DRboltTpye                      BoltType : &lt;None&gt;                      ...                      ActivityTime                      BoltInstStart : DateTime                      BoltInstStop : DateTime</p>	<p>Bolting considered as an individual task: Would it make sense to introduce a separate equipment type for bolters which inherits ALL information from the DrillRigs plus the mandatory Bolt reporting?</p>