Hatfield-1206: Identify steep slopes to assess potential constraints to access

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Challenge

Challenge ID:	HCP-1206		Originator:	Onshore:	Hatfield		
Title:	Identify steep slopes to assess potential constraints to access.						
Theme:	ON 1.2: Seismic Planning - Identification of adverse terrain for trafficability						
Consortium	RPS Group		Interviewed RPS Grou		מוו		
Lead:			Company:		up		
Geography:	ON.REG.00 - Generic onshore						
Challenge Description							
What is not possible / not adequately addressed at present?							
Steepness of terrain governs what source point options are available. Vibrators and all equipment and personnel							
are restricted by where they can go in steep terrain (need to know to mitigate and understand cost options).							
Source points are quite often offset away from design location which effects seismic coverage. In projects where							
a mixed source point option is available (vibrator and dynamite) better planning can be initiated to allow for the							
What effect does this challenge have on operations?							
A lack of a high resolution terrain model leaves an operation susceptible to ad hoc offsetting on the fly which							
may not be beneficial to the geophysical target. Or in the case of mixed source surveys, an over use of more							
expensive drilling options where suitable compromises in planning could have been considered in advance to							
reduce costs. A good digital terrain model will help source point planning and to understand and/or verify why							
source locations may need to be or have been offset. In the case of man portable drilling operations, heavy							
equipment has to be transported from drill location to drill location which has an increased health and safety risk							
in steeper terrains.							
Thematic inform	ation Terra	Terrain information					
requirements:	Торо	Topographic information					
What do you currently do to address this challenge?							
How is this challenge conventionally addressed?							
Create slope models. LiDAR bare earth digital terrain models. SRTM data or other existing terrain models can work suitably for open terrain							
What kind of solutions do you envisage could address this challenge?							
High-resolution satellite derived terrain models where not affected by vegetation.							
What is your view on the canability of technology to most this need?							
Are you currently using EQ tech? If not why not?							
Would be beneficial to have a cost-effective and better resolution ontion to the freely available 00m resolution							
SRTM data.							
Challenge Classification							
Impact on Lifecycle (0=none, Climate / Topography / Urgency:							
4=h1gh):							
Pre-license:	2		Climate class:	1	Generic climate		
Exploration:	4		Topographic c	lass:	Not specific		
Development:	2		Seasonal varia	tions:	Any season		
Production:	2		Impact area:		Health and Safety, Cost reduction		
Decommissionin	lg: 1		Technology un	gency:	2 - Short term (2-5 years)		

Challenge Information Requirements					
Update frequency:	Snapshot				
Data currently used:	LiDAR, high resolution imagery				
Spatial resolution:	License				
Thematic accuracy:	Not specific				
Required formats:	Not Specific				
Timeliness (Vintage):	Reference data				
Geographic extents:	Basin				
Existing standards:	None				

Relevant products

Content by label

There is no content with the specified labels