Hatfield-1203: Identify areas with soft sediments to plan access and assess hazards

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Challenge

Challenge ID:	HCP-1203	Originator:	Onshore: Hatfield
Title:	**Identify areas with soft sediments to plan access and assess hazards.**		
Theme:	ON 1.2: Seismic Planning - Identification of adverse terrain for trafficability		
Consortium Lead:	RPS Group	Interviewed Company:	RPS Group
Geography:	ON.REG.00 - Generic onshore		

Challenge Description

What is not possible / not adequately addressed at present?

Knowing access limitations and potential ground conditions is an important factor in planning effective seismic operations. Efficiently moving both equipment and people around is critical to completing a project in good speed. In addition, from a safety perspective, being able to map emergency response times and how (and what type of transport/vehicle) to get from a particular point to any point within the working area may prove critical in a safety of life situation.

What effect does this challenge have on operations?

Areas of soft terrain affect how equipment and personnel are moved around the work area and also the choice of survey equipment utilised. Heavy vibrators may not be able access a particular area nor a truck-mounted drill unit. Field scouting/reconnaissance is required in advanced of operations.

Thematic information requirements:	Terrain information Distribution and status of infrastructure Land use Land cover Topographic information Water quantity

What do you currently do to address this challenge?
How is this challenge conventionally addressed?

Use satellite imagery to identify potential areas and then verify in the field.

What kind of solutions do you envisage could address this challenge?

Improved classification including seasonal variations to identify optimum survey window. Reduced field scouting/reconnaissance efforts pre-survey and more realistic survey timings and costs proposed.

What is your view on the capability of technology to meet this need?
Are you currently using EO tech? If not, why not?

None

Challenge Classification

Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	2	Climate class:	Generic climate
Exploration:	4	Topographic class:	Not specific
Development:	2	Seasonal variations:	Wet season focus
Production:	2	Impact area:	Health and Safety, Cost reduction
Decommissioning:	2	Technology urgency:	3 - Immediately (0-2 years)

Challenge Information Requirements

Update frequency:	Snapshot
Data currently used:	DEM, high resolution imagery (including Google Earth)
Spatial resolution:	Basin
Thematic accuracy:	Not specific
Required formats:	Not Specific
Timeliness (Vintage):	Reference data
Geographic extents:	Regional, Basin
Existing standards:	None

Relevant products

Content by label

There is no content with the specified labels