Hatfield-1201: Identify up-to-date general land use patterns to plan access and apply safe setback distances.

Identify up-to-date general land use patterns to plan access and apply safe setback distances

Challenge

Challenge ID:	HCP-1201	Originator:	Onshore: Hatfield
Title:	**Identify up-to-date general land use patterns to plan access and apply safe setback distances.**		
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?
Understanding the complete land use of a project area is vital to optimise the seismic survey. Planning lines to reduce the impact of safe distance limitations while designing survey to maximise the potential usefulness of the final deliverable can be a balance of the available information. Need information on: houses, buildings, roads, pipelines, wells, water courses, bridges, power lines, etc. required to apply safe distance buffers.
What effect does this challenge have on operations?
Without up to date information, on the fly changes may be required to the planned survey line design and gaps in source acquisition occur. Sufficient mitigation is more likely with adequate advance knowledge.

Thematic information requirements:	Distribution and status of infrastructure Land use Topographic information Water quantity Sub-surface features

What do you currently do to address this challenge? How is this challenge conventionally addressed?
Combination of available satellite imagery with DEM data.
What kind of solutions do you envisage could address this challenge?
Potentially some kind of reflectance value to help identify metal, pipes and other hard and soft surfaces etc.
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:	Any season
Production:	1	Impact area:	Environmental, Cost reduction, Data Quality
Decommissioning:	1	Technology urgency:	3 - Immediately (0-2 years)

Challenge Information Requirements

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

Relevant products

Content by label

There is no content with the specified labels