

Hatfield-5103: Identify subsurface infrastructure for planning of pipeline crossings

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Challenge

Challenge ID:	HCP-5103	Originator:	Onshore: Hatfield
Title:	Identify subsurface infrastructure for planning of pipeline crossings.		
Theme:	ON 5.1: Logistics planning and operations - Baseline mapping of terrain and infrastructure		
Consortium Lead:	Arup	Interviewed Company:	Arup
Geography:	ON.REG.00 - Generic onshore		
Challenge Description			
What is not possible / not adequately addressed at present?			
Identify constraints to either be avoided or allow for an appropriate design mitigation strategy to be developed.			
What effect does this challenge have on operations?			
Identification of hazards (buried structures, obstructions, existing buried utilities and pipelines, etc.) and risk prior to construction of crossings supports the development of appropriate mitigation strategies.			
Thematic information requirements:	Distribution and status of infrastructure Land use Sub-surface features		
What do you currently do to address this challenge?			
How is this challenge conventionally addressed?			
Undertaking searches with utility companies and local authorities. Carry out desktop study research including review of historic archive data (topo maps, air photographs, satellite imagery), site walkover surveys.			
What kind of solutions do you envisage could address this challenge?			
Integrate high resolution optical / thermal and geophysical methods including GPR.			
What is your view on the capability of technology to meet this need?			
Are you currently using EO tech? If not, why not?			
Already feasible, but time consuming and records may be incomplete. Use airborne geophysics (EM methods).			
Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	0	Climate class:	Generic climate
Exploration:	0	Topographic class:	Not specific
Development:	4	Seasonal variations:	Any season
Production:	2	Impact area:	Cost reduction
Decommissioning:	2	Technology urgency:	3 - Immediately (0-2 years)
Challenge Information Requirements			
Update frequency:	Snapshot		
Data currently used:	Industry reports, government reports		
Spatial resolution:	Regional		
Thematic accuracy:	Not specific		
Required formats:	Not specific		
Timeliness (Vintage):	Within six months		
Geographic extents:	License		

Existing standards:	None
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Relevant products

Content by label

There is no content with the specified labels