

OTM-018: Identifying existing O&G infrastructure for facility site selection

Identifying existing O&G infrastructure for facility site selection

Challenge

Challenge ID	OTM:018				
1 Title	Identifying existing O&G infrastructure for facility site selection				
2 Theme ID	ON 5.3: Logistics planning and operations - Facility siting, pipeline routing and roads development				
3 Originator of Challenge	Onshore: OTM				
4 Challenge Reviewer / initiator					
General description		Overview of Challenge			
5 What is the nature of the challenge? (What is not adequately addressed at present?)	Selecting an appropriate development site for an onshore facility is a complex task. One key consideration is the ability and cost of tying a facility into existing O&G infrastructure. Technology to include this in the early planning stage would be very useful.				
6 Thematic information requirements	4. Obtain detailed land-use information, 5. Identify location and condition of transport infrastructure, 9. Obtain detailed imagery of assets, 12. Identify the presence of sub-surface or covered infrastructure,				
7 Nature of the challenge - What effect does this challenge have on operations?	To make the planning of facility infrastructure more efficient would reduce planning costs.				
8 What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Existing mapping, although this often lacks sufficient detail				
9 What kind of solution do you envisage could address this challenge?	Very high to medium resolution EO data for infrastructure monitoring.				
10 What is your view on the capability of technology to meet this need? – are you currently using EO tech? If not, why not?	EO could be a useful complimentary technology				
Challenge classification					
11 Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
Score from impact quantification [1]	2	2	3	1	1
12 Climate classification	NOT CLIMATE SPECIFIC				
13 Geographic context/restrictions	Generic onshore (Unspecified)				
14 Topographic classification / Offshore classification	Generic onshore (Unspecified)				
15 Seasonal variations	Any season				
16 Impact Area	Reduced capital expenditure				
17 Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
Information requirements					
18 Update frequency	Not important				
19 Data Currently used					
20 Spatial resolution					
21 Thematic accuracy					
22 Example formats					
23 Timeliness	Within a month				
24 Geographic Extent	district area				
25 Existing standards					

[1] Impact quantification scores: 4 – Critical/ enabling; 3 – Significant/ competitive advantage; 2 – Important but non-essential; 1 – Nice to have; 0 – No impact, need satisfied with existing technology

Relevant product

- [Product Sheet: Land Use](#)
- [Product Sheet: Soil Sealing](#)