OTM-050: Identifying near surface infrastructure

Identifying near surface infrastructure

Challenge

	Challenge ID	OTM:050				
1	Title	Identifying near surface infrastructure				
2	Theme ID	ON 5.1: Logistics planning and operations - Baseline mapping of terrain and infrastructure				
3	Originator of Challenge	Onshore: OTM				
4	Challenge Reviewer / initiator	Petronas				
	General description	Overview of Challenge				
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Seismic shots cannot be deployed within a specific proximity of structures and underground services (e.g. pipelines) as the vibrations may damage the integrity of these. Identification of infrastructure such as disused well-pads, sub-surface services is necessary prior to planning seismic surveys.				
6	Thematic information requirements	12. Identify the presence of sub-surface or covered infrastructure,				
7	Nature of the challenge - What effect does this challenge have on operations?	The impact of damage caused is proportional to the value of the asset and this can potentially be significant. For example, it could lead to the collapse of a building or rupturing of a pipeline that could take weeks or longer to repair.				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Online imagery, survey records, construction drawings, ground survey teams				
9	What kind of solution do you envisage could address this challenge?					
10	What is your view on the capability of technology to meet this need? – are you currently using EO tech? If not, why not?					
	Challenge classification					
11	Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.
	Score from impact quantification [1]	3	4	3	0	3
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	Health and Safety				
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency	Snap shot requirement				
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy					
22	Example formats					
23	Timeliness	Reference data - timeliness not important				
24	Geographic Extent	reservoir footprint				
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 products

Content by label

There is no content with the specified labels