OTM-039: Selection of development sites

Selection of development sites

Challenge

	Challenge ID	OTM:039				
1	Title	Selection of development sites				
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	PEMEX, Statoil, Sasol				
	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. The site needs to be accessible, safe, connect to local O&G infrastructure (if any) and have limited impact on the environment.				
6	Thematic information requirements	1. Obtain detailed topographic information, 3. Obtain detailed vegetation information, 4. Obtain detailed land-use information, 5. Identify location and condition of transport infrastructure, 9. Obtain detailed imagery of assets, 11. Determine li				
7	Nature of the challenge - What effect does this challenge have on operations?	Reduction in planning costs and potentially better located facilities, thereby (potentially) reducing opex, improving HSE etc.				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	existing mapping and recorded data, but this rarely is sufficient				
9	What kind of solution do you envisage could address this challenge?	Very high to medium resolution EO data to derive land cover and land use information. Resolution depending on covered area and size of analysis objective.				
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]	3	1	3	0	0
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	reduction in planning costs				
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency	depending on sensor and application				
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy	80-90%				
22	Example formats	Standardized geo-spatial formats (e.g. shapefile, geotiff or KML)				
23	Timeliness	Reference data - timeliness not important				
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 products

Content by label

There is no content with the specified labels