OTM-024: Urban encroachment on O&G assets

Urban encroachment on O&G assets

Challenge

	Challenge ID	OTM:024				
1	Title	Urban encroachment on O&G assets				
2	Theme ID	ON 5.4: Logistics planning and operations - Monitoring of assets				
3	Originator of Challenge	Onshore: OTM				
4	Challenge Reviewer / initiator	PEMEX, Tullow				
	General description	Overview of Challenge				
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Shut-in wells or other assets that are non-operational for a period of time can quickly be engulfed by local populations as the urban area sprawls, typically as a slum. If we later wish to operate this well, our access has been lost and it can be difficult to move people out of the area.				
6	Thematic information requirements	4. Obtain detailed land-use information,				
7	Nature of the challenge - What effect does this challenge have on operations?	If we can identify these encroachments as soon as they happen, we can act quickly to deter people and therefore retain access to our assets.				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	On the ground surveys, together with historical well data. However this can often be inaccurate. Ground surveys are often difficult to conduct through slum areas, and where infrastructure has become fully engulfed.				
9	What kind of solution do you envisage could address this challenge?	Very high to medium resolution EO data. Resolution depends 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]	0	1	2	3	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	Health and safety, operational cost reduction				
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency	Once per month				
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy					
22	Example formats	Standardized geo-spatial formats (e.g. shapefile, geotiff or KML)				
23	Timeliness	Within six months				
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