

OTM-035: Assessing the social impact of construction work

Assessing the social impact of construction work

Challenge

Challenge ID	OTM:035					
1 Title	Assessing the social impact of construction work					
2 Theme ID	ON 4.2: Environmental monitoring - Continuous monitoring of changes throughout the lifecycle					
3 Originator of Challenge	Onshore: OTM					
4 Challenge Reviewer / initiator	PEMEX, Statoil, Shell, Chevron					
General description		Overview of Challenge				
5 What is the nature of the challenge? (What is not adequately addressed at present?)	Monitoring the social impact of O&G development e.g. displacement of communities/ tribes, changes in land use or impacts caused by construction activity					
6 Thematic information requirements	4. Obtain detailed land-use information,					
7 Nature of the challenge - What effect does this challenge have on operations?	The construction site and its impact on the environment can be relatively intense during the early E&P phases, particularly when the site is being constructed. This may impact both the immediate, local society in or distant societies such as those along					
8 What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	This manly done by field surveys which is costly, labour intensive and because it's "point-based", the context of the larger ecosystem can be misunderstood.					
9 What kind of solution do you envisage could address this challenge?	EO-based products can provide consistent, timely information on social impacts of O&G development. High to very high resolution land cover products based on EO data would be useful for analysis of areas in the close proximity to particular assets. For la					
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 providing information on population density, building inventory, exposure mapping, settlement mapping and site location					
Challenge classification						
11 Lifecycle stage	Pre license	Exp.	Dev.	Prod.	Decom.	
Score from impact quantification [1]	4	4	4	4	4	
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	Social impact					
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	within six months					
24 Geographic Extent						
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

