OTM-029: Prelicensing site selection

Prelicensing site selection

Challenge

	Challenge ID	OTM:029
1	Title	Prelicensing site selection
		Mapping environment in remote or unexplored areas (crude, comprehensive inventory)
2	Theme ID	ON 4.1: Environmental monitoring - Baseline historic mapping of environment and ecosystems
3	Originator of Challenge	Onshore: OTM
4	Challenge Reviewer / initiator	PEMEX, Statoil, PetroSA, Shell, Eni, Sasol, Exxon, Tullow
	General description	**Overview of Challenge**
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Obtaining an adequate baseline environmental dataset in remote or frontier areas, that have previously been subjected to little or no monitoring is a time consuming process.
		"- terrain"
		- medium resolution land cover (habitats) (forest, grassland, etc.)
		It is critical that O&G operations are proven to be sustainable and that impact on the natural environment is limited. Unbiased and consistent data is required to prove this. For the results of continuous monitoring to be analysed correctly, they must be judged against an accurate baseline. The longer the time-frame that this baseline information has been collated over, the more natural fluctuations it will encompass - this is important.
6	Thematic information requirements	3. Obtain detailed vegetation information, 4. Obtain detailed land-use information, 5. Identify location and condition of transport infrastructure, 6. Identify inland water bodies and determine water quality, 10. Fauna and presence and patterns,
7	Nature of the challenge - What effect does this challenge have on operations?	Obtaining baseline information over a large area is time consuming and expensive. It can also be difficult to obtain access to property not owned or under lease. We must ground survey parts of the area, but this can lead to bias or unrepresentative resu
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Use of existing base maps (which are often inaccurate), together with on-the-ground surveys.
9	What kind of solution do you envisage could address this challenge?	Medium resolution land cover products based on EO data.
		Resolution depends on covered area and size of monitoring 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	

		Pre license	Exp.	Dev.	Prod.	Decom.
11	Lifecycle stage					
	Score from impact quantification [1]	4	0	0	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	Faster time to production
17	Technology Urgency	Immediately (0-2 years)
	(How quickly does the user need the solution)	
	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	regional area
25	Existing standards	

Relevant products

Content by label

There is no content with the specified labels