OTM-013: Flagging environmentally sensitive areas prior to seismic surveys

Flagging environmentally sensitive areas prior to seismic surveys

Challenge

	Challenge ID	OTM:013
1	Title	Flagging environmentally sensitive areas prior to seismic surveys
2	Theme ID	ON 1.3: Seismic Planning - Identification of environmentally sensitive areas
3	Originator of Challenge	Onshore: OTM
4	Challenge Reviewer / initiator	PEMEX, Ramani, PetroSA, Shell, Eni, Exxon, Tullow, Petronas, Chevron
	General description	**Overview of Challenge**
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Planning the layout of a seismic survey/ seismic lines needs to take into consideration the surrounding environment. Flagging of environmentally significant areas allows for the selection of appropriate seismic lines and methodology e.g. thumpers vs. explosives
		What is the impact of the seismic line, what damage could be done to the existing environment, what steps can be made to mitigate this, how is it likely to recover. Sometimes we enter governmental protected areas (ie national parks) and permits will be needed. To what extent the survey will encroach is important to understand.
6	Thematic information requirements	2. Obtain detailed terrain characterisation, 3. Obtain detailed vegetation information, 10. Fauna and presence and patterns 14. Obtain detailed imagery of the surface,
7	Nature of the challenge - What effect does this challenge have on operations?	Methodology to be adopted needs to be sympathetic to the surrounding environment to avoid breaching environmental legislation / targets. By not meeting these, the operation may reflect poorly on the company and result in licenses not being granted, or b
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Base maps (which are often inaccurate), together with on-the-ground surveys.
		If permission is not granted or delayed can be go round the area or shoot another part first.
9	What kind of solution do you envisage could address this challenge?	Better mapping to enable remote identification to be undertaken, and to facilitate environmental impact assessments.
		Very high to medium resolution EO data to monitor environmentally sensitive areas.
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	

		Pre license	Exp.	Dev.	Prod.	Decom.
11	Lifecycle stage					
	Score from impact quantification [1]	2	4	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	Environment, HSE
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)
	Information requirements	
18	Update frequency	Varies, depending on length of survey. Typically snap shot/ monthly
19	Data Currently used	
20	Spatial resolution	
21	Thematic accuracy	
22	Example formats	
23	Timeliness	Within a month
24	Geographic Extent	Reservoir footprint
25	Existing standards	

Relevant products

Content by label

There is no content with the specified labels