

# OTM-015: Geological and terrain base maps for development of environmental baseline

## Geological and terrain base maps for development of environmental baseline

### Challenge

	Challenge ID	OTM:015				
1	Title	Geological and terrain base maps for development of environmental baseline				
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	Ramani, Statoil, PetroSA, Shell, Exxon, Tullow, Petronas				
	General description	Overview of Challenge				
5	What is the nature of the challenge? (What is not adequately addressed at present?)	<p>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 that can influence the critical path of a project.</p> <p>It is essential that O&amp;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, and it will therefore be more representative of the actual environment.</p>				
6	Thematic information requirements	1. Obtain detailed topographic information, 2. Obtain detailed terrain characterisation,				
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. We must ground survey parts of the area, but this can lead to bias or unrepresentative results because there is a tendency to target the most important or 'environmentally				
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Out of date or poorly detailed basemaps are used.				
9	What kind of solution do you envisage could address this challenge?					
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]	2	2	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	Environmental				
17	Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
	Information requirements					
18	Update frequency	Not important				
19	Data Currently used					
20	Spatial resolution					
21	Thematic accuracy					
22	Example formats					
23	Timeliness	Within six months				
24	Geographic Extent	District area to 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