OTM-010: Monitoring ground movement along pipelines

Monitoring ground movement along pipelines

Challenge

	Challenge ID	OTM:010					
1	Title	Monitoring ground movement along pipelines					
2	Theme ID	ON 3.2: Subsidence monitoring - Infrastructure monitoring					
3	Originator of Challenge	Onshore: OTM					
4	Challenge Reviewer / initiator	BP, PEMEX, Sasol, Exxon					
	General description	Overview of Challenge					
5	What is the nature of the challenge? (What is not adequately addressed at present?)	Pipeline route planning needs to accommodate ground subsidence / movement considerations. Two phases: historical and ongoing. Ongoing: Ground movement can damage pipelines / threaten integrity of infrastructure.					
		ii ground movement likely to cause damage can be identified early, then mitigation can potentially both reduce impact of damage and potentially reduce costs of repair.					
6	Thematic information requirements	1. Obtain detailed topographic information, 9. Obtain detailed imagery of assets, 13. Monitor ground movement,					
7	Nature of the challenge - What effect does this challenge have on operations?	Monitoring and applying suitable intervention measures.					
8	What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Currently, pip slow process, time can be li much more eff	Currently, pipelines are monitored by maintenance crews. However, this is a slow process, and the amount of pipeline that can be covered in a set period of time can be limited. A remote way of monitoring would be very useful and much more efficient.				
9	What kind of solution do you envisage could address this challenge?	Ongoing data	to highlight g	round moveme	nt which could l	ead to failure events	
	What is your view on the conchility of technology to	EO could be a useful complimentary technology					
10	meet this need? – are you currently using EO tech? If not, why not?	EO could be a	userul compl	imentary techn	ology		
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[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