

# OTM-065: Floodplain mapping

## Floodplain mapping

### Challenge

Challenge ID	OTM:065				
1 Title	Floodplain mapping				
2 Theme ID	ON 4.3: Environmental monitoring - Natural HazardRisk Analysis				
3 Originator of Challenge	Onshore: OTM				
4 Challenge Reviewer / initiator	Statoil, PetroSA, Shell, Ardan-Africa				
General description		Overview of Challenge			
5 What is the nature of the challenge? (What is not adequately addressed at present?)	We need to identify areas of floodplain that could become inundated e.g. via flash floods				
6 Thematic information requirements	1. Obtain detailed topographic information, 3. Obtain detailed vegetation information, 4. Obtain detailed land-use information, 6. Identify inland water bodies and determine water quality,				
7 Nature of the challenge - What effect does this challenge have on operations?	This information can be used in conjunction with, for example, our emergency action plan or the locating of assets or infrastructure				
8 What do you currently do to address this challenge?/ How is this challenge conventionally addressed?	Out of date or insufficiently detailed basemaps are used.				
9 What kind of solution do you envisage could address this challenge?	High-resolution imagery from optical satellites in combination with satellite radar imagery is used to monitor floodplain areas and identify assets or infrastructure. This can e.g. support civil defence activities.				
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]	0	2	2	2	2
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	Health and safety, strategic decision maker				
17 Technology Urgency (How quickly does the user need the solution)	Immediately (0-2 years)				
Information requirements					
18 Update frequency	Snap shot requirement				
19 Data Currently used	Topographic				
20 Spatial resolution	Topographic				
21 Thematic accuracy					
22 Example formats					
23 Timeliness	Within a month				
24 Geographic Extent	Development area				
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

