## OTM-035: Assessing the social impact of construction work

## Assessing the social impact of construction work

## Challenge

|  | Challenge ID  | OTM:035   |  |                      |                    |        |  |  |
|--|---|---|--|----------------------|--------------------|--------|--|--|
| 1  | Title   | Assessing the social impact of construction work  |  |                      |                    |        |  |  |
| 2  | Theme ID  | ON 4.2: Environmental monitoring - Continuous monitoring of changes throughout the lifecycle  |  |                      |                    |        |  |  |
| 3  | Originator of Challenge   | Onshore: OTM  |  |                      |                    |        |  |  |
| 4  | Challenge Reviewer / initiator  | PEMEX, Statoil, Shell, Chevron  |  |                      |                    |        |  |  |
|  | General description   | Overview of Challenge   |  |                      |                    |        |  |  |
| 5  | What is the nature of the challenge? (What is not adequately addressed at present?)   | Monitoring the social impact of O&G development e.g. displacement of communities/ tribes, changes in land use or impacts caused by construction activity  |  |                      |                    |        |  |  |
| 6  | Thematic information requirements   | 4. Obtain detailed land-use information,  |  |                      |                    |        |  |  |
| 7  | Nature of the challenge - What effect does this challenge have on operations?   | The construction site and its impact on the environment can be relatively intense during the early E&P phases, particularly when the site is being constructed. This may impacts both the immediate, local society in or distant societies such as those along  |  |                      |                    |        |  |  |
| 8  | What do you currently do to address this challenge?/<br>How is this challenge conventionally addressed?   | This manly done by field surveys which is costly, labour intensive and because it's "point-based", the context of the larger ecosystem can be misunderstood.  |  |                      |                    |        |  |  |
| 9  | What kind of solution do you envisage could address this challenge?   | EO-based products can provide consistent, timely information on social impacts of O&G development. High to very high resolution land cover products based on EO data would be useful for analysis of areas in the close proximity to particular assets. For la  |  |                      |                    |        |  |  |
| 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 providing information on population density, building inventory, exposure mapping, settlement mapping and site location   |  |                      |                    |        |  |  |
|  | Challenge classification  |   |  |                      |                    |        |  |  |
| 11   | Lifecycle stage   | Pre license   | Exp.   | Dev.                 | Prod.              | Decom. |  |  |
|  | Score from impact quantification [1]  | 4   | 4  | 4                    | 4                  | 4      |  |  |
|  |   |   |  |                      |                    |        |  |  |
| 12   | Climate classification  | NOT CLIMAT  | TE SPECIFIO                                  | NOT CLIMATE SPECIFIC |                    |        |  |  |
| 13   | Geographic context/restrictions   | Generic onshore (Unspecified)   |  |                      |                    |        |  |  |
| 14   |   | Generic onsho   | re (Unspecif                                 | ied)                 |                    |        |  |  |
|  | Topographic classification / Offshore classification  | Generic onsho   | ` •  | *                    |                    |        |  |  |
| 15   | Topographic classification / Offshore classification<br>Seasonal variations   |   | ` •  | *                    |                    |        |  |  |
|  |   | Generic onsho   | ` •  | *                    |                    |        |  |  |
| 15   | Seasonal variations   | Generic onsho<br>Any season   | ore (Unspecif                                | *                    |                    |        |  |  |
| 15<br>16                                     | Seasonal variations<br>Impact Area  | Generic onsho<br>Any season<br>Social impact  | ore (Unspecif                                | *                    |                    |        |  |  |
| 15<br>16                                     | Seasonal variations Impact Area Technology Urgency  | Generic onsho<br>Any season<br>Social impact  | ore (Unspecif                                | *                    |                    |        |  |  |
| 15<br>16                                     | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution)  | Generic onsho<br>Any season<br>Social impact  | ore (Unspecif<br>0-2 years)                  | ied)                 | _                  |        |  |  |
| 15<br>16<br>17                               | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements   | Generic onsho<br>Any season<br>Social impact<br>Immediately (   | ore (Unspecif<br>0-2 years)                  | ied)                 | _                  |        |  |  |
| 15<br>16<br>17<br>18                         | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements Update frequency  | Generic onsho<br>Any season<br>Social impact<br>Immediately (   | ore (Unspecif<br>0-2 years)                  | ied)                 | _                  |        |  |  |
| 15<br>16<br>17<br>18<br>19                   | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements Update frequency Data Currently used  | Generic onsho<br>Any season<br>Social impact<br>Immediately (   | ore (Unspecif<br>0-2 years)                  | ied)                 | _                  |        |  |  |
| 15<br>16<br>17<br>18<br>19<br>20             | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements Update frequency Data Currently used Spatial resolution                                   | Generic onsho<br>Any season<br>Social impact<br>Immediately (General Control of the Contro | ore (Unspecif<br>0-2 years)<br>sensor and ap | pplication           | pefile, geotiff or | KML)   |  |  |
| 15<br>16<br>17<br>18<br>19<br>20<br>21       | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements Update frequency Data Currently used Spatial resolution Thematic accuracy                 | Generic onsho<br>Any season<br>Social impact<br>Immediately (General Control of the Contro | ore (Unspecif<br>0-2 years)<br>sensor and ap | pplication           | pefile, geotiff or | KML)   |  |  |
| 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 | Seasonal variations Impact Area Technology Urgency (How quickly does the user need the solution) Information requirements Update frequency Data Currently used Spatial resolution Thematic accuracy Example formats | Generic onsho<br>Any season<br>Social impact<br>Immediately (General Control of Social Contro | ore (Unspecif<br>0-2 years)<br>sensor and ap | pplication           | pefile, geotiff or | KML)   |  |  |

[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

There is no content with the specified labels