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|  | Challenge ID | OTM:066 |
| 1 | Title | Tracking volumes of oil stored |
| 2 | Theme ID | ON 5.4: Logistics planning and operations - Monitoring of assets |
| 3 | Originator of Challenge | Onshore: OTM |
| 4 | Challenge Reviewer / initiator  |  |
|  | General description | Overview of Challenge |
| 5 | What is the nature of the challenge? (What is not adequately addressed at present?) | Getting a snap shot of our stored hydrocarbon volumes, if this storage is geographically widespread and there is no internal level monitoring (through faults or the fact that it was never installed), is incredibly difficult. We have ways of doing this using standard process equipment such as flowmeters or level control systems, but any additional verification measure, if cost effective, is always a good thing. |
| 6 | Thematic information requirements | 1. Obtain detailed topographic information, 9. Obtain detailed imagery of assets, |
| 7 | Nature of the challenge - What effect does this challenge have on operations? | Being able to track the changes in our reservoir storage, in combination with other readings (e.g. flowmeters, level control systems, etc.) could enable us to identify faults or errors in equipment, identify (earlier than before) leaks that may cause dama |
| 8 | What do you currently do to address this challenge?/ How is this challenge conventionally addressed? | Existing readings (flowmeters, level control systems etc… 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? |  |
|  | Challenge classification |  |
| 11 | Lifecycle stage | Pre license  | Exp. | Dev. | Prod. | Decom. |
| Score from impact quantification [[1]](#footnote-1) | 0 | 0 | 0 | 3 | 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 | Operational cost reduction |
| 17 | Technology Urgency(How quickly does the user need the solution) | Immediately (0-2 years) |
|  | Information requirements |  |
| 18 | Update frequency | Monthly |
| 19 | Data Currently used  | Standard process equipment |
| 20 | Spatial resolution | Standard process equipment |
| 21 | Thematic accuracy |  |
| 22 | Example formats |  |
| 23 | Timeliness | within a week |
| 24 | Geographic Extent | 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* [↑](#footnote-ref-1)