

OTM-056: Locating repeater stations for communications infrastructure

Locating repeater stations for communications infrastructure

Challenge

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|----|--|---|------|------|-------|--------|
| | Challenge ID | OTM:056 | | | | |
| 1 | Title | Locating repeater stations for communications infrastructure | | | | |
| 2 | Theme ID | ON 5.2: Logistics planning and operations - Support to surveying crews for planning surveys and H&S | | | | |
| 3 | Originator of Challenge | Onshore: OTM | | | | |
| 4 | Challenge Reviewer / initiator | Petronas | | | | |
| | General description | Overview of Challenge | | | | |
| 5 | What is the nature of the challenge? (What is not adequately addressed at present?) | <p>We need to address issues relating to radio communication infrastructure. These include aspects such as planning road access to communication infrastructure, planning bulldozer lines, identifying line-of-sight issues, and locating repeater stations.</p> <p>We do not want to leave a network of scars through forested areas and we want our E&P activity to be as environmentally sensitive as possible. A way of ascertaining elevation characteristics that could subsequently limit the detrimental aspects of our operations would be very valuable</p> | | | | |
| 6 | Thematic information requirements | 1. Obtain detailed topographic information, 3. Obtain detailed vegetation information, 5. Identify location and condition of transport infrastructure, | | | | |
| 7 | Nature of the challenge - What effect does this challenge have on operations? | Line clearance costs can be very high, and notoriously difficult to maintain. Sending a field survey team to obtain elevation data to find a network of high points for comms purposes is time consuming, costly and difficult, especially in densely forested | | | | |
| 8 | What do you currently do to address this challenge?/ How is this challenge conventionally addressed? | Ground survey team | | | | |
| 9 | What kind of solution do you envisage could address this challenge? | High resolution DEM that is affordable would be very valuable | | | | |
| 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 | 4 | 3 | 1 | 3 |
| 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 | Speed exploration and development (Operational cost reduction), environment, safety | | | | |
| 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 | Conventional mapping and data from ground surveys | | | | |
| 20 | Spatial resolution | Conventional mapping and data from ground surveys | | | | |
| 21 | Thematic accuracy | | | | | |
| 22 | Example formats | | | | | |
| 23 | Timeliness | Reference data - timeliness not important | | | | |
| 24 | Geographic Extent | Development area only | | | | |
| 25 | Existing standards | N/A | | | | |

[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