

OTM-079: Identification of archaeological or burial sites

Identification of archaeological or burial sites

Challenge

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|---|---|-----------------------|------|-------|--------|
| Challenge ID | OTM:079 | | | | |
| 1 Title | Identification of archaeological or burial sites | | | | |
| 2 Theme ID | ON 5.3: Logistics planning and operations - Facility siting, pipeline routing and roads development | | | | |
| 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?) | In areas that are unfamiliar with us it is important that we recognise land parcels that our activity must avoid. This can range from burial sites to temples and religious grounds. | | | | |
| 6 Thematic information requirements | 2. Obtain detailed terrain characterisation, 4. Obtain detailed land-use information, 9. Obtain detailed imagery of assets, | | | | |
| 7 Nature of the challenge - What effect does this challenge have on operations? | These areas must be accounted for in logistics planning, seismic surveying, site selection and development | | | | |
| 8 What do you currently do to address this challenge?/ How is this challenge conventionally addressed? | Existing mapping, although this often lacks sufficient detail | | | | |
| 9 What kind of solution do you envisage could address this challenge? | Radar is sensitive to properties like slight differences in soil density and water content. Changes in soil moisture and in vegetation growth can also be detected by radar. These factors are influenced by underground structures and can be used to infer hi | | | | |
| 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 | 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 | HSE | | | | |
| 17 Technology Urgency (How quickly does the user need the solution) | Immediately (0-2 years) | | | | |
| Information requirements | | | | | |
| 18 Update frequency | | | | | |
| 19 Data Currently used | | | | | |
| 20 Spatial resolution | | | | | |
| 21 Thematic accuracy | | | | | |
| 22 Example formats | | | | | |
| 23 Timeliness | Reference data - timeliness not important | | | | |
| 24 Geographic Extent | district 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

- [Product Sheet: Land Cover Characterisation](#)
- [Product Sheet: Land Use](#)
- [Product Sheet: Soil Sealing](#)
- [Product Sheet: Surface Soil Moisture](#)