

Technical Note 157

**Underground Asset Investigation
(TMR Surveying Standards)**

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1 Purpose of technical note

This technical note provides interim advice on changes regarding investigation of Telstra underground assets. Telstra's latest Duty of Care document varied requirements in relation to the location of Telstra underground assets by electronically derived subsurface measurements. These changes have implications on survey location requirements specified in the *TMR Surveying Standards* (i.e the Standards). The information in this technical note supersedes information in the Standards which limited the use of electromagnetic field (EMF) technology to provide depths to Telstra assets unless potholing was to occur.

2 Background

Only a Telstra Accredited Plant Locator (TAPL) is authorised by Telstra to access the Telstra network for locating purposes, including accessing pits and manholes. TAPL's are bound by Telstra's Duty of Care. The Duty of Care document is provided with all Dial Before You Dig responses from Telstra.

Previous to version 22, Telstra's Duty of Care stated that "*An Accredited Plant Locator is NOT permitted to provide depth of communications plant unless it is physically exposed by hand*".

The *TMR Surveying Standards* highlighted this stipulation in part to educate surveyors and also limit litigation potential. The Standards detail Transport and Main Road's method to adhere to the Duty of Care requirements.

Version 22 of the Telstra Duty of Care varied the above requirement to state:

Electronically derived subsurface measurements can only be provided by Telstra Accredited Plant Locators that have *DBYD Locator Certification.

*Telstra Accredited Plant Locators that have *DBYD Locator Certification can provide electronic subsurface measurements in A/W AS5488-2013 (e.g. electronic depth measurements and/or alignment measurements) - if all five of the following conditions are met:*

- 1. The subsurface depth/alignment measurements are confirmed in writing on a plan or site record.*
- 2. The plan or site record must include the name and the TAPL ID number of the locator providing the subsurface measurements.*
- 3. The quality level as defined by AS5488-2013 must be specified for each subsurface measurement.*
- 4. The source of each subsurface measurement must also be specified.*
- 5. Subsurface measurements that do not specify an AS5488-2013 quality level or the source of obtaining the subsurface measurement cannot be provided or displayed in any form anywhere.*

3 Application

The requirements of the Telstra Duty of Care current at the time of asset location/survey shall be adhered to in preference to the *TMR Surveying Standards* regarding location of Telstra underground assets by electronically derived subsurface measurements. This affects the following sections of the *TMR Surveying Standards*:

- *Part 2 – Geomatic Survey Types*
 - Section 1.7.3.4 Cable locator (CL)
 - Section 1.7.3.5 Cable locator – horizontal (CLH)
- *Schedule 1 – Codes, Linestyles and Examples*
 - Section 7.2 Example A
 - Section 7.3 Example B

Location of underground services by electronically derived subsurface measurements are only to be used as a guide to assess potential conflicts and shall be validated before use for design or construction purposes. The Duty of Care maintains validation shall occur by physically sighting the asset by pot-holing by hand or using non-destructive vacuum extraction methods.

4 Future Developments

Future Telstra Duty of Care statements may change the requirements surrounding location of underground assets at any time. Surveys of underground assets shall adhere to the requirements of the Duty of Care that is current at the time of the underground asset investigation survey.

5 References

Transport and Main Roads *Surveying Standards, Part 2 – Geomatic Survey Types*, Brisbane, Australia

Transport and Main Roads *Surveying Standards, Schedule 1 – Code, Linestyles and Examples*, Brisbane, Australia

Telstra Corporation *Telstra Duty of Care version 22 (31 May 2016)*, Australia

