

**3rd Generation Partnership Project;  
Technical Specification Group Radio Access Network;  
Study on Minimization of drive-tests  
in Next Generation Networks;  
(Release 9)**

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# Foreword

This Technical Report has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

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# 1 Scope

The present document is intended to capture findings produced in the context of the Feasibility Study on Minimization of Drive-Tests (MDT) in next generation networks.

The study aims at assessing the feasibility, benefits and complexity of automating the collection of UE measurements to minimize the need of manual drive-tests. The work under this study should take the following steps.

1. Define use cases and requirements for minimizing drive tests in next generation LTE/HSPA networks
2. Based on the defined use cases and requirements, study the necessity of defining new UE measurements logging and reporting capabilities for minimizing drive tests and analyse the impact on the UE

Policy control mechanism and transport mechanism (including message syntax) for the new UE measurement logging and reporting capabilities are outside of the scope of the study. The study should focus on new logging and reporting capabilities for measurements already available at the UE.

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## 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TR 41.001: "GSM Release specifications".
- [3] 3GPP TR 21 912 (V3.1.0): "Example 2, using fixed text".
- [4] 3GPP TS 25.331:"Universal Terrestrial Radio Access (UTRA); Radio Resource Control (RRC); Protocol specification".
- [5] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) protocol specification".
- [6] R2-096049 MDT coverage and capacity optimization.
- [7] R2-096737 Further simulations on network based solutions for coverage optimization.
- [8] R2-095910 Simulation results for MDT logging with UE under RLF.
- [9] R2-097031 MDT uplink coverage optimization.

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## 3 Definitions, symbols and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

*Definition format (Normal)*

*<defined term>: <definition>.*

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