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**Road vehicles - Diagnostic communication over K-Line
(DoK-Line) - Part 3: Application layer**

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Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents.

This Document was Part 3 of GB/T 41590 Road Vehicles - Diagnostic Communication over K-

Line (DoK-Line). GB/T 41590 has published the following parts:

- Part 1: Physical Layer;
- Part 2: Data Link Layer;
- Part 3: Application Layer;
- Part 4: Requirements for Emission-Related Systems.

This Document equivalently adopts ISO 14230-3:1999 Road Vehicles - Diagnostic Systems -

Keyword Protocol 2000 - Part 3: Application Layer.

This Document made the following minimum editorial modifications:

- In order to coordinate with the existing standard, change the standard name into Road Vehicles - Diagnostic Communication over K-Line (DoK-Line) - Part 3: Application Layer.
- In order to meet the requirements of GB/T 1.1-2020, the numbers of footnotes in Tables are changed from numbers to letters;
- Slight adjust the parameter formats in Table 89;
- Make corrigendum to 10.6.3 of ISO 14230-3:1999.

Please note some contents of this Document may involve patents. The issuing agency of this

Document shall not assume the responsibility to identify these patents.

This Document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

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Road Vehicles - Diagnostic Communication
over K-Line (DoK-Line) - Part 3: Application Layer

1 Scope

This Document specifies the requirements for K-Line-based diagnostic communication data link on which one or several on-vehicle Electronic Control Units are connected to an off-board

tester in order to perform diagnostic functions.

This Document specifies the requirements of the implementation of the Diagnostic Services specified in ISO 14229, including

- byte-encoding and hexadecimal values for the service identifiers;
- byte-encoding for the parameters of the diagnostic service requests and responses;
- hexadecimal values for the standard parameters.

The vehicle environment to which this Document applies may consist of a single tester that may be temporarily connected to the on-vehicle diagnostic data link and several on-vehicle Electronic Control Units connected directly or indirectly (see Figure 2).

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates

indicated are applicable to this Document; for the undated documents, only the latest version

(including all the amendments) is applicable to this Document.

ISO 14229 (all parts) Road Vehicles - Unified Diagnostic Services (UDS)

NOTE: GB/T 40822-2021 Road Vehicles - Unified Diagnostic Services (ISO 14229, MOD)

ISO 14230-2 Road Vehicles - Diagnostic Communication over K-Line (DoKLine) - Part

2: Data Link Layer