ETSI GR ZSM 021 V1.1.1 (2026-05)



GROUP REPORT

Zero-touch network and Service Management (ZSM); Study of ZSM Framework from Automation to Autonomy

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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
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This Group Report (GR) has been produced by ETSI Industry Specification Group (ISG) Zero-touch network and Service Management (ZSM).

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1 Scope

The present document examines the ZSM framework capabilities required to support autonomy. It highlights the differences between automation and autonomy, and the differences among levels of autonomy, through a review of published ZSM work and other industry work.

The study work is driven by scenarios that would benefit from autonomy, it includes an activity aimed at identifying the ZSM framework capabilities to fulfil autonomy.

Additionally, possible service gaps are addressed. Collaboration with and reference to other SDOs (e.g. in TM Forum, IRTF NMRG, 3GPP SA5) are recommended when appropriate.

2 References

2.1 Normative references

Normative references are not applicable in the present document.

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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iTeh Standards (https://standards.iteh.ai)

[i.1] ETSI GR ZSM 005: "Zero-touch network and Service Management (ZSM); Means of Automation".

[i.2] ETSI GR ZSM 011: "Zero-touch network and Service Management (ZSM); Intent-driven autonomous networks; Generic aspects".

[i.3] ETSI GR ZSM 009-3: "Zero-touch network and Service Management (ZSM); Closed-Loop Automation; Part 3: Advanced Topics".

[i.4] TM Forum IG1258: "Autonomous Networks Glossary v1.2.0".

[i.5] ETSI GS ZSM 002: "Zero-touch network and Service Management (ZSM); Reference Architecture".

[i.6] ETSI GS ZSM 009-1: "Zero-touch network and Service Management (ZSM); Closed-Loop Automation; Part 1: Enablers".

[i.7] ETSI GS ZSM 016: "Zero-touch network and Service Management (ZSM); Intent-driven Closed Loops".

[i.8] Joseph Sifakis: "Autonomous Systems - An Architectural Characterization", 2018.

[i.9] TM Forum IG1218: "Autonomous Networks Business Requirements and Framework v3.0.0".

[i.10] TM Forum IG1251A: "Autonomous Networks Reference Architecture Realizations v1.0.0".

[i.11] TM Forum IG1253: "Intent in Autonomous Networks v1.3.0".

[i.12] ETSI TS 128 312: "LTE; 5G; Management and orchestration; Intent driven management services for mobile networks (3GPP TS 28.312 Release 19)".

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