Deutsche Telekom RAN Guardian Agent

IMPLEMENTED 2025 ONWARDS · TELECOMMUNICATIONS · GERMANY · BAND C · CLAIMED ONLY
VERSION 1.0 · PUBLISHED 16 NOVEMBER 2026 · UPDATED 16 NOVEMBER 2026 · FACTS CHECKED 16 NOVEMBER 2026

Deutsche Telekom runs an AI agent built with Google's Gemini that spots large public events, checks the mobile network around them and adjusts it, cutting response times from hours to about a minute by its account.

ABOUT THIS SYNOPSIS

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Facts and figures are as reported by the sources listed below, which may be incomplete, self-reported or out of date. Check the original source before relying on any figure.

The impact band, proof marker and SEAM view are MarLuc's opinion. The organisation is not a MarLuc client and has not reviewed or endorsed this synopsis. Names and trademarks belong to their owners.

NOTICE WORDING LAST UPDATED 16 NOVEMBER 2026

AT A GLANCE

AI used: Multi-agent system built on Google Gemini large language models for mobile network operations.

Implemented: 2025 onwards. Grade: band C, Process change, Claimed only.

Headline result, as reported: Time to manage major network events cut from hours to around a minute, with over 100 autonomous fixes in the first month, by Deutsche Telekom's account

1 · The case

The facts, as reported by the 5 sources listed at the end. Where a source is silent, the field says "Not reported".

Organisation

Deutsche Telekom AG. German telecommunications group with operations in Europe and the United States. It had fewer than 192,000 full-time employees at June 2026, per Light Reading. Canvas block: 4. Operations and process. Also 6. Data and technology, 8. Governance and risk.

Business challenge

The challenge. Large public events can strain the mobile network, and Deutsche Telekom says traditional automation is no longer enough to solve problems in real time as networks grow more complex.

How it was addressed. The RAN Guardian Agent, built with Google's Gemini 2.5 and Google Cloud services, is a set of agents. One scans public sources such as online directories and social

Who implemented it

Google Cloud (Model or cloud provider): Supplied Gemini models and cloud services and co-developed the agent.
In-house (In-house): Deutsche Telekom development teams: built and operate the agent in the mobile network.

Technology (SEAM pillar E)

SEAM types: T7 AI agents, T3 API integrations. Deployment: Cloud APIs. Vendors and products: Google Cloud, Gemini 2.5, Cloud Run, BigQuery, Firestore.

Where it was built in: Agents read public event listings and network performance, inventory and coverage data, then change radio network configuration in Germany's mobile network.

What changed

Before: network teams managed event-related strain themselves, which Deutsche Telekom says took hours. After: the agent pre-checks sites and makes corrections, and the time to manage major events fell to around a minute, by its account. In the February 2026 Carnival season it pre-checked 611 sites; only five saw peak loads and the agent adjusted them, by its account. [1] [2] [3] [4] [5]

What it cost

Not reported for the agent. Deutsche Telekom said its EUR 2.5 billion savings target is gross and excludes AI token costs, which it aims to keep to a low double-digit percentage of gross savings, per Light Reading.

What it saved

For the agent, by Deutsche Telekom's account: time to manage major events cut by more than 95%; more than 100 autonomous remediation actions in the first month. Money saved by the agent: Not reported. Group targets: about EUR 1.1 billion gross savings in 2027 outside the US and about EUR 2.5 billion in indirect costs by 2030, against 2023. [1] [2] [3] [4] [5]

Governance and control

Deutsche Telekom says employees set goals, review results and retain responsibility for decisions, and that the agent documents all actions. Its related MINDR system asked for human approval only when confidence fell below 96% during one incident, per Omdia. An accountable owner for the agent is not named; the Board member for Product and Technology speaks for it.

S2 · Accountable owner · Claimed
The Board member for Product and Technology speaks for the agent; a named operational owner is not reported. [1] [2]

A1 · Safe use · Claimed
Deutsche Telekom says employees set goals, review results and retain responsibility for decisions, and has

A2 · Human in the loop · Claimed
The agent supports network management teams and acts autonomously on corrections; the related MINDR system asked for human approval below 96% confidence, per Omdia. [1] [5]

A3 · Monitoring and assurance · Claimed
The agent documents all actions and outcomes, by Deutsche Telekom's account. [1]

A4 · Vendor AI · Not reported
Built on Google Gemini and Google Cloud services; vendor controls are not reported. [1]

A5 · Agent controls · Claimed
Agents act autonomously on configuration and resource changes and log their actions; limits on what they may change are not reported. [1] [2]

A6 · Standards and regulation · Not reported
Not reported.

What worked, what did not, what is unproven

WORKED

– Faster response to event-driven network strain, by Deutsche Telekom's account.

– Moving from a Mobile World Congress demonstration in early 2025 to live operation in November 2025.

DID NOT

– The share price rose 1% on the AI Investor Day, after falling 7.4% over the previous year, per Light Reading.

– Light Reading argued the EUR 2.5 billion target is less than 3% of 2023 operating costs and questioned whether it can be met.

UNPROVEN

– The effect on customer experience and network quality, as opposed to response time.

– Error rates for autonomous actions and how often people override them.

– Whether the group savings targets for 2027 and 2030 are met.

Timeline

2025 Deutsche Telekom and Google Cloud present the RAN Guardian Agent at Mobile World Congress [1]

Nov 2025 RAN Guardian Agent goes live in Germany's mobile network [1]

Feb 2026 Deutsche Telekom reports more than 100 autonomous remediation actions in the first month and scaling to the Czech Republic and Croatia [2]

Oct 2026 AI Investor Day sets savings targets of about EUR 2.5 billion by 2030 [3]

2 · Grade and SEAM assessment

MarLuc's opinion, made on the evidence above. How cases are graded: marluc.co.uk/case-studies/how-we-rate

Level of change and impact

Claimed: Not applicable. Grade: C, Process change. Proof: Claimed only. Level of change: Process change.

Process change (Level 2, band C). The network event process now runs through an agent that

The SEAM view and lessons learnt

The agent automates a whole loop, from spotting events to changing the network, which goes further than advice to an engineer. That raises the stakes on logging, confidence thresholds and override rights. Deutsche Telekom reports action logs and, for a related system, a confidence threshold for human approval. A larger organisation copying this should publish error and override rates alongside speed.

1. Log every autonomous action and review the log routinely.
2. Set confidence thresholds that send uncertain actions to a person.
3. Report quality and error rates alongside time saved.

Evidence

Score 1 of 4. Self-reported: agent results are Deutsche Telekom's own; Omdia and Light Reading relay or comment on them without independent measurement.

Evaluation method. Self-reported company figures: operating statistics from releases and the AI Investor Day.

Sources disagree. Deutsche Telekom's November 2025 release says processes that took roughly an hour now take a few minutes; its February 2026 release says hours to around a minute. Deutsche Telekom's October 2026 release targets about EUR 800 million of AI-related revenue outside the US by 2030; Omdia reports more than EUR 1 billion of incremental AI-related revenue.

Status. Ongoing: live in Germany since November 2025 and scaling to the Czech Republic and Croatia.

3 · Original sources

Read these in full. To challenge a fact or a grade, use the contact form at marluc.co.uk or the link on https://marluc.co.uk/case-studies/deutsche-telekom-ran-guardian-agent

[1] Deutsche Telekom: AI agents for mobile network (November 2025)
https://www.telekom.com/en/newsroom/latest-updates/media-information/2025/11/deutsche-telekom-ai-agents-for-mobile-network

[2] Deutsche Telekom: Deutsche Telekom and Google Cloud collaborate on agentic AI (February 2026)
https://www.telekom.com/en/newsroom/latest-updates/media-information/2026/2/mindr-ai-agents-in-telekom-network

[3] Deutsche Telekom: Deutsche Telekom boosts growth, efficiency and quality through the use of AI (October 2026)
https://www.telekom.com/en/newsroom/latest-updates/media-information/2026/10/deutsche-telekom-boosts-growth-efficiency-and-quality-through-t

[4] Light Reading: Deutsche Telekom boss's 'AI optimism' isn't shared
https://www.lightreading.com/ai-machine-learning/deutsche-telekom-boss-s-ai-optimism-isn-t-shared

[5] Omdia: Deutsche Telekom's AI Investor Day details AI's widespread impact and benefits
https://omdia.tech.informa.com/om148347/deutsche-telekoms-ai-investor-day-details-ais-widespread-impact-and-benefits

Deutsche Telekom AG website: https://www.telekom.com

Version 1.0 · Published 16 November 2026 · Updated 16 November 2026 · Facts checked against sources 16 November 2026 · Downloaded 27 November 2026. This PDF may be out of date: the latest version, and a way to report an error or a better source, is at https://marluc.co.uk/case-studies/deutsche-telekom-ran-guardian-agent

VERSION HISTORY

v1.0 16 November 2026 First published