June 2024

Welcome to the special edition of the Deutsche Telekom info letter in cooperation with EGLN about the IP emergency call connection.

Topic of the current info letter:

Important notes on real-time text

With Directive (EU) 2019/882 on accessibility requirements for products and services, the EU has obliged member states to introduce the "real-time text" service in addition to voice communication by **June 28, 2025 .**

The Accessibility Strengthening Act and the Ordinance on the Accessibility Strengthening Act have incorporated the requirements into national law. German network operators must therefore

implement the service in their networks by that date.

The **introduction of emergency calls** is currently being initiated by updating the TR Emergency Call. According to Directive (EU) 2019/882, real-time text must be available on the control centres' side by **28 June 2027** at the latest. be supported.

Real-time text (RTT) is not a traditional chat solution, as known from WhatsApp, but an immediate transmission of characters **within a call,** in addition to voice transmission.
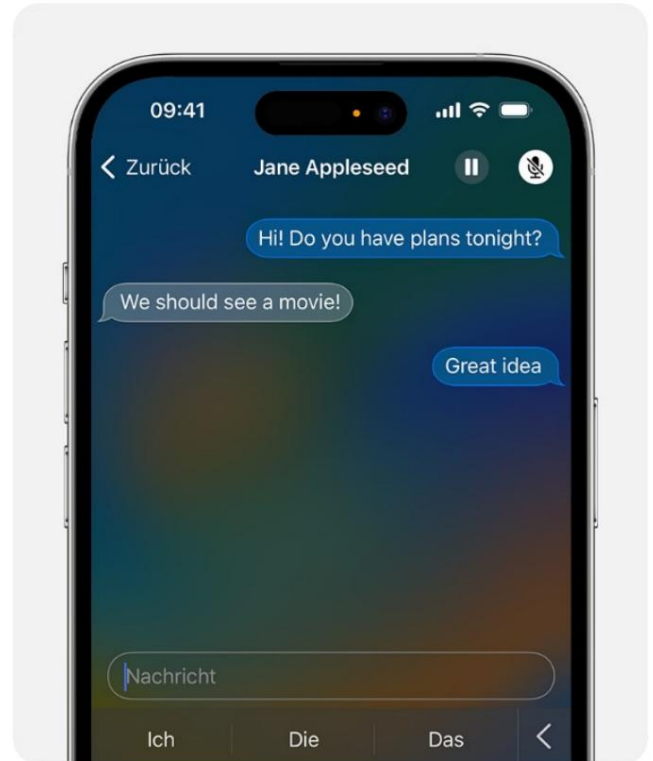

Image: Apple iOS interface within a call for real-time text; Source: https://support.apple.com/de- de/111776

The standard does not include the conversion of text into speech (text to speech) and vice versa.

The introduction of real-time text in public networks and devices before or after June 28, 2025 means that emergency calls can be initiated with "audio" and "text".

If emergency call answering stations do not yet support "text", they must accept the "audio" call while simultaneously rejecting the "text" part in accordance with the procedures defined in standards. **Otherwise, the caller's attempt to make an emergency call will fail.** This means that regardless of the date on which emergency call answering stations support real-time text, mechanisms must be supported at an early stage that allow calls to be accepted for an "audio" connection, even if other media (e.g. "text", "video") are requested in addition to "audio" in the call attempt.

The following graphic illustrates the different phases:

2024:

Network operators are working on the
RTT implementation

28.06.2025:

RTT available, control center
optional support

28.06.2027:

RTT available, binding
support for control centers

In concrete technical terms, this means:

If RTT transmission is not (yet) supported for a connection, this must be negotiated within the framework of the SDP negotiation according to RFC 3264 (see e.g. Chapter 6 paragraph 4, Chapter 8 paragraphs 1,2) via an m-line with "m=text 0 <proto> *<fmt>" (ie port = 0).

The number of media lines between 200 OK and INVITE must match (see RFC 3264 Chapter 6 Paragraph 2, Chapter 8 Paragraph 4).

According to the syntax definition in RFC 8866, the m-line contains at least one <fmt> attribute. The codec associated with the <fmt> attribute(s) must be defined via an associated "a=rtpmap" line in accordance with RFC 8866 (see, for example, Chapter 8.2.3, paragraph 6), provided it is a dynamic payload type. The same mechanisms also apply if a video component is added in the future.

Please work with your suppliers to ensure that your control center technology can support this.

The default for correctly accepting the "audio"
Call rejection while simultaneously rejecting the "text" part applies both to control centers with IP technology and to control centers with ISDN gateways.

Since real-time text can currently only be supported with IP-based control center technology, the latest shutdown date for ISDN-based control center technology is June 28, 2027.

Contact

If you have any further questions, please do not hesitate to contact us.

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