RealtimeInterface

Realtime **Interface**
System Operator - DER

Dutch implementation of RfG interface requirements

Add-on document Realtime Interface specification version 1.1 final

Netbeheer Nederland

19-09-2025 version 1.0

Distribution: *publicly available on the website of Netbeheer Nederland and actively shared with Subject Matter Experts, which are involved in the RTI version 1.1 development*

Short summary

The Realtime Interface specification version 1.1 has been published in August 2025. Although this specification has been written carefully and the requirements are validated with a Proof-of-Concept, some requirements will be changed. The changes require less, not more. The changes, which are effective immediately, are:

1. **NULL cipher support** is **removed**
2. **TLS 1.3** shall be supported **from a later moment in time**

Detailed description of the changes

After Realtime Interface version 1.0, the development started of version 1.1. In close collaboration with vendors, a Proof-of-Concept is performed. Several SME (Subject Matter Expert) sessions are held and draft documents are shared for feedback. In August 2025, the final specifications has been published on the website of Netbeheer Nederland and vendors started implementing the new requirements. Feedback from several SMEs led however to the insight that the specification shall be changed on two points.

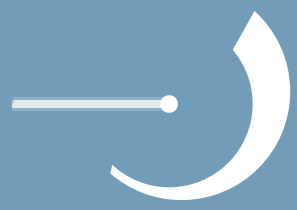
First, the NULL cipher requirement. This was a mandatory requirement to keep the possibility of deep packet inspection. It turned out that this implementation significantly complicated the implementation and increased the implementation cost. After a consultation round, it has been decided that this requirement can be considered as obsolete. Another way to perform the needed security measures is found.
The NULL cipher requirement entails the following requirements in the Technical Specification version 1.1 final.

ID	[TLS-Customer-Ciphers-1]
Requirement	Support for cipher suite~~s~~: TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384 ~~and~~ ~~TLS_RSA_WITH_NULL_SHA256~~
Source	Customer Endpoint
Description	TLS 1.2 shall support the following cipher suite~~s~~: - TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384 ~~- TLS_RSA_WITH_NULL_SHA256~~ (in addition to the mandatory cipher suites in IEC 62351-3:2023).

ID	[TLS-Customer-Ciphers-2]
Requirement	Support for cipher suite TLS_AES_256_GCM_SHA384 ~~and TLS_SHA384_SHA384~~
Source	Customer Endpoint
Description	TLS 1.3 shall support the following cipher suite~~s~~: - TLS_AES_256_GCM_SHA384 ~~- TLS_SHA384_SHA384~~ (in addition to the mandatory cipher suites in IEC 62351-3:2023).

Second, the needed conformance documents for TLS 1.3 (IEC 62351-100-3) to perform the conformance tests are still in development by the International Electrotechnical Committee (IEC). To overcome this situation, Netbeheer Nederland decided to postpone the required compliance with TLS 1.3. This entails the following requirements: Technical Specification chapter 3.3, [TLS-Customer-Standards-2] and [TLS-Customer-Ciphers-2]).
The requirement will however stay in the specification documents, and will be formal **required one year after publication** of the conformance document, IEC 62351-100-3. The planned publication of this document is in 2026.

The specification document will not immediately be updated. This add-on document is used as an ‘extension’ of the Technical Specification.



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