

FAQ MaKo AS4

General

- 01** Which changes apply with MaKo 2023?
- AS4 communication replaces AS2 and email communication in the electricity sector.
 - All market participants need to set up a new connection to each of their communication partners.
 - AS4 communication to be encrypted with ECC Brainpool (elliptic curve cryptography).
 - Certificates are used within the smart meter public key infrastructure (PKI).
 - Participants will need to obtain new certificates.
 - MaKo to become part of the smart meter public key infrastructure (SM-PKI).
 - Private keys must be secured in the hardware security module (HSM).
 - Take a look at this [SEEBURGER AS4 blog article](#) to discover more.

Dates

- 02** Is the October 2023 deadline likely to be postponed again?
- So far, there has been no talk of further delaying MaKo 2023.
- 03** Will the migration period be extended to April 1, 2024?
- The AS4 migration period will not be extended.
- 04** The technical implementation process is due to run from October 1 2023 to March 31 2024. Can I start using the new communication format before October 2023?
- You may enter mutual agreements with partners to use the new transmission path before October 1 2023. However, you may not discriminate in any way against partners who do not introduce the format ahead of schedule.

AS4 profile

- 05** What do I need to switch to AS4?
- You need an AS4 adapter that supports ECC Brainpool. The SEEBURGER adapter already supports this type of encryption.
 - You need a hardware security module (HSM) to generate and store private keys.
 - You need new certificates from the Federal Office for Information Security's smart meter public key infrastructure.
- 06** Where can I find details of the AS4 profile? Is this available to view anywhere?
- You can find information on the AS4 profile for MaKo on the edi@energy page.
- 07** Does AS4 use the push or pull method?
- MaKo only uses the push method.
- 08** Is the URL in the certificate the AS4 address or web address where I can get the AS4 parameters?
- The URL is the same as the AS4 address used for communication.
- 09** When can I consider a file „delivered“ through AS4? Is there a time stamp I can refer to?
- Your file has been successfully transferred via AS4 if you receive a synchronous, non-repudiation receipt (NRR).
- 10** As with smart meters, do I have to provide a separate host name for each connection?
- Each endpoint, i.e. each individual partner ID, requires a hostname.

HSM

- 11** What is HSM?
- HSM is an acronym for Hardware Security Module. This is used to generate and store private keys.
- 12** Can my company only use one HSM?
- A company can use multiple HSMs. There are no restrictions to the number you can use.
- 13** Can I use the same HSM for smart meter communication and MaKo?
- Yes, you can use the same HSM. You can find more details in the [BSI Certificate Policy \(CP\)](#) for Smart Metering PKI version 1.1.2.
- 14** What HSMs can I use?
- From what we know so far, you can use any HSMs that have already been approved for SM-GW communication by the BSI.
- 15** Can I implement and use one HSM for multiple organizations and customers or are there scenarios that require two or more HSMs?
- You can use one HSM for several organizations and customers.
- 16** From now on, will every MaKo process via AS4 access my HSM in order to retrieve the certificate information?
- All cryptographic operations that need a private key take place within the HSM.

Certificates

- 17** Which sub CAs can I use for MaKo and from when?
- Find more information on all sub CAs in this list from the Federal Office for Information Security (BSI): [SubCA-Liste](#).
- 18** Is there a specification or a process on how to apply for the certificates?
- You must follow a specific process to apply for certificates as defined by the BSI.
 - You can find the relevant BSI documents in the list below:
 - [Certificate Policy \(CP\) for Smart Metering PKI](#)
 - [BSI TR-03109-4](#)
 - [BSI TR-03116-3](#)
- 19** Can the TLS-SSL certificate for an incoming AS4 https endpoint come from a free CA, or does it need to come from the BSI PKI?
- You must use a TLS certificate from the smart metering public key infrastructure (SM-PKI).
- 20** Do I actually need a separate AS4 certificate for each role or division? This field has always been optional for AS2?
- The certificate policy for the smart meter PKI stipulates an individual AS4 certificate for each MP-ID - i.e. also for each division- as the MP-ID must be maintained in the certificate.
- 21** Will there be permanent AS4 certificates? Or will they also expire after a certain period and need to be re-obtained?
- From what we know so far, the AS4 certificates will expire after 2 years.

Migration scenario

- 22** What can I do if market participants are still not able to use AS4 after October 1, 2023, or if my own company has not migrated to the new messaging protocol yet?
- There are no clearly defined rules or consequences for this scenario. However, it is obligatory to have fully migrated by **March 31, 2024** at the latest.
- 23** How is the migration phase organized? Who reports to whom, and when?
- The BDEW has issued recommendations for dealing with migration. However, essentially “the market has to organize itself”. You are therefore expected, to plan time for queries and delays into your project plan.
- 24** Where can I find the BDEW recommendations for the migration period?
- You can find the BDEW application help [“introductory scenario for migrating to AS4”](#) on the Edi@Energy website.
- 25** What is the process for automated migration to AS4 after the test period, or after a request for migration has been issued?
- The conversion service sends a conversion request to the partner. Your partner confirms the request, after which you can use ASA to communicate in both directions.
- 26** Can I completely delete email communication data during the migration period?
- Please ensure a fallback option to email in the unlikely case that an error occurs during the migration period of October 2023 to March 2024.

Other

- 27** Have there been interoperability tests with other manufacturers?
- SEEBURGER is in contact with other manufacturers and service providers as well as via various working groups, such as BDEW, EDNA. The tests are ongoing.
- 28** Are there exemptions for certain market participants or limitations for SMEs?
- No, there are no exemptions.
- 29** Where is the data decrypted?
- In the HSM.
- 30** Why are there two versions of the regulations for the transmission paths? Which one is valid?
- Both will be valid.
 - **RzÜ from version 2.x** regulates the AS4 communication for MaKo in the electricity sector.
 - **RzÜ from version 1.x** regulates the communication for MaKo in the gas industry which has not yet changed, Redispatch 2.0.
- 31** What are the e rules for the gas industry?
- RzÜ 1.x continues to apply to the gas industry. We currently have no information when they are implementing AS4.
- 32** I found this in the latest BDEW documents: “Deadlines for the market migration: Within six weeks after the start of the migration period or parallel operation, all market partners should have migrated their communication to AS4 by migrating communication with all market partners to AS4 one after the other using the “Change of transmission path” service.”
- Is the migration period just six weeks long rather than half a year? Or is this statement no longer applicable?
- The application help is to be seen as a recommendation. The migration period runs until March 31, 2024. However, you may consider migrating as many partners as soon as possible.
- 33** Will there be a central address service?
- The German BNetzA is not planning to have a central address service for retrieving AS4 communication data. Therefore, you must separately store and continuously update all data per MP-ED for each of your market partners.