FAQ for the Introduction of AS4

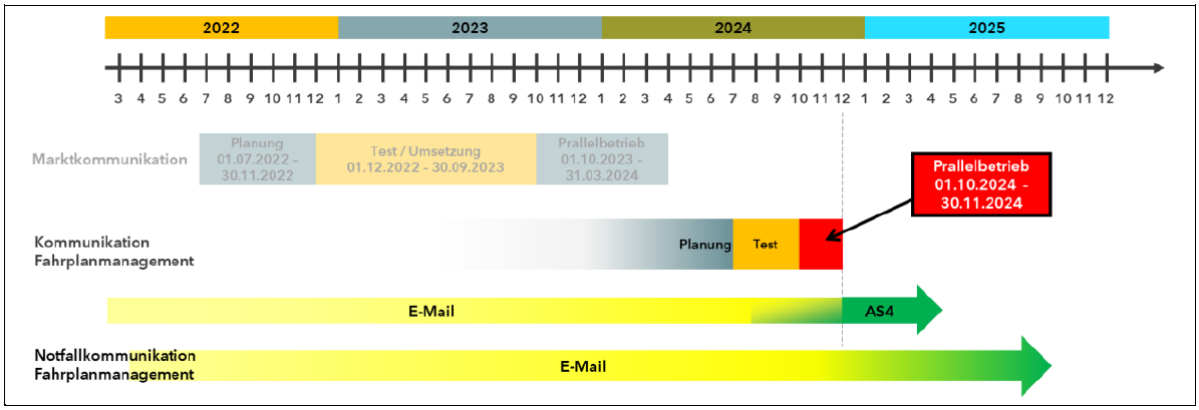
zur Festlegung „Regelungen zum sicheren Austausch im Fahrplanprozess“

Berlin, Dortmund, Bayreuth, Stuttgart,

Stand: 28.5.2024

Inhalt:

1. Time schedule



1.1. Short and sweet: The most important key data

- The AS4 standard for schedule exchange will be introduced simultaneously at all German TSOs
- AS4 communication takes place between the TSO and BRP market roles
- There is one AS4 endpoint per TSO
- Start of the AS4 introduction in schedule exchange: 01.10.2024
- Parallel operation (AS4 and S/MIME e-mail) until 30.11.2024
- Exclusive acceptance of timetables via AS4 from 01.12.2024
- Test period: expected from 01.07.2024
- Sending via S/MIME e-mail, corresponding to today's signed and encrypted communication, remains a mandatory backup method in the event of a fault (fault-related communication). The TSOs reserve the right to test this backup method regularly. You as the BRP must maintain this backup method.

1.2. Short and sweet: The most important links

Bundesnetzagentur

[1] BK6-21-282:
Festlegung zur künftigen Absicherung der elektronischen Marktkommunikation Strom

[2] Anlage 1 zum Beschluss BK6-21-282:
Anlage 1 - Einführungsszenario.pdf (bundesnetzagentur.de)

Regulations for secure exchange in the scheduling process

[3] Link BNetzA: Regelungen zum sicheren Austausch im Fahrplanprozess

[4] Link 4-ÜNB: Fahrplanmanagement (netztransparenz.de)

BDEW / EDI@Energy

(Any necessary corrections and future valid documents can also be found here)

[5] RzÜ: Regelungen zum Übertragungsweg 2.0

[6] AS4-Profil: BDEW AS4-Profil 1.0

[7] Implementation scenario: Einführungsszenario zur Umstellung der elektronischen Marktkommunikation Strom auf AS4

Bundesamt für Sicherheit in der Informationstechnik (BSI)

[8] TR-03116: Technische Richtlinie BSI TR-03116 Kryptographische Vorgaben für Projekte der Bundesregierung

[9] CP: Certificate Policy der Smart Metering PKI

Registered certificate issuers:

[10] BSI - Registrierte Sub-CAs (bund.de)

2. The changeover to AS4

- The changeover to AS4 in the FPM is not an automated process and differs from the changeover in market communication.
- The TSOs will activate the communication channel via AS4 for all BRPs from 1 October 2024. From this date, you as an BRP will receive our feedback (ACK, ANO, CNF...) both via e-mail and via AS4, if possible.
- From 1 October 2024, you as a BRP can switch your nomination (TPS, SRQ) from e-mail to AS4 independently and without further notice.
- You must carry out this changeover by 30 November 2024 at the latest.
- For those BKVs that have successfully switched to AS4, e-mail communication can be deactivated before 1 December 2024 on request. As a result, you will no longer receive our feedback (ACK, ANO, CNF ...) by e-mail, but only via AS4.
- From 01.12.2024, e-mail will be deactivated for all BKV and will only remain as an emergency communication channel.
- Notes Service provider/multiple EICs:
  A market participant (with all assigned EICs) has exactly one certificate triple per market role.
  Bilateral communication is established between exactly 2 AS4 endpoints. The corresponding AS4 adapters must carry out the corresponding routing to the individual processes in each house.

3. Overview BDEW-Codenummern oft he TSO

BDEW-Codenummern oft he German TSO bdew Marktfunktion „Übertragungsnetzbetreiber“		
TSO	**Number**	**BDEW Marktfunktion**
50Hertz Transmission GmbH	9911845000009	Übertragungsnetzbetreiber
Amprion GmbH	4045399000077	Übertragungsnetzbetreiber
TenneT TSO GmbH	4033872000058	Übertragungsnetzbetreiber
TransnetBW GmbH	9911835000001	Übertragungsnetzbetreiber

4. Tests

Approximately you will be able to carry out a communication test via the AS4 test service from 1 July 2024; this will take place without the payload being processed by the recipient.

From 1 October 2024, we recommend that you first send an SRQ via AS4 in the production environment and check whether you also receive the responses via AS4. If this is not the case, the respective TSO should be contacted to activate the AS4 outbound route.

5. FAQ

5.1. Q: Can EDIFACT messages and XML schedules be sent via the same AS4 server system?

EDIFACT Messages and XML Schedules have to be sent via the same URL, and therefore usually via the same AS4 server system (AS4 endpoint).
In both cases, the same Marketpartner-ID (MP-ID) must be used in the same market role (BKV).

The distinction in the processes (MAKO and Scheduling) is the setting of the correct parameters in the Service field of the AS4 message and the recipient.
The TSO receives the XML Schedules in the BDEW market role “TSO” with the AS4 service “FP”.

5.2. Q: Can I use one certificate for several market partner IDs?

The Marketpartner-ID (MP-ID) is part and the unique identifier of the certificate triple and may only be present once.
A separate certificate triple must therefore be obtained for each market role of a company.

5.3. Q: Can certificates for an MP-ID possibly be issued for two different sub-CAs and then be used on the respective HSMs?

If several valid certificates exist on the recipient's side, the sender can choose which of these certificates to use.
The recipient must ensure that it can receive data via all URLs in its valid certificates.

5.4. Q: When is a schedule considered as "delivered" under AS4 operation

With the introduction of AS4 communication, a distinction is made between a technical NRR of the AS4 adapter upon successful technical delivery of the AS4 message and the technical ACK of the scheduling system.

As was previously customary in the scheduling process and described in the balancing group contract, receipt of the technical ACK is considered confirmation of delivery.
The technical NRR of the AS4 adapter does not count as confirmation of delivery.

5.5. Q: What are the URL addresses or where were the URL addresses published?

The URL addresses are freely visible in the "Alternative applicant name" field in all three certificates of a public certificate strip.
In accordance with the current regulations on the transmission path, the URL of the AS4 web service must be taken from the certificates to be used.
The certificates must be retrieved from the issuer.
As communication may only take place within the Smart Meter PKI (SM-PKI), certificates for a market partner can be searched for directly in the SM-PKI directory services using the associated unique MP-ID.

5.6. Q: What are the URL addresses or where were the URL addresses published?

The **BDEWFulfillmentDate** element must be filled with the date of the timetable day in the form **YYYY-MM-DD**, regardless of the data format used.

5.7. Q: Does the content of the payload need to be compressed before sending the AS4 message?

No, the contents of the payload must not be compressed before sending. The payload is compressed automatically within AS4 shipping.

See also chapter 2.2.3.3 Nachrichtenkomprimierung in the BDEW AS4 profile, [6].