

SCP/ZW/1/2024  
CCP/ZW/132/2024

Warszawa, 7<sup>th</sup> February, 2024

To: KDPW Participants  
KDPW\_CCP Participants

**Re.: Modifications to IT systems in the area of A2A communication**

Dear Madam or Sir,

With reference to the information communicated in letters of 3 October 2023 (our ref.: SCP/ZW/3/2023 and CCP/ZW/675/2023) and 20 March 2023 (our ref.: SCP/ZW/1/2023 and CCP/ZW/242/2023), announcing the KDPW Group's planned modifications to IT systems, below please find a description of the scope of the planned modifications in the area of the use of electronic certificates in A2A communication.

The first stage of the project, implemented in 2023, covered modifications to the areas of A2A communication in the EMIR Trade Repository, SFTR Trade Repository, and ARM services (with the exception of communication carried out within the SWI). As part of the modifications, an application was developed to manage the electronic certificates used to authenticate systems for MQ-based communications, the encryption algorithms were changed, and the scheme used for their generation was standardised. Uniform rules were introduced for the segregation of services within A2A communication, uniform naming in queue configuration areas, and the management of access to the test environments.

Under the adopted model, an electronic certificate is used to establish a secure encrypted system connection between a participant and the KDPW Group's IT systems. A certificate is issued for a participant's institution code, which is a four-character identifier of the participant in a service or services, according to an established scheme. The handling of certificates, in particular the

submission of certificate requests, the downloading of certificates, and the cancellation of certificates, takes place in the A2A Certificates application, available on the Services Portal (<https://online.kdpw.pl>) which, with the implementation of the second stage of the project, will also be available to KDPW direct participants. The application will also be made available to KDPW\_CCP clearing members. The A2A Certificates application can only be accessed by a person authorised by the participant to handle certificates on its behalf. The authentication and the authorisation to the application follow the rules applicable to all applications on the Service Portal. Each person authorised by the participant may request certificates active for a given code to be generated. It is possible to re-download a generated certificate and to revoke a selected certificate.

The work currently underway, in the second stage of the project to modernise and standardise A2A communication, includes the implementation of modifications to SWI communication (carried out in accordance with the current SWI Rules), i.e., the area concerning services for KDPW direct participants (including ARM services and the Compensation Scheme) and KDPW\_CCP clearing members. In practice, this involves the introduction of separate MQ queues for individual services: the depository and settlement system, the Compensation Scheme, the ARM (using the ESDK protocol), and the clearing services provided by KDPW\_CCP. SWI communication carried out in the ARM service without the use of the ESDK protocol will be switched to a dedicated access point for this type of connection, launched during the first stage of the project.

At the KDPW Group level, authentication to MQ communication will be separated. Consequently, separate certificates will have to be requested in order to establish A2A communication with KDPW and with KDPW\_CCP.

In addition to the change of connection parameters and the modification of the way electronic certificates are issued, it is planned as part of the modifications to discontinue the requirement to sign ESDK messages with an issued certificate. Consequently, the ESDK protocol frame will be modified and the process of ensuring the integrity of transmission will be based on in-built MQ queue support mechanisms.

A detailed description of the modifications and the documentation of the solutions is provided in an attachment to this letter.

The roll-out of the complete solution is scheduled for December 2024. With the roll-out, KDPW direct participants and KDPW\_CCP clearing members will get access to the applications supporting the issuance of certificates while the issuance of certificates in the legacy authorisation centre will be discontinued. All certificates previously downloaded can be used until the communication is switched to the new upgraded solution or the certificates are revoked.

The participants will be switched to the new A2A communication model after the roll-out of the modifications, starting in December 2024, within defined switchover windows (the switchover window plan will be communicated at the final stage of the project), separately for the test environments (TST and EDU) and for the production environment (PRD). In each switchover window,

communication for a group of institution codes will be switched according to the participants' declarations. In order to minimise the impact of the switchover on business processes, the work in the production environment will be scheduled for Saturdays only.

Based on the experience of the first stage, we anticipate that the switchover of all institution codes should be completed within 3-4 months. Once the process is complete, all certificates issued in the legacy authorisation centre will be revoked.

The roll-out of these functionalities will entail formal modifications in the KDPW and KDPW\_CCP regulations.

We will provide details of the process of switching communication to the new model and the planned regulatory changes at a further stage of project work.

Yours sincerely,

Stawomir Panasiuk  
Vice President of the Management Board

Enclosures:

- 1/ Configuration specification for MQ A2A connections
- 2/ Description of the ESDK protocol used for A2A communication
- 3/ Instructions for downloading the A2A certificates used for connecting to the KDPW and KDPW\_CCP services
- 4/ Using OpenSSL to obtain a certificate for A2A communication

C/C:

Chamber of Brokerage Houses (IDM)  
Council of Depository Banks at the Polish Bank Association (RBD ZBP)  
Polish Financial Supervision Authority (UKNF)