Technical recommendations and recommendations regarding security of access to IRGiT S.A.'s IT applications

X-Stream Workstation – access to the clearing system

About the application:

X-Stream Workstation application allows Clearing House Members/Participants to access clearing reports containing data on their transactions, open positions, margins calculated, values of clearing and settlement, instruments, fees and details of physical deliveries of electricity and natural gas.
Communication with the X-Stream Workstation application is encrypted and secured by an SSL certificate.
X-Stream Workstation application has been delivered by Nasdaq – developer of IRGiT S.A.'s clearing system.

Hardware requirements:

Minimum hardware requirements for X-Stream Workstation: *Core processor 2.0 GHz or higher; 8 GB RAM; 70 GB (5.4k) drive; PC or laptop.*
Software requirements for X-Stream Workstation: *Microsoft Windows 7 operating system or higher; .NET Framework 4.5 Client Profile or higher; Windows Installer 3.1 application or higher; Internet Explorer 7 or higher.*
Additional requirements for X-Stream Workstation: *Internet access (broadband recommended); unblocked access to ports 80, 443.*

Invoice Sharing Platform (ISP) – access to the application

About the application:

The ISP application allows Clearing House Members/Participants to access transaction invoices and self-billing invoices concerning clearing of all transactions concluded on all markets cleared by IRGiT S.A. as well as commission invoices. Invoices may be downloaded in the form of PDF files. It also supports downloads of text files, which may be imported to accounting systems of Clearing House Members/Participants.
Communication with the ISP application is encrypted and secured by an SSL certificate.
ISP is an application developed in-house and IRGiT S.A. provides technical support to Clearing House Members/Participants in respect to this application.

Hardware requirements:

Minimum hardware requirements for ISP: *Intel Core 2 Duo CPU 2.4 GHz; 2 GB RAM; PC or laptop computer.*
Software requirements for ISP: *Microsoft Windows XP operating system with Service Pack SP3 or higher; .NET Framework 4.0 Client Profile or higher; Windows Installer 3.1 application or higher; Internet Explorer 7 or higher.*
Additional requirements for ISP: *Internet access (broadband recommended); unblocked access to ports 80, 443.*

Education

IRGiT S.A. conducts training on the operation of the X-Stream Workstation application and the Invoice Sharing Platform (ISP). It provides support during operation and problem-solving related to the functioning of the application.

Moreover, IRGiT S.A. provides Clearing House Members/Participants with access to the X-Stream Workstation training system, in which the application can be tested with the use of test access and test data. In each instance before the system configuration changes and new functions or products are introduced, training is organized for Clearing House Members/Participants on the use of the system.

IRGiT S.A. provides instruction manuals for its applications.

Business Continuity in IRGiT S.A.

IRGiT S.A. ensures redundant architecture of systems; IRGiT S.A. additionally has backup systems in place in a separate location.

The recommended technical infrastructure at the user's side should feature:
- redundant Internet access from two different providers,
- backup workstations at Clearing House Members/Participants,
- redundant power grid connections from two different providers.

Security measures

For the workstation and IT infrastructure, we are recommending the following security measures:
- the operating system with current fixes and patches,
- anti-virus software with current virus definitions,
- a firewall system,
- IT technical support.

The configuration of the anti-virus program and the firewall should enable communication with IRGiT S.A.'s applications.

Authentication data: user name, password, session key, must not be disclosed to third parties. Neither passwords nor logins should be written down. The user is liable for all the consequences of disclosing these data to third parties.

We recommend blocking the workstations, on which there are active sessions with IRGiT S.A.'s applications.

If a login or password are lost; in the event the computer is stolen, that is whenever there is a possibility that user data may intercepted, this fact must be reported to IRGiT S.A. immediately in order to change the authorization data.