

**NOTE BY THE TECHNICAL SECRETARIAT****UPDATE ON THE SECURE INFORMATION EXCHANGE SYSTEM****Introduction**

1. The timely exchange of information between the States Parties and the Technical Secretariat (hereinafter “the Secretariat”) is crucial for the effective and efficient implementation of the provisions of the Chemical Weapons Convention (hereinafter “the Convention”).
2. The traditional way of exchanging classified information, through diplomatic pouch, imposes logistical difficulties. These can cause delays and may, therefore, adversely affect the timely fulfilment by the States Parties of their obligations under the Convention, including the timely submission of declarations. This may also have repercussions for important activities carried out by the Secretariat, such as the evaluation of declarations and the planning of inspections.
3. To address this issue, the Secretariat has designed and put in place a system for the secure electronic transmission of classified documents, known as the Secure Information Exchange (SIX) system, in accordance with the Note by the Secretariat on this subject (S/1192/2014, dated 1 July 2014).
4. The present Note describes the current status of the SIX system and the priorities for the future of this critical communication mechanism. A previous update was provided to the States Parties last year (S/1525/2017/Rev.1, dated 19 September 2017).

Overview of system utilisation

5. As at 31 July 2018, 56 States Parties had registered for the SIX system, resulting in authorisation for 97 individual users to use the system, which can now be considered as an established system for secure communication between the Secretariat and the States Parties. An up-to-date list of registered States Parties is maintained on the dedicated section of the OPCW external server.¹
6. States Parties from all OPCW regional groups are represented among the users, with 30% from the Group of Western European and other States, 27% from Asia, 20% from Latin America and the Caribbean, 16% from Eastern Europe, and 7% from Africa.

¹ See the “SIX Documents” link on the left-hand side of the OPCW external server home page.



7. The number of registered States Parties has been growing steadily since the system's launch. The highest increases in the number of newly registered States Parties have been observed in the periods when States Parties are preparing and submitting annual declarations. These trends started in the first quarter of 2015 and continued from 2016 to 2018. As a result, the number of annual declarations on past activities received through the SIX system continues to increase. In the 2018 declaration round for past activities, 46 declarations were submitted using the SIX system (resulting in a significant increase year over year); in 2017 this number was 33 and in 2016 this number was 28. Therefore, current trends indicate an overall increase and preference for the use of the electronic declaration transmission process, which allows States Parties to dedicate more time to the preparation of declarations and benefit from a more effective and streamlined declaration submission process.
8. Overall, the Secretariat has so far received 703 documents from States Parties through the SIX system. The majority of these documents have been annual declarations of past and anticipated activities, as well as amendments to previously submitted declarations under Article VI of the Convention. In addition, other types of documents have been received, including declarations under other articles of the Convention (Article III or Article X, for example), responses to official letters from the Secretariat, and operational documents related to the SIX system itself.
9. For the submission of documents from the Secretariat to the States Parties, in addition to the reconciliation letters, the system is increasingly being used for final inspection reports. It is also important to note that several States Parties recently expressed an interest in moving to paperless communication with the Secretariat for confidential information, where possible.

Current and future activities

10. The majority of the Secretariat's activities since the system was launched have focused on providing support to the States Parties in regard to registering and using the system and on promoting the system among the States Parties. Presentation and demonstration of the SIX system have been part of the training courses organised for National Authorities. In addition, the e-learning module "Introduction to SIX", which was introduced in 2015 in English only, is now available in French and Spanish also.
11. To ensure that the system is operational and available to users and for continued security, the Secretariat performs regular system updates and maintenance activities, as well as security audits, by both internal and external experts.
12. Following the successful analysis of legal considerations and in accordance with paragraph 8 of the terms and conditions for the use of the SIX system included in Annex 1 to S/1192/2014, the SIX system may be used for the transmission of information such as declarations and related documentation, which includes transfer discrepancy (TD) letters. Accordingly, starting from the 2017 TD round, the SIX system has been open for the transmission of TD letters between State Parties, whereby the Secretariat serves as the hub for document exchange between the State Parties.
13. Between the fourth quarter of 2017 and the second quarter of 2018, the Secretariat made two notable system security and user experience improvements, namely:

- (a) The usage of the WebVPN authentication layer has been decommissioned. SIX users now access the SIX Internet portal page directly. However, it is important to highlight that the SIX Internet portal is not directly exposed to the Internet, and all traffic to it is first managed by a new appliance that has been put in place—the web application firewall (WAF). The WAF is an advanced firewall system that inspects web-based traffic and blocks anything malicious. The WAF protects the SIX system against unauthorised access, and proactively protects it against fraud and/or data theft.
 - (b) To further strengthen and improve SIX user logon sequence security, the Secretariat has introduced a two-factor authentication (2FA) method. The 2FA is the latest advancement in information security systems. It works using the phenomenon of presenting two authentication factors to gain access into the SIX system. This implies that the new authentication method will require a knowledge factor (SIX system password and PIN) and a possession factor (a software token each SIX user will be required to use).
14. Concerning the use of the system for the exchange of other types of documents, the Secretariat is evaluating the potential expansion of the system's scope to include documents under other articles of the Convention (such as Articles VII and X). This analysis is in progress, focusing on legal considerations as well as any background work required to support this expansion.

Conclusion

15. Since it was introduced in 2014, the SIX system has demonstrated the increased efficiency it brings to the Secretariat and the States Parties. The Secretariat will continue its efforts to increase and expand the use of the system, as well as to further improve the quality of this service provided to the States Parties.
16. Further questions or comments concerning SIX can be sent to:

Data Analytics, Reporting and Quality Control Section
Declarations Branch, Verification Division
OPCW
Johan de Wittlaan 32
2517 JR The Hague
The Netherlands
Telephone: +31 (0)70 416 3039
Email: six@opcw.org