7 February 2008

SAC027: SSAC Comment to GNSO regarding WHOIS studies

The Security and Stability Advisory Committee thanks the GNSO for the opportunity to comment on future studies related to WHOIS. SSAC has conducted studies on WHOIS in the past (SAC 014, *Information Gathering Using Domain Name Registration Records* 28 September 2006, and SAC 023, *Is the WHOIS Service a Source for email Addresses for Spammers?* 23 October 2007) and believes additional studies may prove valuable.

SSAC members have and will continue to work with the GNSO to provide a viable and scalable solution to the administration and access of domain name registration information. To do so, we believe it is useful to consider the following matters:

- To date, little progress has been made towards the development of a formal directory service for the Internet. While the development of technical standards for the Internet is not an ICANN activity, the ICANN community would benefit from the use of a formal directory service.

- In the absence of a formal directory service, the Internet community has attempted to "make do" with available protocols/services. The adaptation of the WHOIS protocol by the domain name registration community is a noteworthy example.

- Considerable technical shortcomings prevent WHOIS services from satisfying the needs of the domain name community in areas of authentication, data accuracy, data confidentiality, and data integrity. SSAC observes that it is unlikely that this rudimentary protocol could be improved to overcome these shortcomings.

- The limitations of the WHOIS protocol and variability among WHOIS implementations and services contribute to the poor quality of domain name registration data currently available.

- The domain name registration community has focused its attention on compensating for (3) through policy definition and enforcement. However, policy alone will not provide the Internet community with a secure and reliable directory service capability that is able to satisfy the needs of diverse Internet constituencies. SSAC believes that this objective can only be achieved through a _combination_ of policy development and implementation of a standard, uniform directory service that provides authentication, data confidentiality, data accuracy and data integrity services.

On these bases, SSAC recommends the following:

1. The GNSO should continue current and proposed work to resolve legal and privacy issues within the existing WHOIS framework. SSAC believes that studies that catalog legitimate uses as well as abuses of domain registration information, continued studies regarding privacy, and studies that consider finer-grained access and role-based access control models for WHOIS can help the community establish requirements for the administration of domain registration information.

2. ICANN should take aggressive measures with respect to improving registration data accuracy and integrity. Future agreements should include data accuracy and integrity (e.g., archival and restoration) guidelines and should include provisions for sanctions or other penalties for those who do not comply with these guidelines.

3. The ICANN community should adopt an Internet standard directory service as an initial step toward deprecating the use of the WHOIS protocol in favor of a more complete directory service. SSAC encourages the ICANN community to study the standards developed by the IETF's Cross Registry Information Service Protocol (CRISP) Working Group. In particular, SSAC urges the GNSO to consider the requirements for CRISP identified in RFC 3707 and the set of RFCs associated with the Internet Registry Information Service (IRIS) (RFCs 3981 - 3983) which appear to provide sufficient features and services to meet the needs of the domain registration community.

4. ICANN should work with all TLD registry operators to develop a timeline and transition plan for migrating from the current WHOIS service to a successor Internet "domain" directory service.

SSAC looks forward to participating in these activities.