

CPH Definition of DNS Abuse – 16 June 2020

DNS Abuse is composed of five broad categories of harmful activity insofar as they intersect with the DNS: malware, botnets, phishing, pharming, and spam when it serves as a delivery mechanism for the other forms of DNS Abuse. The Internet and Jurisdiction Policy Network's *Operational Approaches, Norms, Criteria, Mechanisms* provides the following definitions for each of these activities:

- **Malware** is malicious software, installed on a device without the user's consent, which disrupts the device's operations, gathers sensitive information, and/or gains access to private computer systems. Malware includes viruses, spyware, ransomware, and other unwanted software.
- **Botnets** are collections of Internet-connected computers that have been infected with malware and commanded to perform activities under the control of a remote administrator.
- **Phishing** occurs when an attacker tricks a victim into revealing sensitive personal, corporate, or financial information (e.g. account numbers, login IDs, passwords), whether through sending fraudulent or 'look-alike' emails, or luring end users to copycat websites. Some phishing campaigns aim to persuade the user to install software, which is in fact malware.
- **Pharming** is the redirection of unknowing users to fraudulent sites or services, typically through DNS hijacking or poisoning. DNS hijacking occurs when attackers use malware to redirect victims to [the attacker's] site instead of the one initially requested. DNS poisoning causes a DNS server [or resolver] to respond with a false IP address bearing malicious code. Phishing differs from pharming in that the latter involves modifying DNS entries, while the former tricks users into entering personal information.
- **Spam** is unsolicited bulk email, where the recipient has not granted permission for the message to be sent, and where the message was sent as part of a larger collection of messages, all having substantively identical content.

While Spam alone is **not** DNS Abuse, we include it in the five key forms of DNS Abuse when it is used as a delivery mechanism for the other four forms of DNS Abuse. In other words, generic unsolicited e-mail alone does not constitute DNS Abuse, but it would constitute DNS Abuse if that e-mail is part of a phishing scheme.