

## Reporting Status of Vulnerability-related Information for Software Products, etc.

- 4<sup>th</sup> Quarter of 2007 (October – December) -

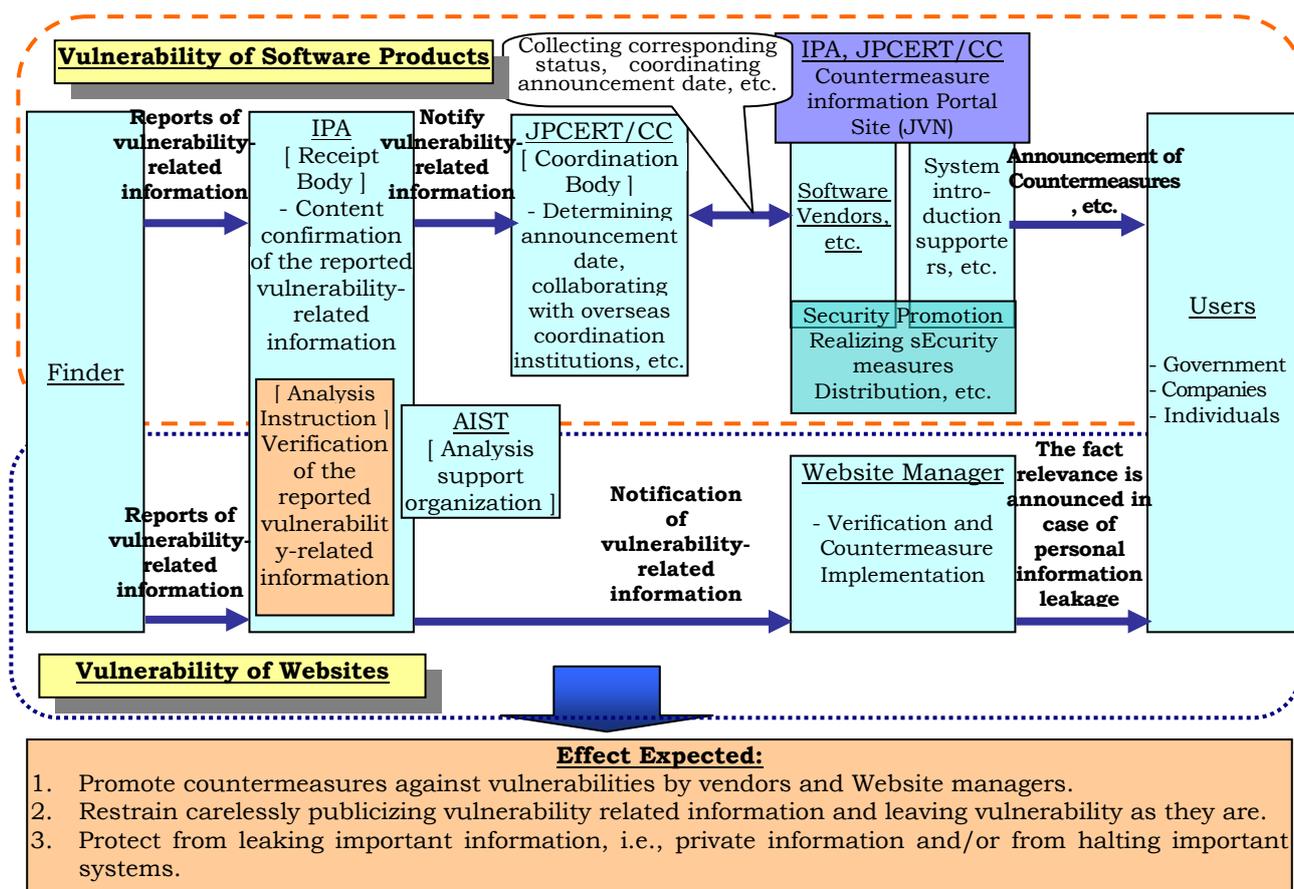
Information-Technology Promotion Agency, Japan (IPA) and JPCERT Coordination Center (JPCERT/CC), a limited intermediate corporation, have initiated to handle vulnerability-related information from July, 2004 based on the announcement “Standard for Handling Vulnerability-related Information for Software Products, etc. (#235, Announcement of METI, 2004) by the Ministry of Economy, Trade and Industry (hereinafter refers to METI). Based on the announcement, IPA is accepting reports for following vulnerability-related information:

### **1: Vulnerability-related Information for Software Products:**

Vulnerabilities against software on clients such as on OSs and/or on browsers, software on servers such as Web servers, software embedded hardware such as IC cards, etc. Other than the information for vulnerability itself, information for verification method, attacking method and method for workaround are also accepted. IPA will notify such vulnerability-related information to JPCERT/CC and JPCERT/CC will communicate such information to concerned organizations such as vendors, etc. in domestic.

### **2: Vulnerability-related Information for Website(Web Applications):**

Vulnerabilities against systems which configure services unique to that site provided for public through the Internet Web sites, etc. IPA will notice such vulnerability-related information to Website managers and to prompt its modification.



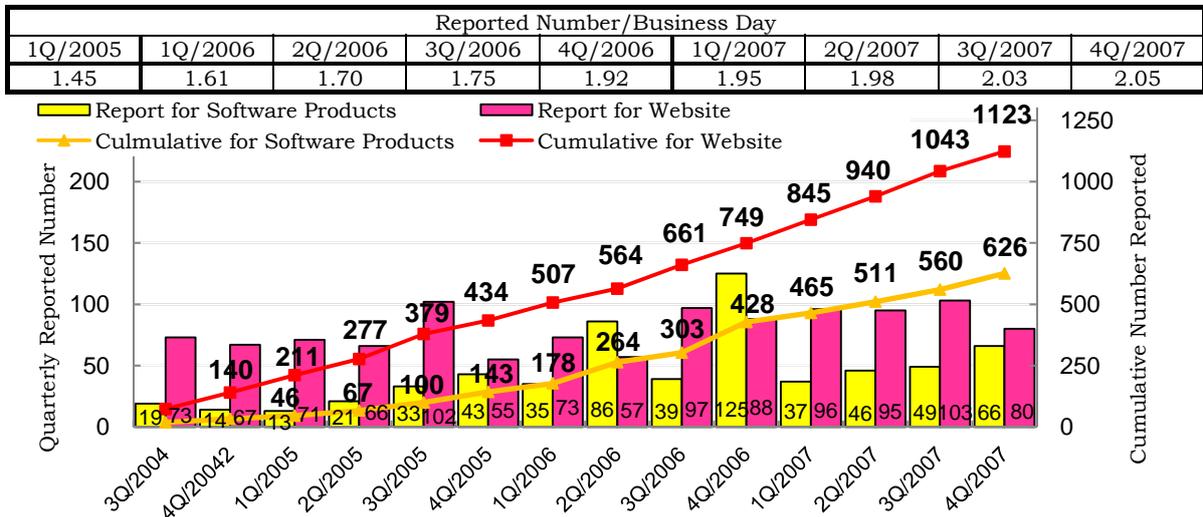
### **“Information Security Early Warning Partnership” (Framework for Handling Vulnerability-related Information)**

Source: Material for explanatory meeting for handling vulnerability-related information (General explanation for handling standard for vulnerability-related information in software and its guidelines) by the Ministry of Economy, Trade and Industry

Based on the framework for the vulnerability-related information described in advance, reporting status for the 4<sup>th</sup> Quarter of 2007 (October to December) is summarized as follows.

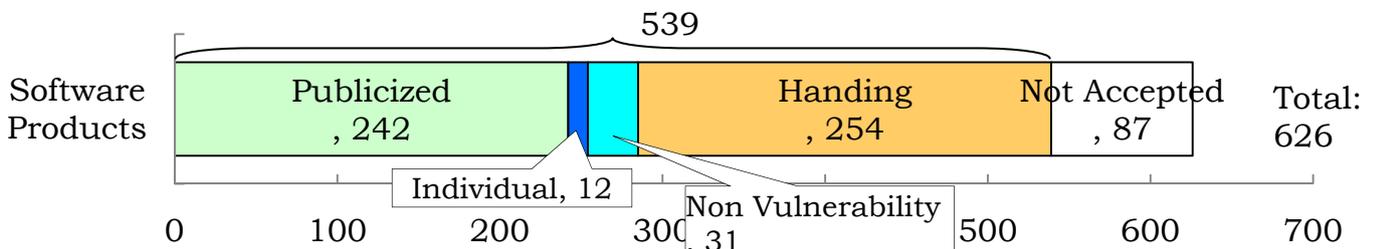
**1. Reported Number and Handling Status of Reports:**

The reported number in relation to vulnerability-related information reported to IPA from October 1 to December 31, 2007 was 146: of 66 was for vulnerability-related software products and the rest of 80 was for vulnerability-related Website. The cumulative reported number from the initiation of acceptance of reporting (July 8, 2004) was 1749: of 626 was for vulnerability-related software products and the rest of 1123 was for vulnerability-related Website. The Chart 1-1 shows the reporting status for respective quarters.

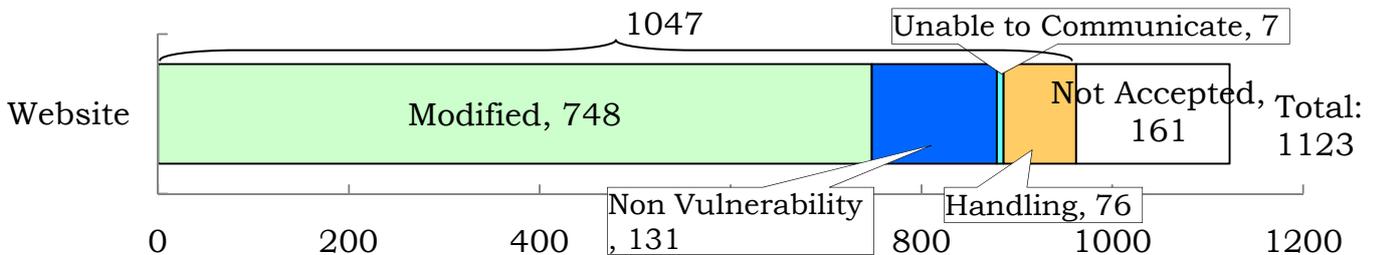


**Chart 1-1: Quarterly Reported Number for Vulnerability-related Information**

The Chart 1-2 shows the processing status of reports for the vulnerability-related information as of the End of December, 2007. As for software products, of 45% (242) of the reports being accepted as vulnerabilities (539) are modified and publicized. As for Website, of 71% (748) of the reports being accepted as vulnerabilities (1047) are modified.



- Publicized : Vulnerability which has been publicized with vendor's responding status by JVN
- Individual : Vulnerability which has been informed to each user by vender
- Non Vulnerability : Vulnerability which has been determined not vulnerability by vendor
- Handling : Vulnerability which is being studied/responded by vendor
- Not Accepted : Vulnerability which is not applied to the subject for report defined by announcement of METI

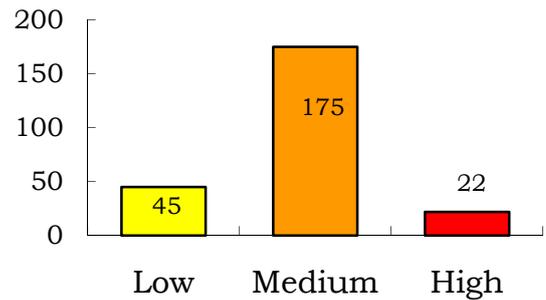


- Modified : Vulnerability modified by Website manager
- Non Vulnerability : Vulnerability which has been determined not vulnerability by Website manager
- Unable to Communicate : It is not possible to communicate with the Website manager
- Handling : Vulnerability which is being studied/responded by Website manager
- Not Accepted : Vulnerability which is not applied to the subject for report defined by announcement of METI

**Chart 1-2: Processing Status of Reporting for Vulnerability-related Information (As of the End of December, 2007)**

**2. Handling of Vulnerability-related Information for Software Products and its Coordination:**

The total reports as information related vulnerabilities in Software Products reported to IPA were 626. The Chart 2-1 show the breakdown for 242 of publicized, and The Chart 2-2 show the breakdown for 539 reports related to the vulnerabilities in software products reported to IPA for the dates from initial acceptance (July 8, 2004) to the End of December, 2007.

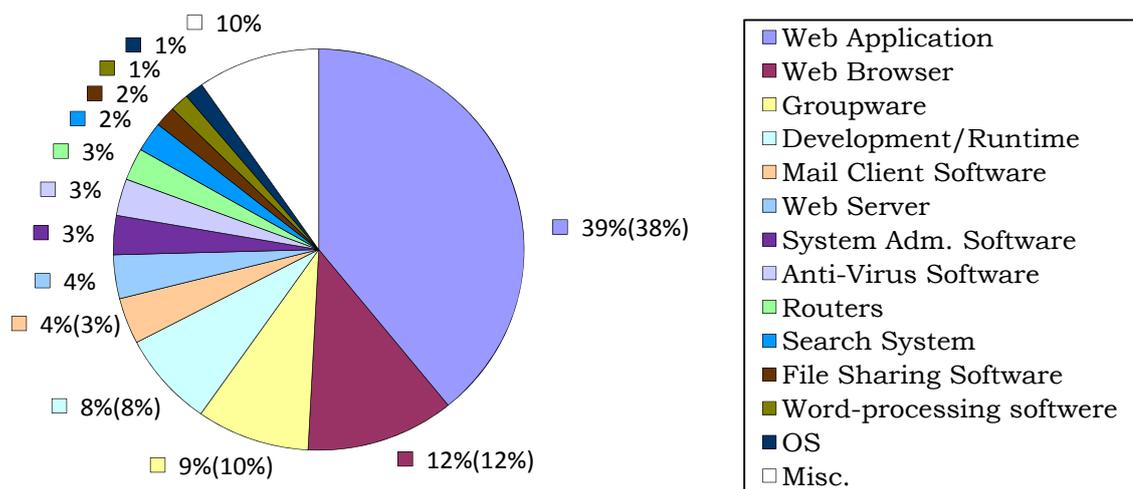


**Chart 2-1: Severity of Vulnerabilities in Software Products**  
(from Initial Acceptance to the End of December, 2007)

The vulnerabilities are organized according to severity, determined by the Common Vulnerability Scoring System (CVSS v2) standard. The division of low, medium, and high severities correspond to the following scores:

- Low - Vulnerabilities will be labeled Low severity if they have a CVSS base score of 0.0 - 3.9 .
- Medium - Vulnerabilities will be labeled Medium severity if they have a CVSS base score of 4.0 - 6.9 .
- High - Vulnerabilities will be labeled High severity if they have a CVSS base score of 7.0 - 10.0 .

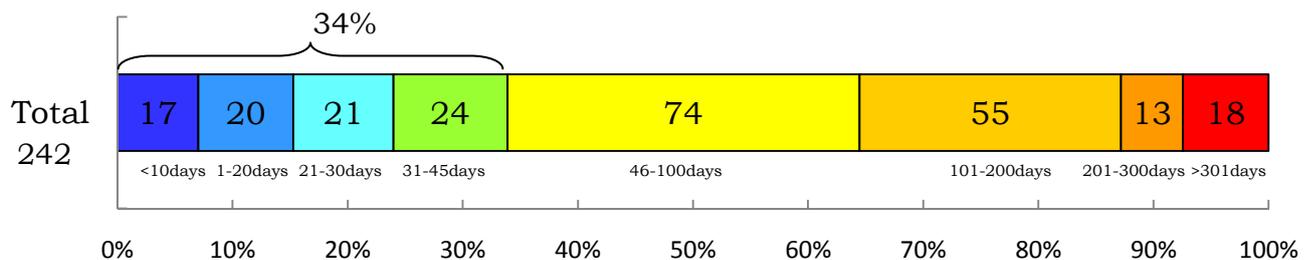
The most significant reporting was for Web application and the reporting for Web Browser was subsequently followed.



Misc. in this graph include software for database, Proxy, etc.  
(Breakdown of 539: Numbers in parenthesis are for previous Quarter)

**Chart 2-2: Breakdown for Classification for the Vulnerabilities in Software Products (for the dates from initial acceptance to the End of December, 2007)**

The Chart 2-3 shows the dates required for the announcement of vulnerabilities in software products. About 34% of reports were addressed within 45days from its initial reporting and announced.

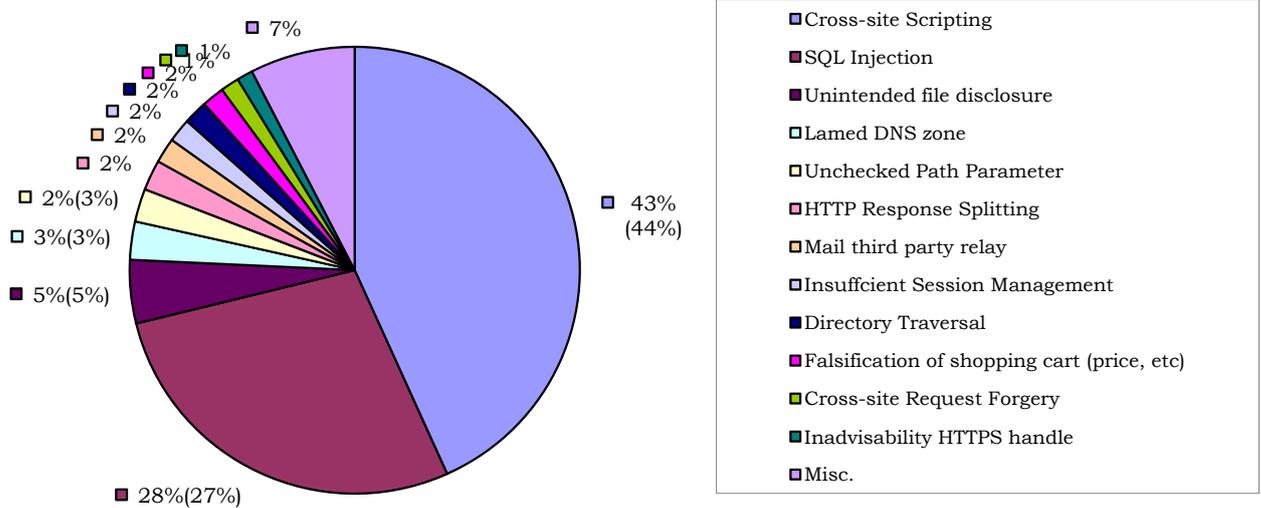


**Chart 2-3: Dates Required for the Announcement of Vulnerabilities in Software Products**

In this Quarter, 31 vulnerabilities were being modified.

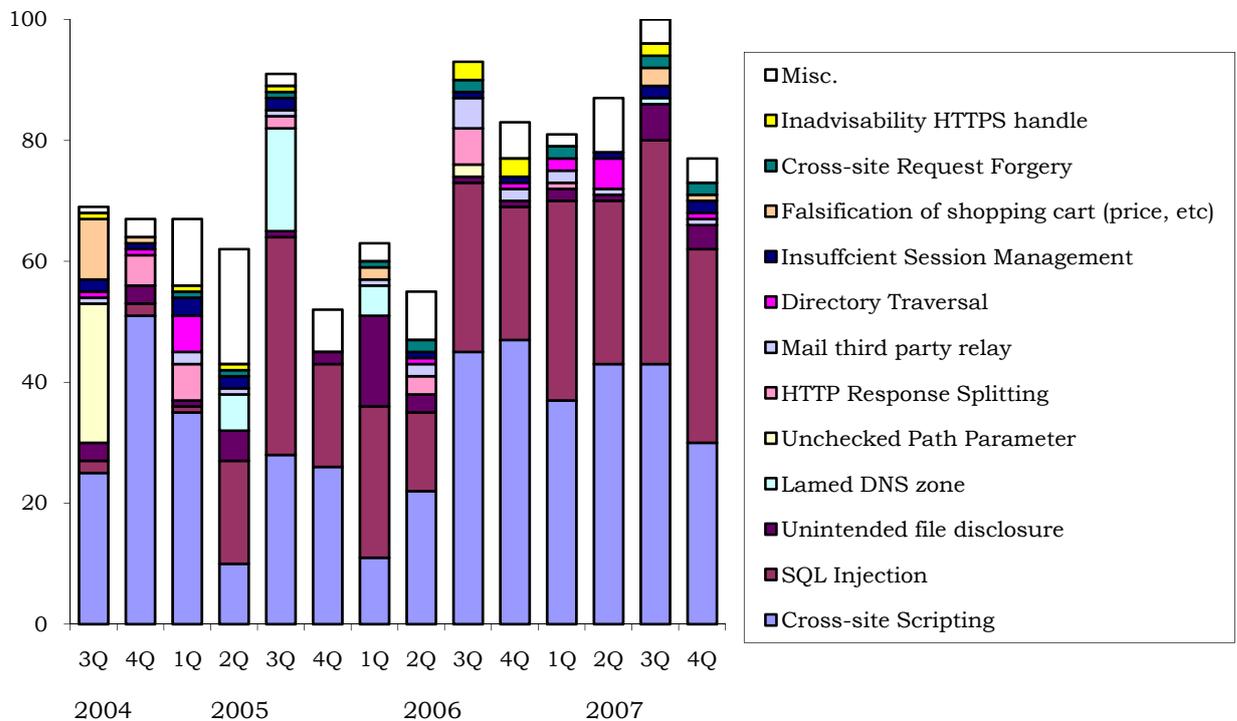
**3. Handling of Vulnerability-related Information for Website:**

The total reports as information related vulnerabilities in Website reported to IPA were 1123: of 1047 information related vulnerabilities in Website being reported from its initial acceptance(July 8, 2004) to the end of the 4<sup>th</sup> Quarter of 2007 excluding those not being accepted as they were not vulnerabilities is shown in the Chart 3-1 and 3-2 .



- Breakdown of 1047: Numbers in the parenthesis are for the previous Quarter

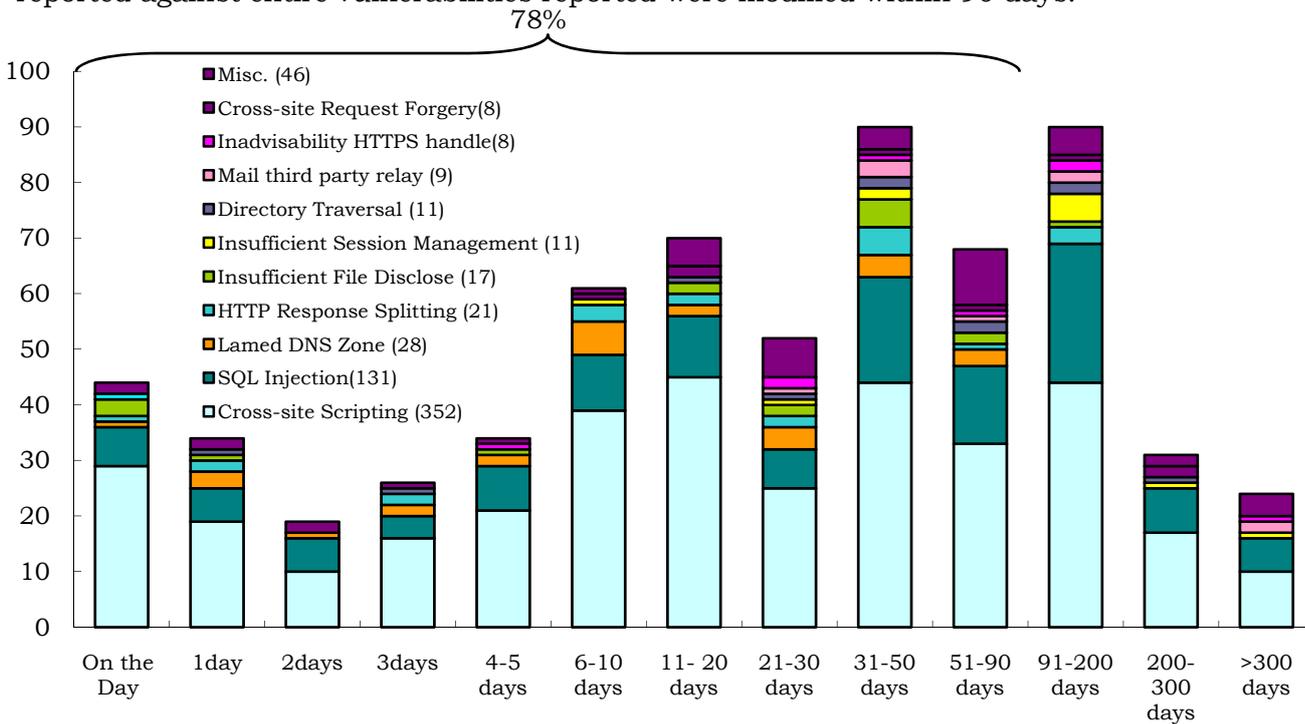
**Chart 3-1: Breakdown of Vulnerabilities in Website by Type (for the dates from Initial Acceptance to the End of December, 2007)**



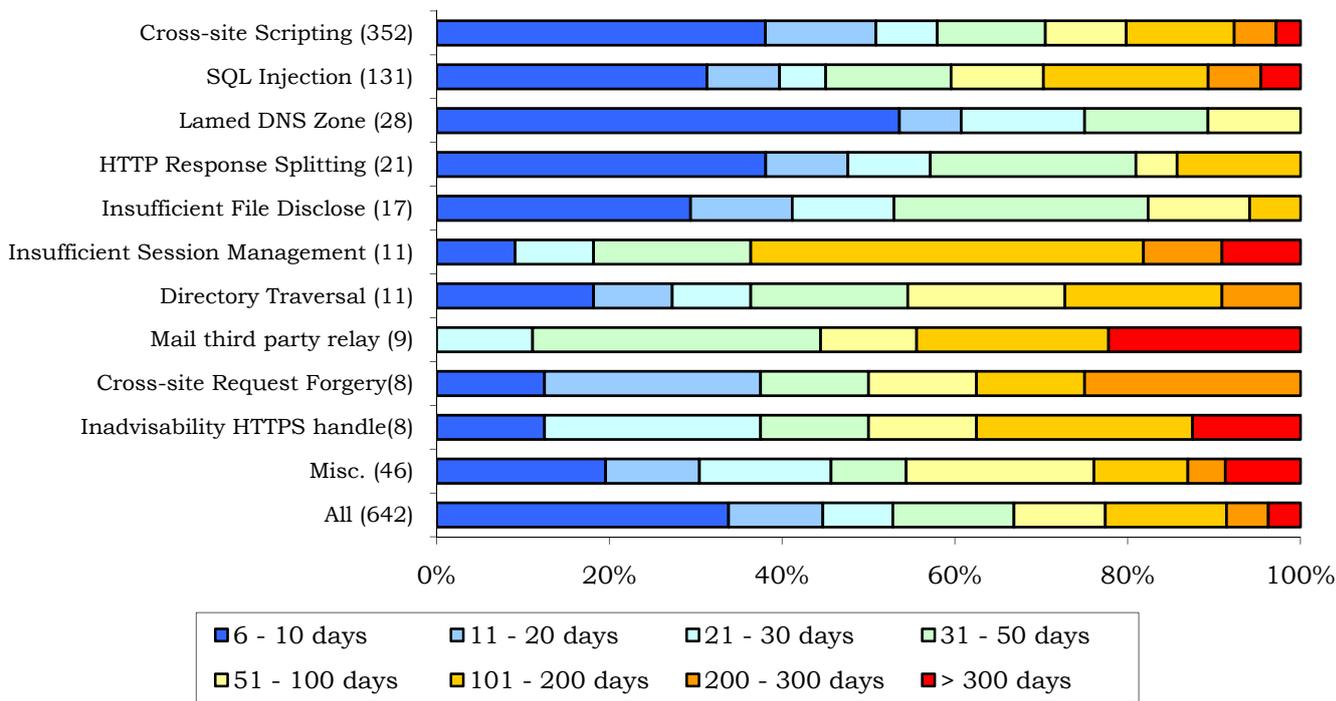
**Chart 3-2: Shift in Number of Vulnerabilities in Website by Type (for the dates from Initial Acceptance to the End of December, 2007)**

As for the type of vulnerabilities, “Cross-site scripting” and “SQL injection” were taken over about 70% against entire vulnerabilities.

The Chart 3-3 and 3-4 show dates required to modify vulnerabilities by type after notified detailed information of the vulnerabilities to Website managers. Of 78% of vulnerabilities reported against entire vulnerabilities reported were modified within 90 days.



**Chart 3-3: Dates Required Modifying Vulnerability in Website**



**Chart 3-4: Dates Required Modifying Vulnerability in Website by Type**

**Contact**

IT Security Center, Information-technology Promotion Agency, Japan (IPA/ISEC)  
 Tel : +81-3-5978-7527  
 Fax : +81-3-5978-7518  
 E-mail : [isec-info@ipa.go.jp](mailto:isec-info@ipa.go.jp)