

APPENDIX B: METHODOLOGY

INTERNATIONAL INTELLECTUAL PROPERTY ALLIANCE (IIPA) 2010 SPECIAL 301 REPORT ON COPYRIGHT PROTECTION AND ENFORCEMENT

BUSINESS SOFTWARE

The Business Software Alliance (BSA)'s calculation method compares two sets of data – the number of new software units installed (based on hardware shipments and software load), and the legal supply of new software units. The amount of pirated software is equal to the difference between paid-for or legitimate packaged software units and the total software base. The piracy rate is the percentage of the total packaged software base that is pirated.

The total amount of software, legitimate and pirated, installed during the year (the total software base) is obtained by multiplying the number of new hardware units and the number of existing hardware units getting new software by their respective software loads.

Hardware shipments are determined from tracking data on 60+ countries that IDC collects as a matter of routine. For the additional 30+ countries and markets, the data was either collected in-country or modeled regionally out of our rest-of-region estimates. The basic tracking data is generated from suppliers, including local suppliers. Similarly, the hardware-installed base is based on this tracking data. The software load is the amount of software units installed and/or pre-installed (OEM) on the computers during the year. To obtain the number of software units for each type of hardware platform, including those running software on Windows and those running software on non-Windows operating systems, IDC surveyed consumers and business in 15 countries: China, Malaysia, Taiwan, Spain, Romania, Brazil, Bolivia, Chile, Colombia, Mexico, Costa Rica, Dominican Republic, Guatemala, Kuwait, and the United States. The results of these surveys were used to populate our input models for the other countries. Within software load, IDC accounted for:

- Software running on new computers
- New software running on existing computers
- Software obtained from retired computers
- Software obtained for free as shareware or open source
- Software that runs on Windows and non-Windows OS

Legitimate software shipments are determined by dividing the software revenues in a country by the average system value (ASV) for that country. Software revenues are captured annually in 60+ countries by IDC software analysts around the world. Revenues are gathered from interviews with suppliers in the country and cross-checked with global numbers and financial statements. For the countries not normally covered by IDC, the data were either collected in-country or modeled regionally out of our rest-of-region estimates. Software revenues are gathered by type – such as application, infrastructure, and development tools – and by software running on Windows and non-Windows operating systems. It was also allocated to software running on new systems bought during the year and on systems that were already in place.

ASVs are estimated country-by-country by country and regional analysts for five software categories (e.g., collaboration, office, security, OS, other) for each hardware type and Windows and non-Windows software. Prices were gathered from IDC's pricing trackers, local research, and interviews with the channel. They included adjusting for OEM and channel-loaded software, as well as software from local suppliers. ASVs were gathered in the appropriate currency depending on how the country analysts collected software revenues.



Dollar losses are calculated off the piracy rate and the market for legitimate software in a country. For instance, if the piracy rate is 60% and the market \$100 million, then the legitimate market is 40% of the total value of all software, which would be \$250 million (\$100M/40%). Pirated software is that total minus the legitimate market (\$250M-\$100M). Thus the value of pirated software is \$150 million. The dollar losses to U.S. vendors are computed by multiplying the value of pirated software by the percentage market share of U.S. vendors in a particular country.

For IIPA's February submission of its 2010 report to U.S. Trade Representative, BSA's statistics for 2009 are preliminary. Final data for 2009 will be released later in 2010.

ENTERTAINMENT SOFTWARE

In select countries, the Entertainment Software Association has provided estimates of the overall number of infringing game downloads performed by users of the leading peer-to-peer (P2P) protocols during December 2009. The methodology underlying these estimates is as follows:

ESA's online program surveys download activity on all major public P2P networks involving a select number of ESA member game titles. The data is derived by measuring the overall levels of worldwide pirate activity on P2P networks, broken down, by country, based on the country of origin of the ISP. This data is only a subset of the overall infringements during the monitoring period as it accounts only for downloads through P2P file sharing protocols of the selected game titles, such as BitTorrent and eDonkey, but does not include infringing downloads from hosting sites, such as rapidshare.com. Therefore, this data should be viewed as an estimation of the overall levels of piracy on each P2P protocol being monitored and the estimated percentage of infringements detected per country and ISP. All of the data available reflects 100% verified infringements. Each file (hash) included in the results has been downloaded, viewed and verified to be infringing.

RECORDS AND MUSIC

The Recording Industry Association of America (RIAA) collects market data from the local industry or from executives with responsibility for the particular territory. The estimates are based on local surveys of the market conditions in each territory. Each submission is reviewed against a range of sources:

- Market surveys by anti-piracy personnel and/or third parties;
- Optical disc industry and CD-R burning data provided by third-party consultants;
- Legitimate sales;
- Enforcement data and anti-piracy developments;
- Historical piracy estimates; and where possible,
- Economic indicators, professional surveys and academic studies of piracy or counterfeit goods.
- Where possible, legitimate revenue from online and mobile networks.

The numbers produced by the music industry in most cases reflect estimates of the level and value of pirate sales of U.S. repertoire. This does not take into account downstream (or value chain) losses from high piracy levels acting as a drag on the economic development of legitimate markets. In cases where circumstances permit, rather than reporting pirate sales, RIAA projects unit displacement (real losses). In such cases, "loss" data does not reflect the value of pirate sales but rather the value of estimated lost sales. In most cases, this would be significantly higher than the value of pirate sales. Where possible, RIAA estimates losses and piracy rates occurring via online and mobile networks and in appropriate cases has so designated this in the text of the country report.