Proposal for the creation of an
"IGF Working Group on Trusted Computing"

Summary

This proposal requests the creation, as a part of the United Nations' Internet Governance Forum, of a working group on the subject of "trusted computing", with the purpose of bridging the different views on the subject and of establishing common best practices that could act as guidelines for the deployment and regulation of this new technological and social development.

Definition of the issue

"Trusted computing" (TC) is the name used by the industry to indicate the practice of including, inside PCs and other consumer electronic appliances, special hardware pieces designed to certify the source of the software running on the device, and prevent the execution of software unauthorized by the hardware piece itself, and by its manufacturer.

This practice is designed to fight viruses and piracy; it has the advantage of preventing the execution of malicious or illegal code, but also the disadvantage of potentially giving to a few multinational ICT corporations control on what can be done with all electronic devices in the world. Also, to prevent its circumvention, this technology is being kept reserved, thus not allowing users and governments to verify what the TC devices actually do, especially in terms of data being sent back to the manufacturers over the Internet.

Global technical and policy standards for this matter are defined by the "Trusted Computing Group", an industry consortium including all primary manufacturers of electronic devices and software. Users have formed groups to ask for regulation of the matter, or to fight for the rejection of the idea at all. There is no global regulation of the matter yet, and also few or no national initiatives at all.

The first TC-enabled devices are currently about to be introduced onto the market; this makes the discussion of the issue even more urgent.

Pertinence to the IGF

The matter of trusted computing could completely change the relationship between the ICT industry and end users; most, if not all, of the control on what users can or cannot do with a computer would shift from the owner of the computer to its manufacturer.

This would in turn have an impact on many different policy sectors:
- Antitrust: The manufacturer of the PC and/or of the operating system would be able to prevent specific applications, for example by its competitors, to work on the device.
- Industry development: It is presently unclear how SMEs and individuals who write software could be able to obtain authorization to let their software work on TC-enabled computers. Potentially, licensing costs or other fees and clauses required for the authorization could remove small players and developing country actors from the software development market.

- Electronic security: The introduction of TC could speed up the detection and removal of viruses, trojans, and other malicious software commonly spread over the Internet.
- Consumer rights: Consumers could lose the ability to do whatever they want with their computer; in fact, some say they would in the end lose "property" of their own device, and the rights traditionally attached to it.
- Privacy: It is unclear which operations TC devices actually do, and especially how they communicate with manufacturers over the Internet. This could in turn allow manufacturers to spy what their customers do with the device.
- Intellectual property: TC can prevent the execution of pirated software; however, it can also prevent users from exercising their rights, such as fair use or backup copies.
- National security: The presence of opaque devices on PCs can potentially allow mass surveillance of all electronic communications and activities in a country, not necessarily by the government of that same country.
- National sovereignty: As rules for what can or cannot be done with an electronic device would be defined by private companies residing in a few developed countries, other countries could lose part of their practical ability to regulate the matter.

While the impact of this technology is forthcoming and potentially huge, there is no existing forum that deals with all these aspects; thus, the IGF appears to be the best place where to have a global discussion on trusted computing.

Proposal

The proposal is to establish an online working group, the "IGF Working Group on Trusted Computing" (IGF-WGTC), to have an open discussion on the merits and disadvantages of the widespread introduction of trusted computing, and on whether some practices and rules can be agreed among all stakeholders, to protect the interests and views of all of them.

The working group should be open to any interested stakeholder, and be based on an online mailing list, supplemented by workshops at all physical meetings of the IGF, and, if necessary, by specialized meetings during the year. It could be coordinated by an impartial Chair who can have the trust and support by all stakeholders.

Its aim should be the production of a set of common principles, adopted by consensus, on how to handle this new technology at a global level, defining possible rights and duties of the different stakeholders when using this technology.

If approved, the online working group should be established in September, and the first workshop on the matter could be held in Athens. Final documents could be presented and adopted in the 2007 meeting of the IGF.