Frequently Asked Questions:
Wi-Fi CERTIFIED™ 802.11n draft 2.0

Why should I buy Wi-Fi CERTIFIED 802.11n draft 2.0 products?
802.11n is a breakthrough technology that enables Wi-Fi networks to do more, faster, and over a larger area. 802.11n Wi-Fi provides the best connection available for computer networking and home entertainment applications alike – delivering the range, bandwidth, and performance today's multimedia applications and products demand.

Key features of Wi-Fi CERTIFIED 802.11n draft 2.0 products include:

- A strong Wi-Fi signal that can blanket the entire home
- Support for more devices connecting together on a single network without sacrificing bandwidth
- Use many devices and applications without sacrificing connection performance
- Plenty of bandwidth to move high-definition video and audio streams from device to device throughout the home
- The best user experience while using Wi-Fi devices for with voice calls, video games, and other multimedia applications
- Back up large files in a snap
- Confidence that devices from different manufacturers will work together
- Tested for latest security features
- Configured with "good neighbor" protocol

When will products be available for purchase?
We expect that Wi-Fi CERTIFIED 802.11n draft 2.0 devices will be available in stores and from dealers in August of 2007.

How much performance improvement should I expect with 802.11n Wi-Fi products?
The technology specified in 802.11n draft 2.0 has the potential to deliver up to twice the range and five times the throughput of 802.11a, 802.11b, or 802.11g Wi-Fi devices. However, products may vary in their performance and you should consult manufacturer information and independent product reviews to determine which products are right for you.

What does "draft 2.0" mean?
The IEEE (Institute of Electrical and Electronics Engineers) defines the underlying standards of Wi-Fi technology through a process of written draft documents which are approved by the organization and which ultimately lead to an accepted final standard. Currently, draft 2.0 of the IEEE 802.11n standard has been approved, and this forms the basis for Wi-Fi CERTIFIED 802.11n draft 2.0 products. The final 802.11n standard is not expected until 2009, but the draft 2.0 is widely considered to provide a stable foundation for commercial products.

The Wi-Fi CERTIFIED logo includes the word "draft" so that consumers will know that products with the certification are based upon this draft standard. By looking for the Wi-Fi CERTIFIED logo consumers will know that products have been tested for interoperability, and also that they support the requirements of the same foundational set of specifications.

Will my draft-based Wi-Fi gear work with gear that is designed to comply with the final 802.11n standard?
When the final 802.11n standard is ratified by the IEEE, the Wi-Fi CERTIFIED program will be updated to align with its requirements. This is expected in 2009. At this point it is not possible to determine whether "forward compatibility" with the final standard will exist, but it is widely believed that at least some manufacturers will be able to upgrade equipment via a software update.

I've seen pre-n products in the store for a while now. What has changed?
Some manufacturers released product based upon earlier versions of the IEEE draft standard and labeled these products "pre-n." Some of these products were noted to have interoperability problems. With this new certification program, the Wi-Fi Alliance is helping the industry converge on a specific draft version of the standard against which all certified equipment will be tested. Wi-Fi certification will help ensure the best user experience through wide product interoperability, security protections, a common set of requirements, and backward compatibility. Consumers should always choose Wi-Fi CERTIFIED products when buying any Wi-Fi gear.

How can I tell if a product has been Wi-Fi CERTIFIED?
Look for the Wi-Fi CERTIFIED name and / or logo on the product. Only products which have passed our testing bear the Wi-Fi CERTIFIED name and/or logo:

Can I use 802.11n draft 2.0 products with my old Wi-Fi gear?
Yes. Wi-Fi CERTIFIED 802.11n draft 2.0 products are tested for backward compatibility with 802.11 a/b/g products. Users should match the letters on the Wi-Fi CERTIFIED logo for the new product to the letters in the Wi-Fi CERTIFIED logo in their old product(s).

If a product is Wi-Fi CERTIFIED but does not display the logo, you can determine which older Wi-Fi products will work with this equipment by finding out whether the older products operate in 2.4 GHz or 5 GHz (called band or frequency band), and making sure that the CERTIFIED equipment you purchase operates in the same band.

What is MIMO?
MIMO is an abbreviation for Multiple-Input Multiple-Output, which refers to the ability of equipment to handle multiple data input and multiple data output operation. Wi-Fi CERTIFIED 802.11n draft 2.0 devices make use of multiple antennas to send and receive more than one communication signal simultaneously. This is similar to having two FM radios tuned to the same channel at the same time – the signal becomes louder and clearer. This multiplies the performance of the Wi-Fi signal, and is reflected in the two, three, or even more antennas found on some 802.11n access points or routers.

If I have a mixed network of Wi-Fi CERTIFIED 802.11n draft 2.0 and previous-generation Wi-Fi gear, can I still get the benefits of 802.11n?
Wi-Fi CERTIFIED 802.11n draft 2.0 gear is backward-compatible with Wi-Fi CERTIFIED 802.11 a/b/g gear that operates in the same frequency bands. When using an 802.11n router or access point, you will probably see some performance improvements on a mixed network, but the dramatic range and throughput improvements are only possible when both the client device (notebook computers, gaming devices, printers, cameras, etc.) and access points are Wi-Fi CERTIFIED 802.11n draft 2.0.

Is 802.11n draft 2.0 protected by security?
Yes. All Wi-Fi CERTIFIED 802.11n draft 2.0 products are tested for the latest generation of government-grade Wi-Fi security: WPA2™ (Wi-Fi Protected Access™ 2). The only way to be sure that an 802.11n draft 2.0 product meets these standards is to purchase Wi-Fi CERTIFIED products.

I heard 802.11n draft 2.0 can cause interference problems with other Wi-Fi networks. Is this true?
In some configurations, 802.11n draft 2.0 products can interfere with other Wi-Fi networks when these 802.11n draft 2.0 products are trying to achieve the best performance. However, all products that are Wi-Fi CERTIFIED 802.11n draft 2.0 are required to implement a "good neighbor" protocol that helps ensure interference is not a problem. This is another important reason to buy only Wi-Fi CERTIFIED 802.11n draft 2.0 equipment.

How can I find a list of Wi-Fi CERTIFIED products?
Visit www.wi-fi.org and click on "Certified Products" to find a searchable database of products. You can search by product type, manufacturer, and type of Wi-Fi certification.

Some of the products mentioned in your news release, "test suite products," are already Wi-Fi CERTIFIED for 802.11n draft 2.0? What is a test suite?
Wi-Fi Alliance interoperability tests rely on a set of products as a baseline against which other products are tested. This set of products has passed through an extensive series of qualifying events to be selected to the test suite. They will be the very first products to become officially Wi-Fi CERTIFIED when the program launches in late June 2007.

How can I learn more about 802.11n?
Visit www.wi-fi.org, where you will find white papers, presentations, and other information about Wi-Fi and Wi-Fi CERTIFIED 802.11n draft 2.0.