IEEE 802.11n: Updated Wi-Fi Alliance Plan of Record

August 2006

Background

- In October 2004, the Wi-Fi Alliance announced that it would not certify IEEE 802.11n products until IEEE ratification
  - Reflecting our support for standards-based technology
  - Expectation at the time was that IEEE would ratify by March 2007

- However, the situation is now different:
  - Expected final ratification has been delayed to March 2008, one year past last estimate
  - Pre-standard IEEE 802.11n products are shipping, and tens of millions more are expected to enter the market in 2007 *(ABI Research)*
  - Some pre-standard products are reaching a level of maturity where interoperability testing adds value
  - End users are impacted: either purchasing products without demonstrated interoperability or deferring purchase until ratification

This situation has led to a revision of the Wi-Fi Alliance Plan of Record regarding 802.11n products.

New certification plan: Phase 1

- **WFA plans to introduce a certification program for pre-standard IEEE 802.11n products in the first half of 2007 to help ensure interoperability for a baseline set of features in the short term:**
  - Targeting first approved IEEE 802.11n Letter Ballot, if available by March 2007
    - If the Letter Ballot has been approved, certification will mirror the baseline features in it
  - If Letter Ballot is not approved in this timeframe, Wi-Fi Alliance plans to certify products within the first half of 2007, drawing upon IEEE documents
    - Certification is dependent upon successful interoperability testing of pre-standard products
    - Specifics of how this contingency plan will be executed will be provided as we further our planning efforts in the coming months

- **The Wi-Fi Alliance plans to certify products based on the final IEEE 802.11n standard when it is ratified, supporting what we expect to be a larger set of features and a fully reviewed and interoperable standards based solution**
  - When a full IEEE 802.11n standard is available, we will work toward support of compatibility with pre-standard certified products to help ensure positive user experience
    - The maturity of baseline features in the pre-standard certification diminishes the risk that certified pre-standard products will not comply with the final IEEE 802.11n standard

FAQs

- Why did Wi-Fi Alliance make this change?
  - WFA believes that the change in the estimated IEEE ratification date, the interoperability needs of the user community, and the volume of pre-standard product expected to enter the channel warrants an update to the certification plan-of-record

FAQs

- Is IEEE draft mature enough to form the basis of a certification program?
  - WFA anticipates the baseline features in the IEEE 802.11n draft will be mature enough to start a certification program in the first half of 2007. There are some risks in certifying interoperability to a draft standard while the IEEE review process is still in progress.
  - However, in this case, the WFA believes that the industry's need for certified interoperability between the rapidly increasing numbers of pre-standard products justifies the risks. We will continue to evaluate the maturity of the baseline features between now and the start of the pre-standard 802.11n certification.

FAQs

- Will there be backward compatibility?
  - When the final standard is ratified the Wi-Fi Alliance plans to support backward compatibility with pre-standard certified products; However, it is not possible to make any guarantees of backward compatibility at this time, given that the final IEEE 802.11n standard is not anticipated to be ratified until March 2008.

- What should prospective Wi-Fi buyers consider in the interim, before pre-standard 802.11n certification is available?
  - Wi-Fi buyers should seek Wi-Fi CERTIFIED® products that meet their needs.

FAQs

- How will the certification marks be communicated?
  - Our logo development process is just beginning, but we recognize that it is important that consumers be aware that they are buying pre-standard products. Our logo and naming will support that objective.

- What features/capabilities will be included in the pre-standard certification program?
  - The feature list is still in development as progress within the IEEE continues. Further details will be available prior to certification launch.

FAQs

- Will Wi-Fi Alliance continue to provide Wi-Fi certification testing according to the pre-standard program once the 802.11n standard has been ratified?
  - Wi-Fi Alliance will formulate recommendations for the migration of legacy test plans over time, based upon the market situation at the time of 802.11n ratification

- Will the Phase 2 certification program comply with the final IEEE 802.11n standard?
  - Yes