

**IEEE P802.22  
Wireless RANs**

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**IEEE 802.22a ISO PSDO Ballot Comment Resolutions**

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**Abstract**

This document provides the ISO IEEE 802.22a Comment Resolutions for the PSDO Process

## IEEE 802.22a ISO/IEC/JTC1 Comments and Resolutions

### BACKGROUND

- IEEE 802.22a 60-day pre-ballot passed on 3 April 2016 but a response is required
- Drafts sent to SC6: sent
- IEEE 802.22a was liaised in July 2015 to SC6 to allow them to become familiar with it before submission for approval under the PSDO process
- 60-day pre-ballot: passed on 3 April 2016 and a response is required
- IEEE 802.22a was submitted for 60-day ballot in December 2015, and after a delay the ballot passed on 3 April 2016 (N16414)
- The only substantive comment was from the China NB
  
- **China NB comment 1**
  - *The security in both ISO/IEC/IEEE 802.22a (6N16378) and ISO/IEC/IEEE 802.22b (6N16379) is based on IEEE 802.1X. Since the technical concerns China NB proposed in 6N15555 still haven't been reasonably disposed in this text, China NB has to vote against on this ballot*
- **China NB request 1**
  - *Remove the IEEE 802.1X-2010-related descriptions from the text.*
  
- **Proposed IEEE 802 response to China NB comment & request 1**
- The China NB has requested that IEEE 802.1X-2010 related descriptions are removed from the text of IEEE 802.22a.
- IEEE 802 declines to make this change because:
  - IEEE 802.22a does not contain any IEEE 802.1X-2010 related descriptions and does not require conformance to or use IEEE 802.1X-2010
  - There is no technical justification to remove any IEEE 802.1X-2010 related descriptions from any standard
- While the base IEEE 802.22-2011 specification does reference various IEEE 802.1 specifications including IEEE 802.1X, only IEEE 802.1Q is referenced directly in IEEE 802.22a. IEEE 802.1Q explains how it can be used in conjunction with IEEE 802.1X. However, conformance to and use of IEEE 802.1X is not a requirement of any of the possible claims of conformance to IEEE 802.1Q.
- IEEE 802 recognizes that the China NB has asserted this in past that man-in-the-middle (and other) attacks are possible against IEEE 802.1X based systems. However, the technical details of such an attack (or a demonstration of an attack) have not yet been supplied by the China NB. In the absence of technical substantiation of the claims, there is no justification to remove references to IEEE 802.1X-2010 from any standard.