This provides responses to comments JTC1 ballot of IEEE 802c-2017 (ISO/IEC/IEEE FDIS 8802-A:2015/FDAmd 2).

The voting results on IEEE 802c-2017 (ISO/IEC/IEEE FDIS 8802-A:2015/FDAmd 2):

- Passed 9/1/9
- 1 comment was received with the China NB NO vote

The comments have been processed in a timely manner using the mechanisms defined and agreed in 6N15606. This document provides the responses from IEEE 802 to the comment by China NB on this ballot.

China NB comment 1 on IEEE 802c-2017 (ISO/IEC/IEEE FDIS 8802-A:2015/FDAmd 2):

The abstract stated "*An optional local medium access control (MAC) address space structure, known as the Structured Local Address Plan (SLAP), is provided in this amendment to IEEE Std 802®-2014 in order to allow multiple administrations to coexist. This structure designates a range of local MAC addresses for protocols using a Company ID (CID) assigned by the IEEE Registration Authority. "*

Also Section 9.3 states that "*an organization that has an OUI, CID, or OUI-36 assigned to it may use its OUI, CID, or OUI-36 to assign globally unique protocol identifiers to its own protocols*". The format of an OUI or CID used as protocol identifier is explicitly and typically defined for this project in Figure 15.

However, IEEE has already registered multiple OID nodes for the MAC adddress and add them into the OID identification system. Using CID will cause confusion in the international standard identifier system and add burden or difficulty to the management.

Proposed Change:

OID is a flexible, scalable and across heterogeneous systems identifying mechanism proposed by ISO/IEC and ITU-T. OID is commonly applied in ISO/IEC international standard series. It has established a complete global OID registration system and is running well over years. Moreover, OID has explicitly reserved 1(ISO).3(identified-organization) for assigning globally unique protocol identifiers for companies.

IEEE 802 replied CN1 in 6N16797 and mentioned that *"OID-based identifiers are already supported and are specified Clause 10 of the base standard (ISO/IEC/IEEE 8802-A:2015 "Information technology -- Telecommunications and information exchange between systems -- Local and metropolitan area networks -- Part A: Overview and architecture") that is proposed for amendment by IEEE Std 802c."*However, actually the similar problem also exist in the base standard ISO/IEC/IEEE 8802-A:2015. The management of network resources of a large number of IEEE 802 standard series is still unclear and there are no specific management provisions and allocation rules. The users have no idea about where and how to get these resources.

Therefore, in terms of the unification of similar identifiers used in global standards and the reduction of management difficulty as far as possible, it is suggested that the CID format defined in this proposal directly adopt OID format.

IEEE 802 response to CN.1 on IEEE 802c-2017 (ISO/IEC/IEEE FDIS 8802-A:2015/FDAmd 2):

IEEE 802 appreciates the review and comments of the China National Body regarding ISO/IEC/IEEE FDIS 8802-A:2015/FDAmd 2.

The protocol identifiers specified in the amendment are intended for use within Layer 2 packets and other cases with a need for a compact identifier rather than a verbose and variable-length OID.

OID-based identifiers are already supported and are specified in Clause 10 of the base standard (ISO/IEC/IEEE 8802-A:2015 that is proposed for amendment. Regarding the comment that "IEEE has already registered multiple OID nodes for the MAC adddress," an OID hierarchy is specified in ISO/IEC/IEEE 8802-A:2015 but we are not aware of an IEEE OID for MAC addresses.

ISO/IEC/IEEE 8802-A:2015 specifies the construction of a protocol identifier as an extension of the 24-bit unique OUI assigned to an organization. The proposed amendment would provide for a 24-bit unique CID to be used as an alternative to the 24-bit unique OUI. The OUI and CID lie in non-overlapping regions of the same 24-bit number space, so the amendment supports additional organizational assignments. An OID, even if the length were fixed, would not be backward-compatible with current OUI usage and would be problematic and complex for many implementations.

The SNAP encoding of ISO/IEC/IEEE 8802-A:2015, based on OUI, has been widely implemented. Replacing OUI with CID is completely compatible, whereas using OID would not be.

Regarding the view that "users have no idea about where and how to get these resources," we note that, per ISO/IEC/IEEE 8802-A:2015, "The IEEE RA has the responsibility of defining and carrying out procedures for the administration of universal addresses. The IEEE RA has also been designated by ISO/IEC to act as a registration authority for the ISO/IEC 8802 series of standards." Additional information for users is provided in Footnote 1 of ISO/IEC/IEEE 8802-A:2015 and in Footnotes 2-5 of the FDIS.