

IEEE 802.1 Shortest Path Bridging Update Summary For Discussion

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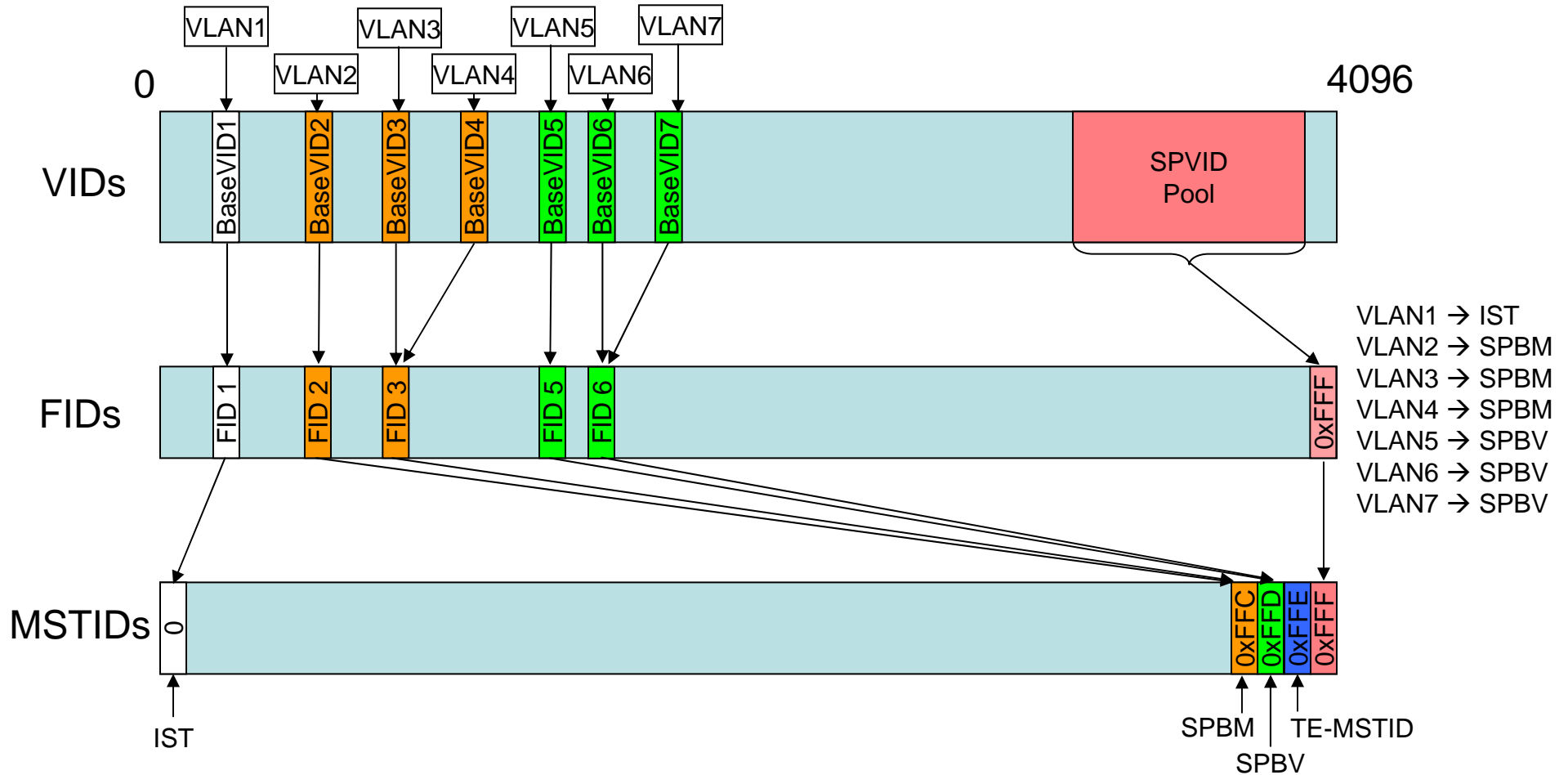
D2.1 Update

- Primarily alignment of Clause 27 and 28 to comments and the bridge architecture
- Lots of new text.
- New Terms SPBV and SPBM to clarify modes as per July Discussions
- Still checking 2.0 Comments
 - Not all comments addressed yet particularly with aligning base text with 802.1Qay

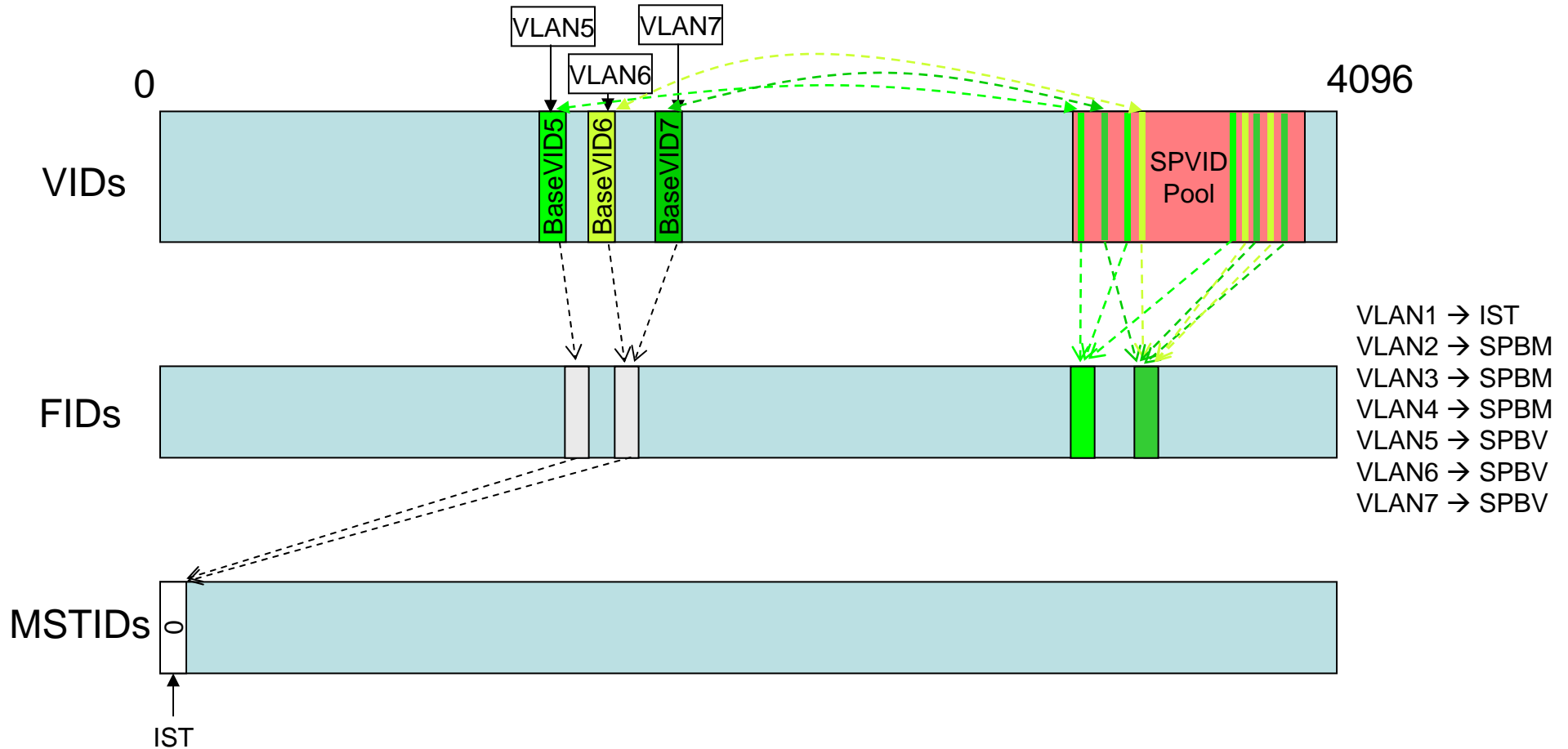
Terminology

- SPBV and SPBM used consistently.
- ECMT -> ECT
- I-SID registration and the VLAN Mapping

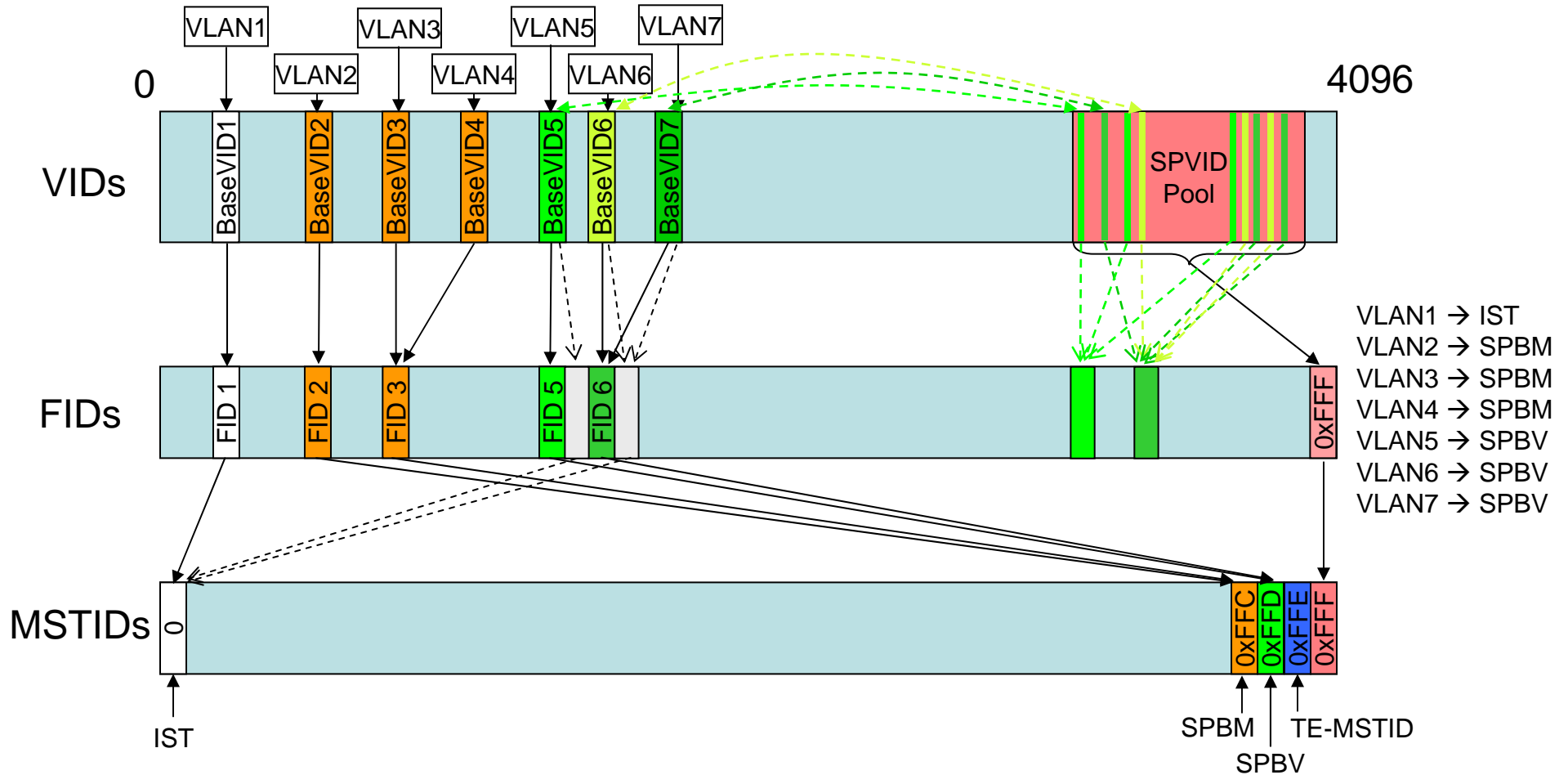
VID → FID → MSTID configuration



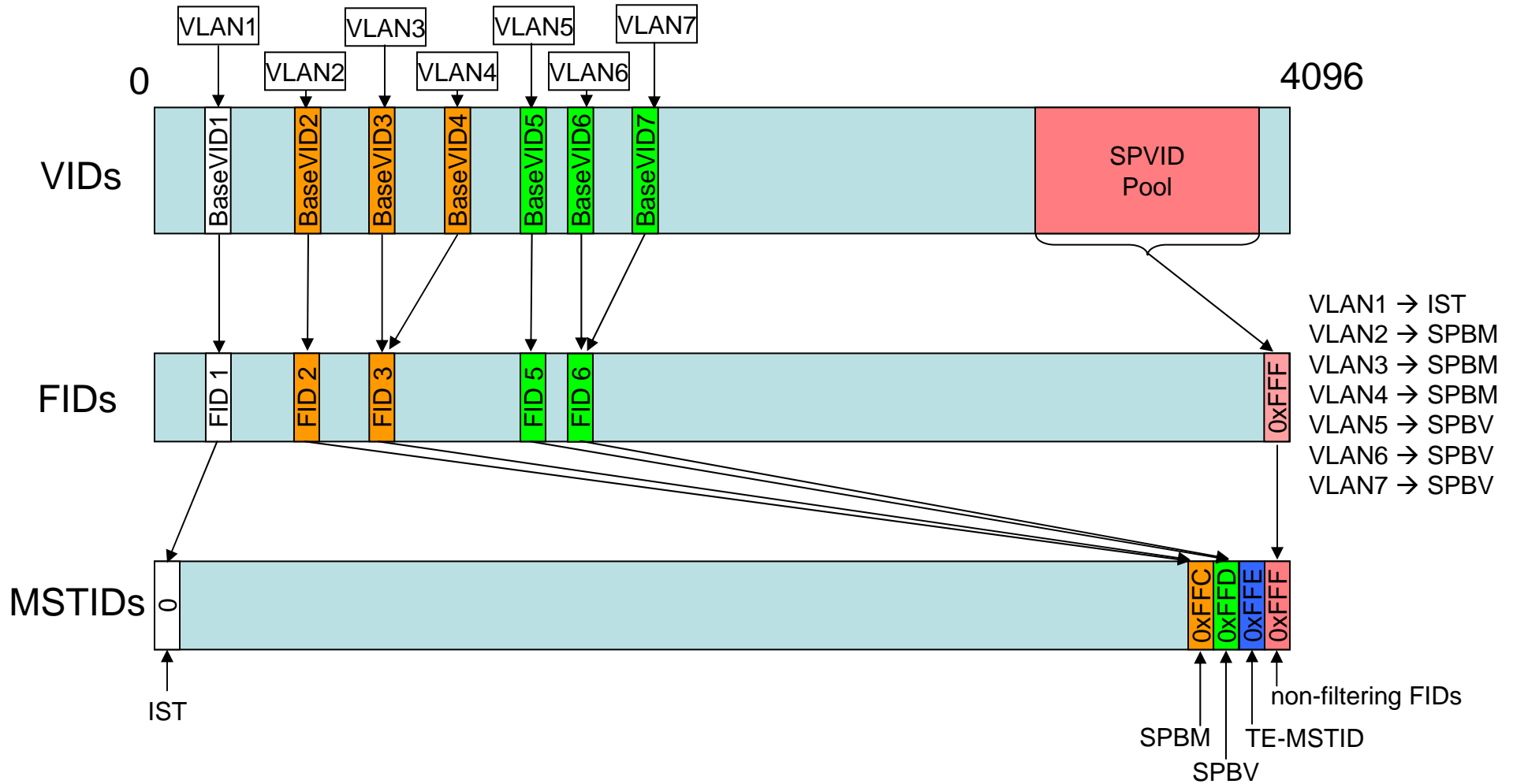
VID→FID→MSTID allocation



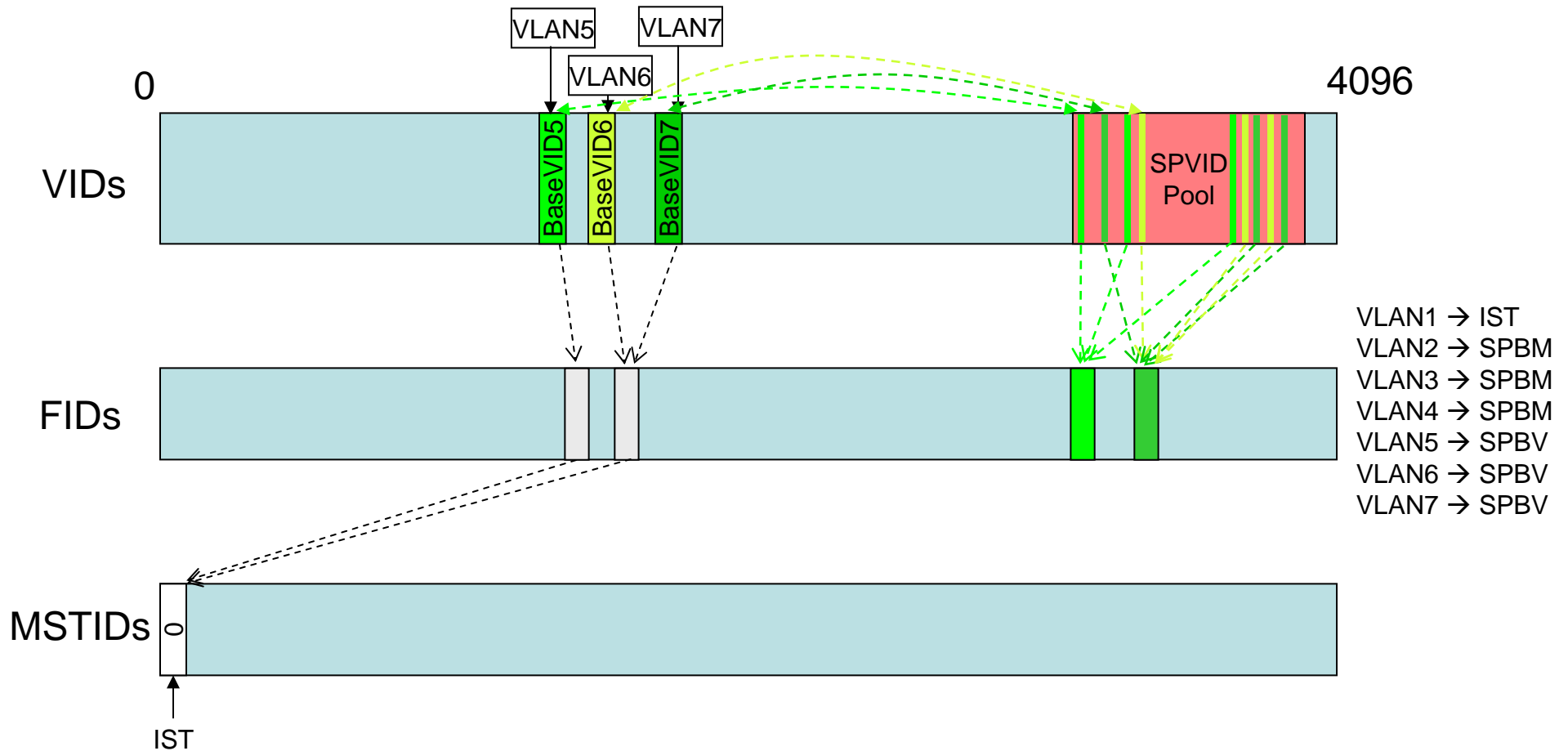
VID → FID → MSTID config+alloc



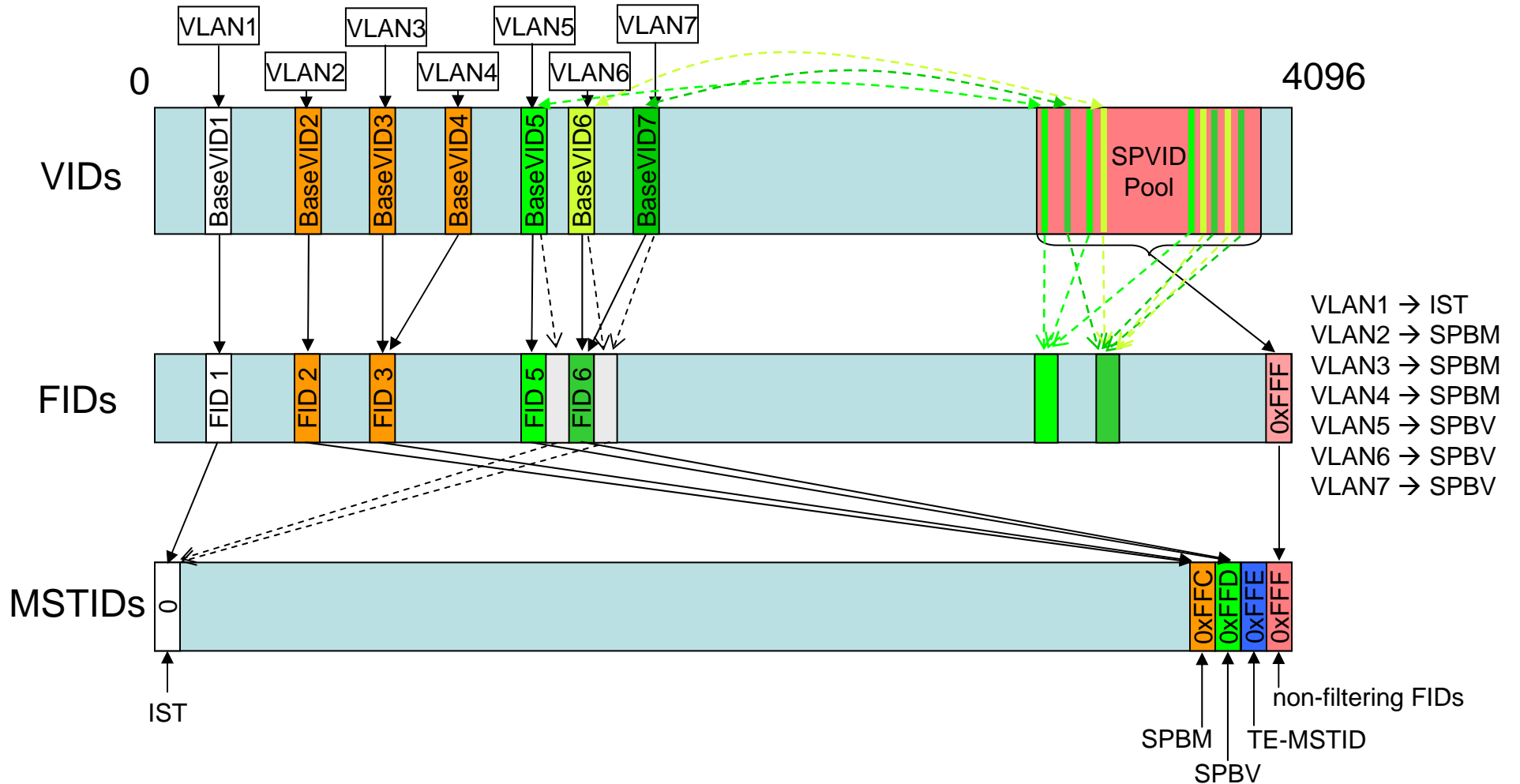
VID→FID→MSTID configuration (27.4)



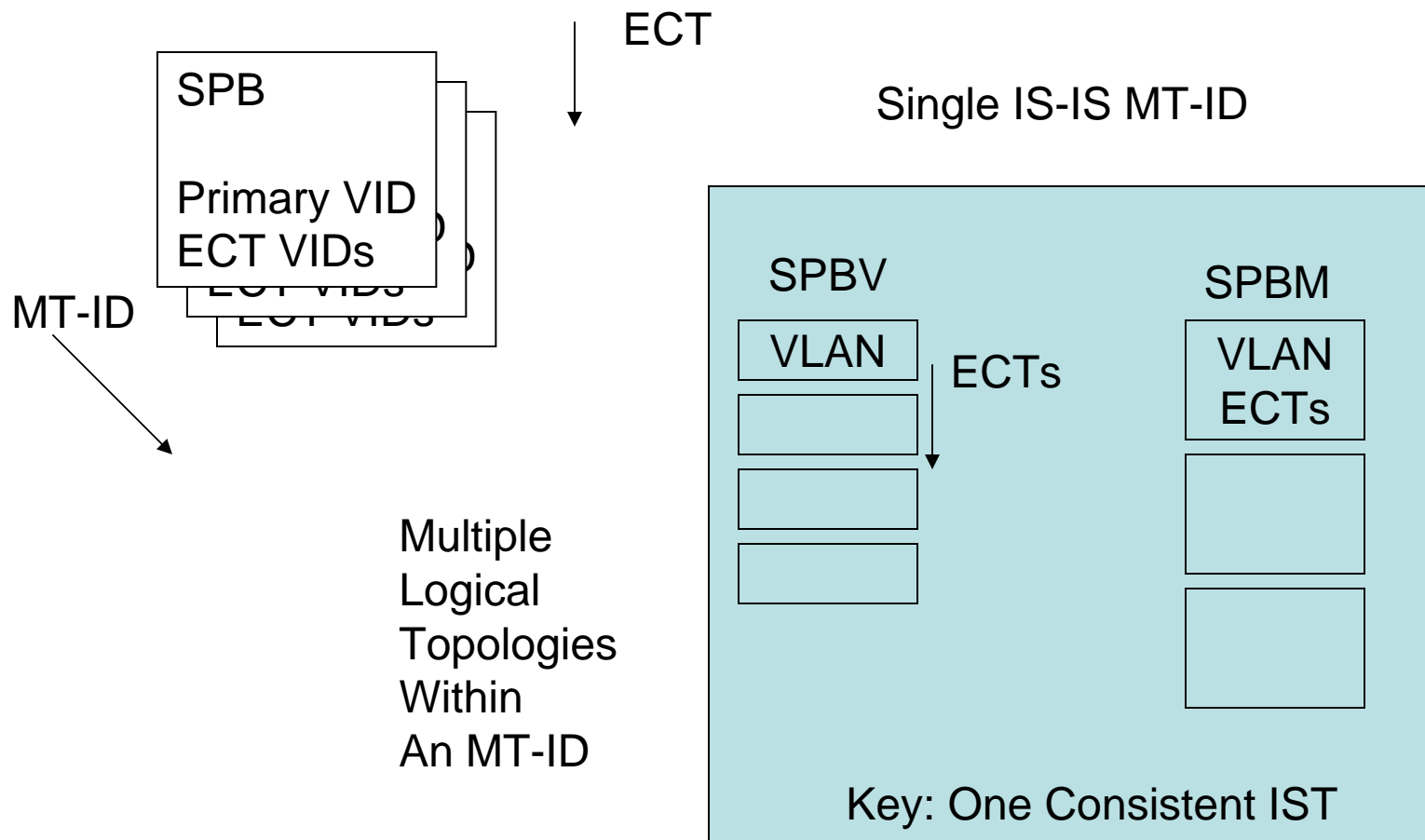
VID→FID→MSTID allocation (27.12)



VID → FID → MSTID config+alloc



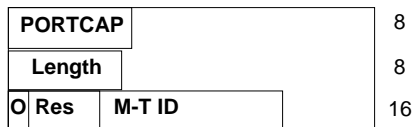
SPBV/SPBM IS-IS Topology



IS-IS Data Structures

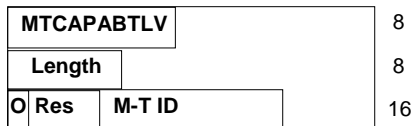
a) Multi Topology Port

Capability TLV

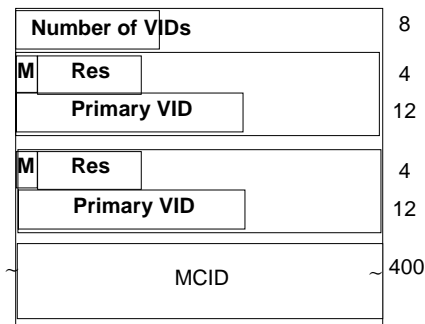


b) Multi Topology Aware

Capability TLV



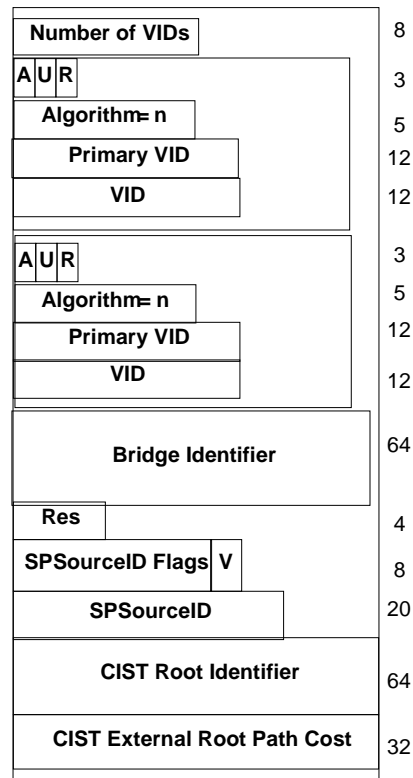
c) Hello PDU BASE -VID sub TLV



Per Bridge

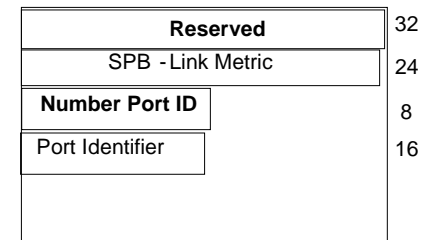
9/8/2009

d) SPB Instance sub TLV



Per Bridge

e) SPB Link Metric sub TLV

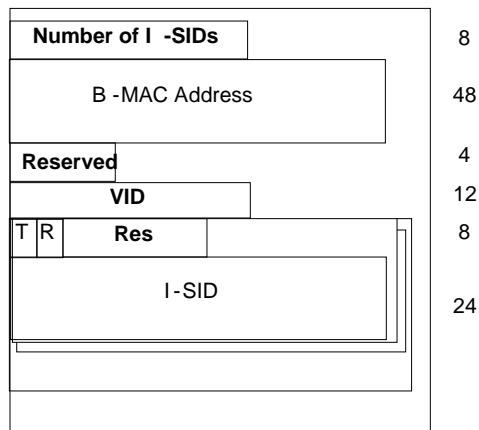


Per Adjacency

IS-IS Data Structures Cont

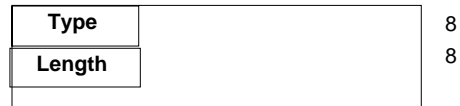
h) SPBM Service Identifier and

Unicast Address sub TLV



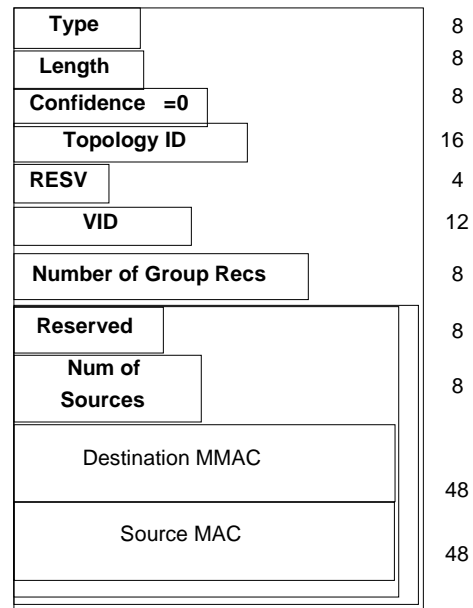
Per Bridge

f) Group Address TLV



g) Group MAC Address

subTLV

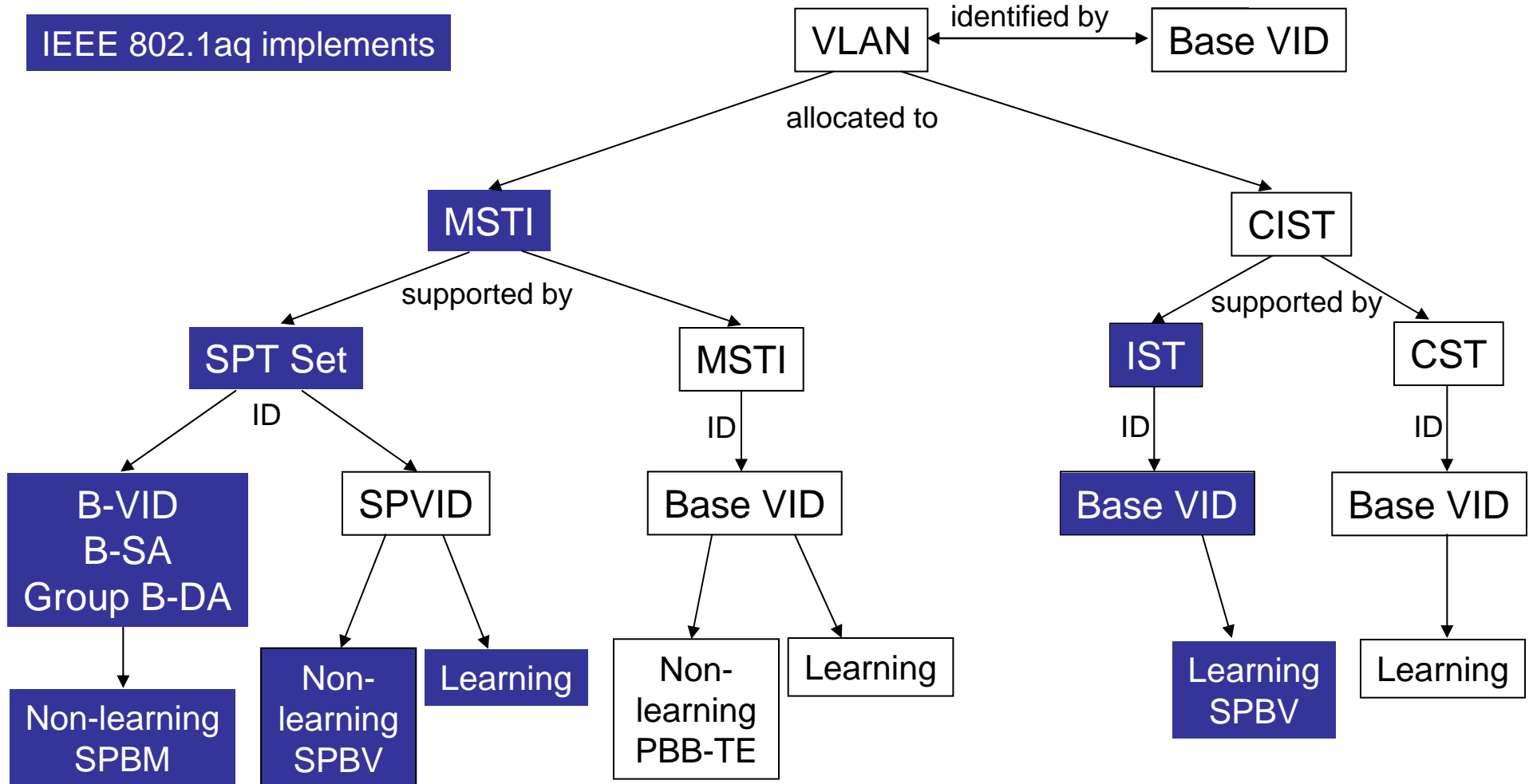


Per Bridge

Digests

- Why we use digests
 - Fast compare of Database <- Good enough
- SPB has two Digests
 - MCID
 - Configuration Digest
 - Now in IS-IS Hello
 - Defines a Region as described earlier
 - Prevents IS-IS neighbors from forming adjacency – indicates region boundary (or configuration issues)
 - Agreement Digest
 - For synchronizing Link State for Loop Prevention
 - In BPDUs

VLAN assignment



9/8/2009

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Volterra

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Tandem Suppress

- Prior versions of this allowed the IS-IS usage of Tandem Suppress
 - Primarily for SPBM implementations
- Mick pointed out that this is not consistent with the IST in the aligned model.