

Review of the 5 Criteria

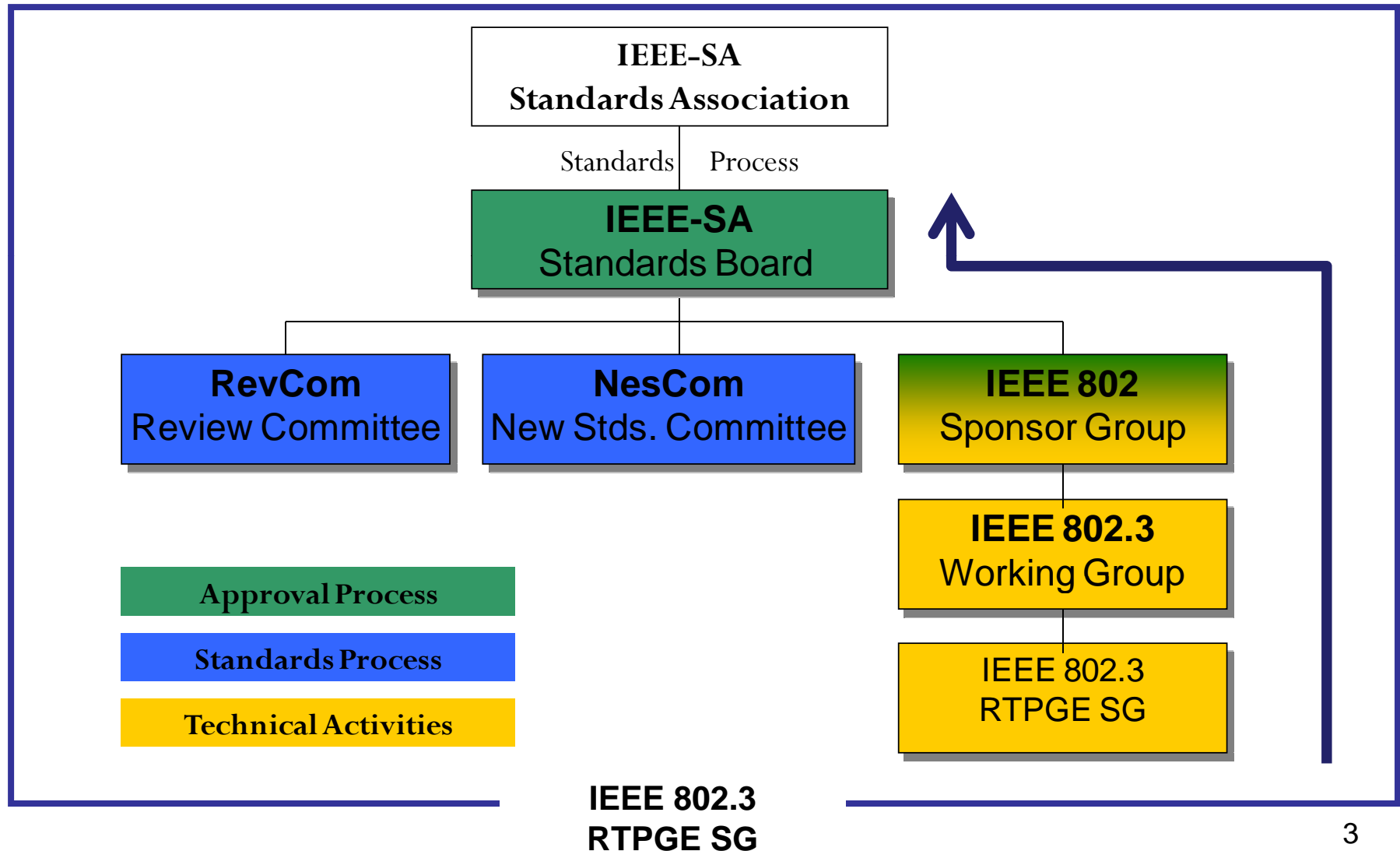
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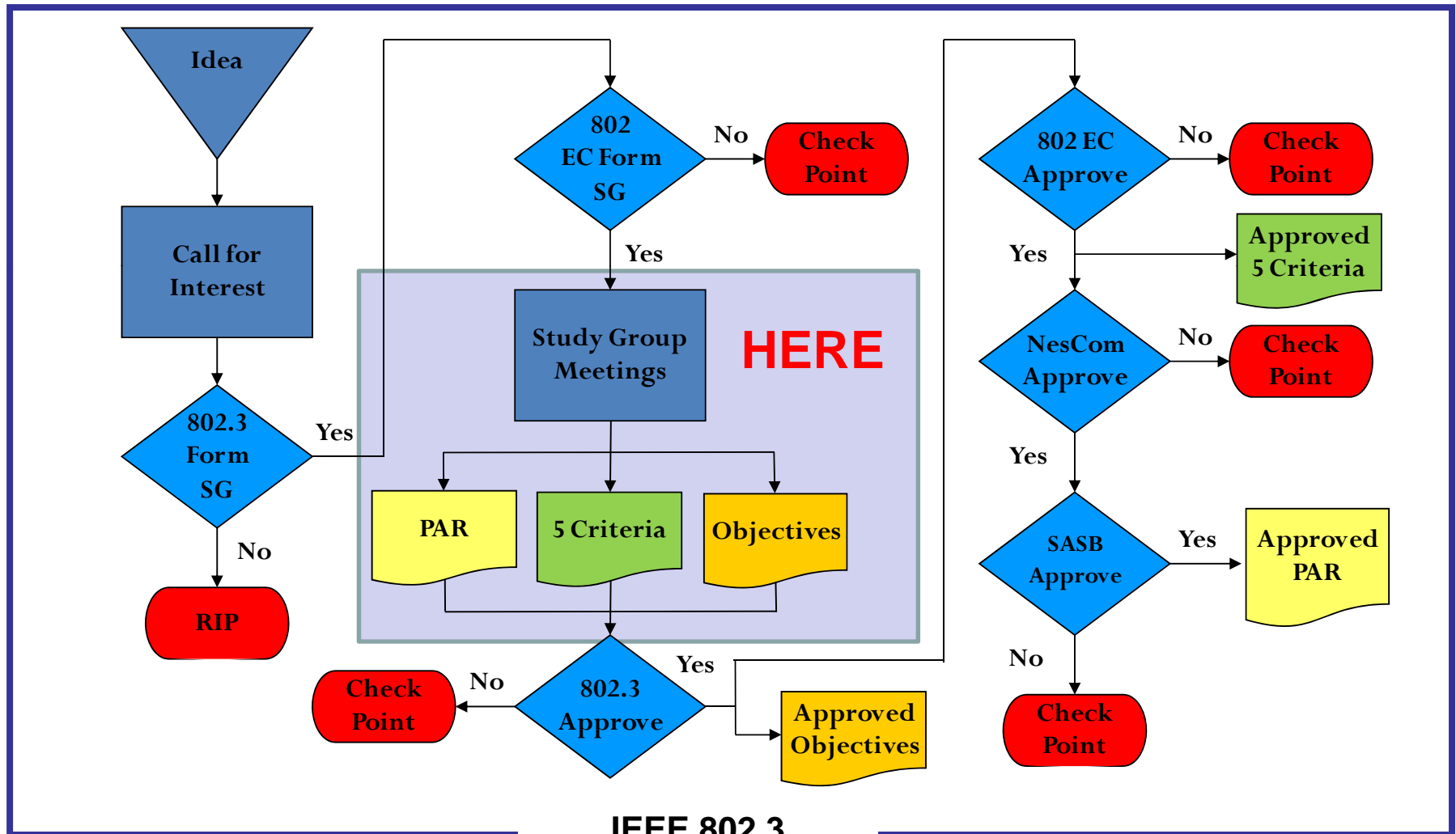
Outline

- Introduction
- Audience
- Purpose
- 5 Criteria
- Guidelines for responses
- Summary
- Successful examples

Introduction - IEEE Structure



Introduction – Study Group Phase



IEEE 802.3
RTPGE SG

Audience

- The 5 criteria are drafted and approved by a study group
- They are reviewed and approved (individually) by the working group
- They are subject to review and approval by each and every other working group in IEEE 802®
- They are reviewed and approved by the IEEE 802 executive committee

Purpose

- The 5 criteria are used to evaluate proposed projects
- They are used to filter out projects that are not appropriate for standardization in IEEE 802
- They are unique to IEEE 802
- They are one of the reasons why IEEE 802 standards are relatively successful
- They help perpetuate the “IEEE 802 culture”

The 5 Critters



Broad
Market
Potential



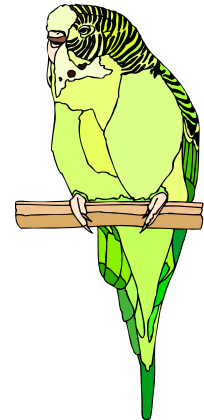
Compatibility



Distinct
Identity



Technical
Feasibility



Economic
Feasibility



Broad Market Potential

- a) Broad sets of applicability
- b) Multiple vendors and numerous users
- c) Balanced costs (LAN versus attached stations)



Compatibility

- IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: IEEE 802. Overview and Architecture, IEEE 802.1D, IEEE 802.1Q, and parts of IEEE 802.1F. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1.
- Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.
- Compatibility with IEEE Std 802.3
- Conformance with the IEEE Std 802.3 MAC
- Managed object definitions compatible with SNMP



Distinct Identity

- a) Substantially different from other IEEE 802 standards
- b) One unique solution per problem (not two solutions to a problem)
- c) Easy for the document reader to select the relevant specification
- d) Substantially different from other IEEE 802.3 specifications/solutions



Technical Feasibility

- a) Demonstrated system feasibility
- b) Proven technology, reasonable testing
- c) Confidence in reliability



Economic Feasibility

- a) Known cost factors, reliable data
- b) Reasonable cost for performance
- c) Consideration of installation costs

Guidelines for responses

- Respond to each criterion on a separate slide
- Repeat the criterion verbatim at the top of each slide
- Respond to each point of the criterion
- Be prepared to defend every word of the responses
- Responses must be specific

Guidelines for responses

- Responses must be succinct
- Responses must be honest
- A project must satisfy all 5 of the criteria simultaneously
- Track the project against the criteria as the project progresses
- Update them as necessary, and get them re-approved

Summary

- The 5 criteria are an important output of a study group, along with the PAR and objectives
- Presentations should address the 5 criteria
- Be thorough and exercise due diligence
- Words of experience –
 - Follow the process – it works!
 - And when all else fails – Follow the process!

Successful examples

- 802.3.1 Ethernet MIB definitions
http://www.ieee802.org/3/maint/public/frazier_2_0908.pdf
- 802.3ba 40G/100G
http://www.ieee802.org/3/ba/PAR/P802.3ba_5C_0908.pdf
- 802.3av 10G-EPON
http://www.ieee802.org/3/av/tf_docs/10gepon_5criteria_0506.pdf
- 802.3ah EFM
http://www.ieee802.org/3/efm/public/jul01/presentations/par_1_0701.pdf
- 802.3ae 10 Gigabit Ethernet
<http://www.ieee802.org/3/ae/criteria.pdf>