Review of the 5 Criteria

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Outline

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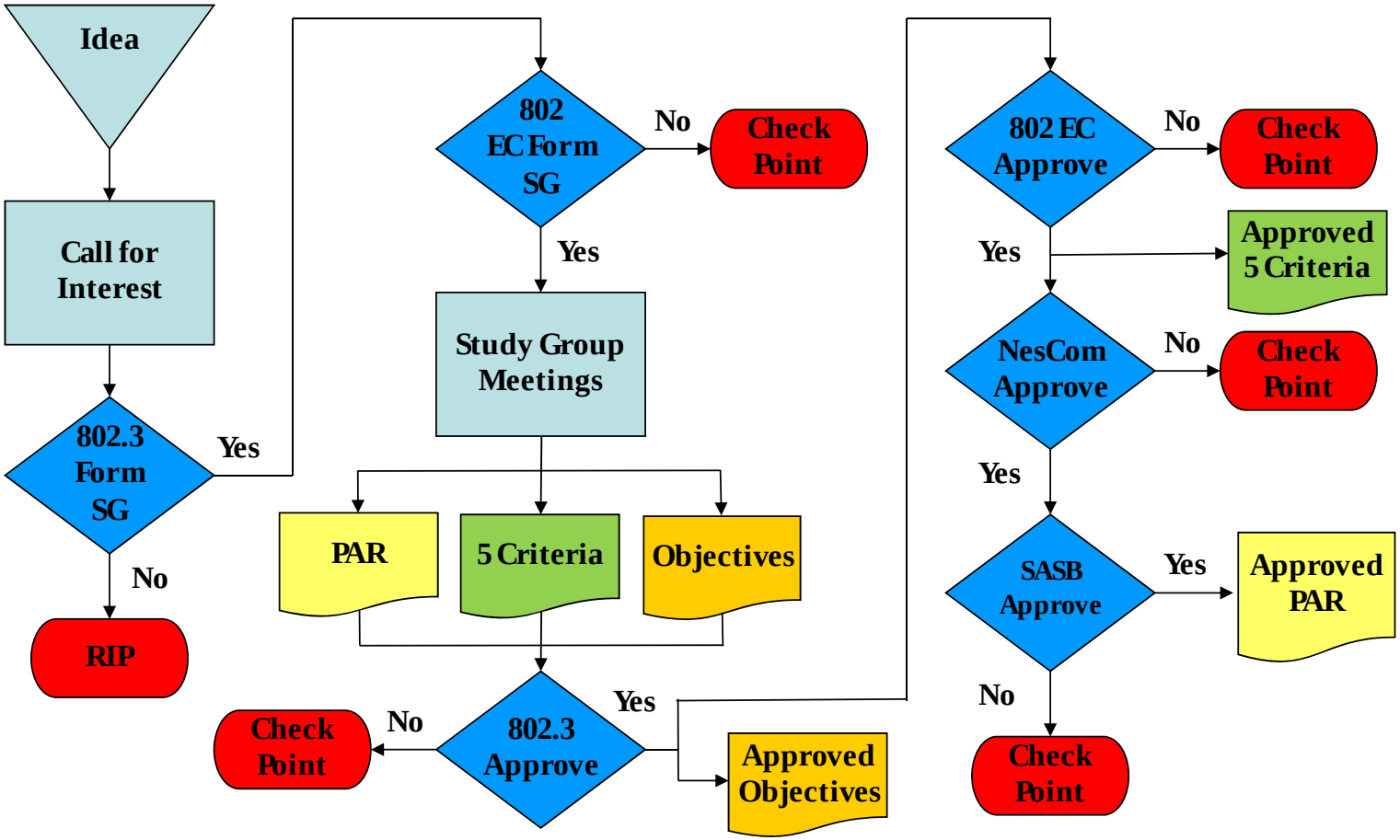
Introduction



Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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”

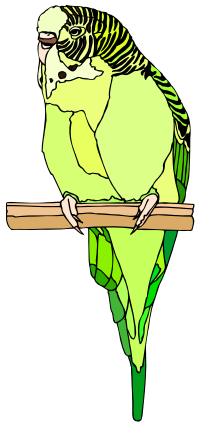
The 5 Critters

Broad Market Potential

Compatibility

Distinct Identity

Technical Feasibility



Economic Feasibility

Broad Market Potential

- A standards project authorized by IEEE 802 LMSC shall have a broad market potential. Specifically, it shall have the potential for:
  a) Broad sets of applicability.
  b) Multiple vendors and numerous users.

Compatibility

- IEEE 802 LMSC defines a family of standards. All standards should be in conformance : IEEE Std 802, IEEE 802.1D, and IEEE 802.1Q. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1 WG. In order to demonstrate compatibility with this criterion, the Five Criteria statement must answer the following questions.
  a) Does the PAR mandate that the standard shall comply with IEEE Std 802, IEEE Std 802.1D and IEEE Std 802.1Q?
  b) If not, how will the WG ensure that the resulting draft standard is compliant, or if not, receives appropriate review from the IEEE 802.1 WG?
  c) Compatibility with IEEE Std 802.3
  d) Conformance with the IEEE Std 802.3 MAC
  e) Managed object definitions compatible with SNMP

Distinct Identity

- Each IEEE 802 LMSC standard shall have a distinct identity. To achieve this, each authorized project shall be:
  a) Substantially different from other IEEE 802 LMSC 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

- For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:
  a) Demonstrated system feasibility.
  b) Proven technology, reasonable testing.
  c) Confidence in reliability.

Economic Feasibility

- For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:
  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

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