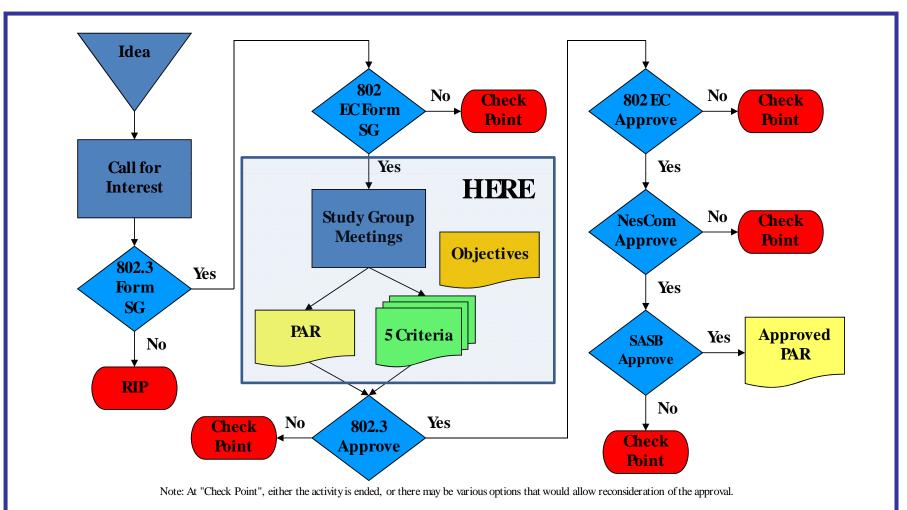# Review of the 5 Criteria

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Dell

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Outline

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

Introduction

Idea

Call for Interest

802.3 Form SG — Yes

802.3 Form SG — No → RIP

802 EC Form SG — No → Check Point

802 EC Form SG — Yes

HERE

Study Group Meetings

Objectives

PAR

5 Criteria

802.3 Approve — No → Check Point

802.3 Approve — Yes

802 EC Approve — No → Check Point

802 EC Approve — Yes

NesCom Approve — No → Check Point

NesCom Approve — Yes

SASB Approve — Yes → Approved PAR

SASB Approve — No → Check Point

Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.
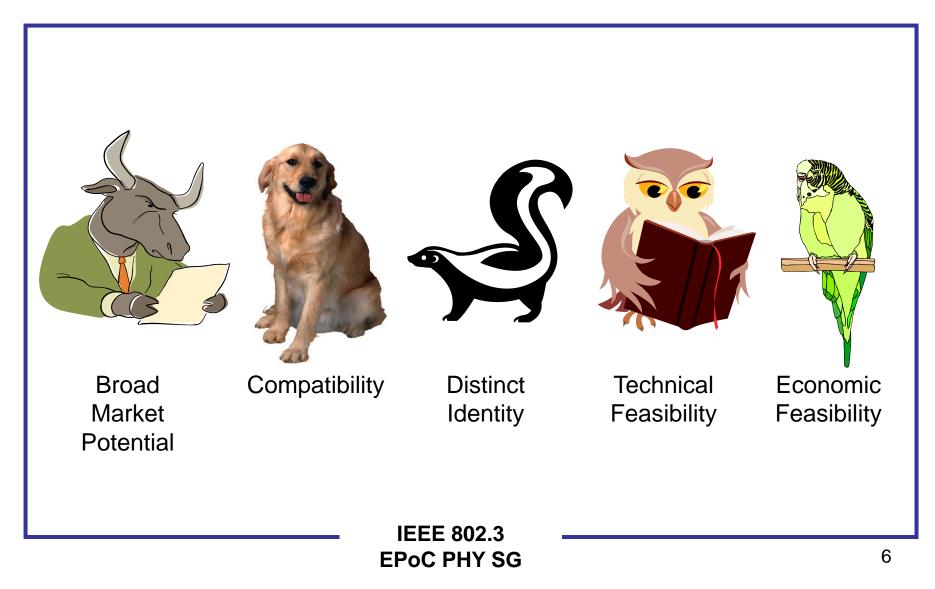
**IEEE 802.3
EPoC PHY SG**

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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

IEEE 802.3
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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 <u>verbatim</u> 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

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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