

04-564v0

PROPOSAL FOR A NEW T11.2 PROJECT
ANSI/INCITS Technical Report

FIBRE CHANNEL METHODOLOGIES FOR SIGNAL QUALITY SPECIFICATION (FC-MSQS)

August 02, 2004

1. Source of the Proposed Project

1.1 Title:

Fibre Channel Methodologies for Signal Quality Specification (FC-MSQS)

1.2 Date Submitted:

August 05, 2004

1.3 Proposer:

T11

2. Process description for the Proposed Project:

2.1 Project Type:

Development

2.2 Type of Document:

ANSI/INCITS Technical Report

2.3 Definitions of Terms:

None

2.4 Expected Relationships with Reference Models, Frameworks, Architecture:

None, the Technical Report is expected to be used in closed systems, and as reference for FCSM-2 and FC-PI-n.

2.5 Recommended INCITS Development Technical Committee:

T11

2.6 Anticipated Frequency and Duration of Meetings:

Technical Committee T11 meets on a regularly scheduled basis. Specific Task ad hoc groups are called as required between the regular meetings but their results are not binding.

2.7 Target Date for Initial Public Review (Milestone 4):

February 2006

2.8 Estimated Useful Life of Standard or Technical Report:

5 years

3. Business Case for Developing the Proposed Standard or Technical Report:

3.1 Proposed content

The Fibre Channel Methodologies for Signal Quality Specification Technical Report (FC-MSQS) is a collection of recommendations on methodologies to be used to specify and measure signals used in FC and other high speed serial applications. These methodologies support the current family of Fibre Channel standards and are designed to work with the variants expected to be specified in FC-PI-3 and FC-PI-4. FC-MSQS extends the material contained in FC-MJSQ. The following items may be considered for inclusion in FC-MSQS:

Specific goals:

1. Traceable references for signal quality measurements
2. Signal budget calculation methods
3. Further divisions of the DJ budget
4. Further detail concerning compensation issues
5. Signal tolerance methods
6. Signal output methods
7. Common mode signal specifications including common mode tolerance

Other areas of possible interest:

8. The interoperability penalty
9. Qualification of practical systems using real components
10. Method for mask margin scaling (high population methods)
11. Reconsideration of the TJ/DJ budgeting scheme (compensatable/non-compensatable)
12. Test fixture design
13. Eye contour methods details (calculated and measured)
14. Validity issues for conversion of Gaussian populations between noise and jitter and vice versa
15. Additional methodologies as may be proposed

3.2 Existing Practice and the Need for a Technical Report:

The proposed project involves a compatible evolution of the present Fibre Channel physical layer.

3.3 Implementation Impacts of the Proposed Technical Report

3.3.1 Development Costs

Resources are provided by the members of T11. The members host the required meetings for development, provide for the necessary lab experiments and silicon technology development and provide the Technical Editor for the project.

3.3.2 Impact on Existing or Potential Markets

The nature of the proposed project is to ensure that Fibre Channel has an upward, highly compatible growth path. This ensures that current investments in Fibre Channel are provided with a stable managed migration path in the face of technological developments.

3.3.3 Costs and Methods for Conformity Assessment

The committee will consider the results of testing as may be available to the committee through the voluntary efforts of the various participants in T11. With this method all costs are borne by the organizations of the various participants and have for the most part been mainly an adjunct of their normal development costs.

3.4 Legal Considerations

3.4.1 Patent Assertions

Calls will be made to identify assertions of patent rights in accordance with the relevant INCITS, ANSI, and ISO/IEC policies and procedures.

3.4.2 Dissemination of the Standard or Technical Report

Drafts of the document will be disseminated electronically. Dissemination of the final Technical Report will be restricted as the document becomes property of INCITS, ANSI, or IS/IEC.

4. 4. Related Standards Activities:

4.1 Existing Standards

BSR Number	Title	Project
------------	-------	---------

4.2 Related Standards Activity:

BSR Number	Title	Project
------------	-------	---------

Corresponding ISO projects:

4.3 Recommendations for Coordinating Liaison:

None

4.4 Recommendations for Close Liaison:

None

5. Units of Measurement used in the Technical Report:

Indicate units of measurement used in the Technical Report:

- International Systems of Units (SI)
- Inch/Pound
- Both
- Other
- Not Measurement Sensitive