Background on Proposed ATSC Recommended Practice: Transport Stream Verification

TSG-697r3, "Proposed ATSC Recommended Practice: Transport Stream Verification," outlines a common methodology for describing Transport Stream conformance criteria for digital television. This document explicitly describes the elements and parameters of A/53 and A/65 that should be verified in an ATSC Transport Stream for it to be considered a proper emission. TSG-697r3 does not cover RF, captioning, or elementary streams.

While ATSC standards A/53 and A/65 define strict limits for each parameter, in practice the severity of a given error may depend upon the magnitude of the deviation. Therefore, to aid broadcasters and other users, error severity levels are assigned to ranges for these parameters. Specifically:

- Transport Stream Off Air (TOA)
- Program Off Air (POA)
- Component Missing (CM)
- Quality Of Service (QOS)
- Technically Non-Conformant (TNC)

Within the construct of the ATSC emission Transport Stream, there may be interactions and interrelationships among various components. TSG-697r3 identifies the potential interactions and interrelationships, and provides guidance on how these issues might impact the overall DTV system.

TSG-697r3 was developed in the TSG-1 working group, which unanimously concluded that it should become a Recommended Practice, rather than a Technology Group Report or similar informational document. TSG-1 set out to develop an informational document but along the way became convinced that an RP would better serve ATSC members, their industries, and the public. TSG-1 looked at similar work within DVB and considered feedback from test equipment manufacturers. It became clear that a simple informational listing of the "strict" rules would be counterproductive and would lead to a high false alarm rate. Based upon its technical content, TSG has classified this document as a Recommended Practice.