



**Information  
Technology &  
Telecommunications**

**Rahul N. Merchant**

*Chief Information and Innovation Officer*  
255 Greenwich Street, 9<sup>th</sup> Floor  
New York, NY 10007  
212-788-6600

May 28, 2013

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445-12 Street, SW, Room TW-A325  
Washington DC 20554

Re: *Ex Parte Presentation and Comments*  
MB Docket No. 12-217, Cable Television Technical and Operational Requirements

Dear Secretary Dortch:

On May 23, 2013, Peter Schwab, Stanley Shor and Tanessa Cabe of the New York City Department of Information Technology and Telecommunications (“DoITT”) and Bruce Regal of the New York City Law Department (collectively both agencies are “the City”) participated in a conference call with staff from the Federal Communications Commission (“the FCC”) at the request of the FCC. In attendance on the conference call from the FCC were:

- Nancy Murphy – Associate Media Bureau Chief
- Alison Neplokh – Chief Engineer of the Media Bureau
- John Wong – Chief of the Engineering Division
- Wayne McKee – Deputy Chief of the Engineering Division
- Steven Broeckaert – Deputy Chief of the Policy Division
- Sean Yun – Engineering Division Engineer
- Sean Mirzadegan – Engineering Division Engineer
- Walid Kassem – Engineering Division Engineer
- Jeffrey Neumann – Engineering Division Engineer/Attorney

Over the course of the call, the City presented to the FCC a description of its current digital testing procedures for certain cable television franchisees. As background, the City described its current cable TV franchise environment: Time Warner Cable operates under long-standing franchises in Manhattan, Queens, Staten Island and part of Brooklyn; Cablevision Systems operates under long-standing

franchises in the Bronx and part of Brooklyn; and Verizon is currently completing its full Citywide build-out under a Citywide franchise granted in 2008. There are over 3 million residential households in the City, about 2.1 million of which are current cable TV subscribers.

Currently, DoITT oversees and observes voluntary digital proof of performance testing with Cablevision and Time Warner Cable. Verizon has not yet participated in testing or proofs of performance. Digital testing has proven simple and easy to administer and has resulted in the resolution of complaints. Testing as overseen by the City is beneficial to cable consumers but has also helped the cable companies identify and resolve previously unknown technical issues enabling them to provide a better product. The current digital proof of performance test protocol agreed on with Time Warner Cable and Cablevision includes the scheduling of four random test points (determined by DoITT) in each franchise area twice a year, once in the summer and once in the winter. With the City divided into nine different historical franchise areas, at four test points each that represents a total of 36 points tested across the City each summer and each winter. Multiple testing points in each franchise area both in summer and in winter are extremely important due to the varying urban environments represented in New York City and the differing potential effects of variable weather conditions on equipment and service. Each of the City's five boroughs encompasses varying terrain and building density across the borough's geography that can present different issues. The City would not recommend the use of any fewer test points for an area the size and density of the City than the number the City is currently using for Time Warner Cable and Cablevision.

With respect to specific testing methodologies, the City notes that due to the ease and simplicity of digital testing, DoITT is able to oversee testing with less of a burden on the cable companies than it did when analog proof of performance testing was conducted. The City has also found that digital measurements performed are less invasive than analog testing because it is not necessary to drop a channel to perform a test. Also, while DoITT currently observes proof of performance of QAM systems, similar procedures can be used to test non-QAM systems as well to allow for full testing of all digital environments.

DoITT currently observes tests of twelve QAM channels equally (as possible) divided between 5-860 MHz over the entire system's spectrum. The QAM testing reviews MER goals set at 64 QAM >28dB and 256 QAM >33dB. The pre-error rates should be no less than (e-6). Less than that measurement is actually a recording of post errors (uncorrected errors) which will cause audio/video impairments noticeable by the viewer. No post errors should be recorded. MER, pre, and post error rate measurements are run simultaneously and should have at least a 2 minute acquire time. Picture quality checks are made on as many channels as possible during the testing. All pre and post BER anomalies will be confirmed once the channels related to the QAM in question are identified and viewed. Equipment used for this test may include: CM-1000, CM-2000, JDSU D-SAM 3600 and Avantron AT-2000. Included in the resulting test report is an attachment that shows some constellation impairments. Constellation impairment tests are helpful when in fact MER and/or pre or post errors exist. For example, if coherent interference exists and the probable cause is ingress CSO or CTB there is no real number that is generated. For this reason, constellation impairment testing is most helpful used in conjunction with other tests to investigate errors previously mentioned. DoITT also requests a provisioned modem to check speeds of data.

Over the past few years, DoITT's observation of proofs of performance tests scheduled with franchisee system engineers has uncovered numerous issues in the plant that needed attention by the companies. Corrections were subsequently made and revised test data was attached to the original test reports.

Repairs have included, for example, cracked coaxial cables, water damaged distribution equipment and active equipment out of balance.

As an example of how digital testing works successfully for all involved, as part of the most recent scheduled proof of performance test, in the winter of 2013, DoITT requested a test point in the Rockaways in Queens. The testing revealed that one of the QAM frequencies was out of BER specification. Video observation of the channels within the QAM confirmed macro-blocking issues and franchisee engineers found damaged passive taps and splitters in the distribution that appears to have been caused by a power surge issue. All damaged equipment was replaced and the issue was resolved, to the benefit of both the franchisee and its subscribers. Note that although "picture quality" testing has a subjective element to it, in the digital environment picture quality issues are easier to identify and less likely to be disputed than in the previous analog environment, as ghosting and other analog picture issues have been replaced by easier-to-identify issues of pixelation/macro-blocking, etc.

For cable service providers to be fairly judged by consumers against each other in a competitive market, all cable providers in New York City should be held to the same basic technical quality standards. The City therefore strongly supports uniform digital testing standards adopted by the FCC and enforced at the local level as a means of ensuring that the public gets at least an assured basic quality of service against which subscribers and potential subscribers can make informed cable purchasing decisions. Signing up with a cable company is a commitment. It is not easy to switch providers and each consumer deserves to have as much information as possible about the competing providers in order to make an informed purchasing decision. Indeed, "competition" between two service providers is not true competition where one or more providers is not offering demonstrable and demonstrated compliance with base-level technical standards.

Thank you very much for the opportunity to comment and to provide this additional information on the record.

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, an electronic copy of this letter is being filed for inclusion in the above-referenced docket.

Sincerely,

/s/

Stanley Shor  
Assistant Commissioner, Franchise Administration, DoITT

Peter J. Schwab  
Executive, Director, Franchise Administration, DoITT

Tanessa Cabe  
Telecommunications Counsel, DoITT

Bruce Regal  
New York City Law Department