



## The Importance of Effective Trials in the Phone Network Transition

The ongoing transition of the Public Switched Telephone Network (PSTN) from analog technology to IP (Internet Protocol) technology raises many important questions. Public Knowledge has addressed the most central of these – ensuring that the network continues to meet the needs of Americans – with its "Five Fundamentals" framework:

- 1) Ensuring Service to All Americans
- 2) Effective Competition and Interconnection
- 3) Preserve Adequate Consumer Protections
- 4) Sustain Network Reliability
- 5) Continue Universal Access to Reach Public Safety

In addition to the public policy issues PK has discussed under our framework, it is important to ensure that, on a purely technical level, the network upgrade goes smoothly. This is why PK supports the idea that carriers and the FCC should conduct several technical trials, which will help stakeholders identify and correct possible technical problems.

To that end, CTC Technology and Engineering has prepared a report for PK titled "**A Brief Assessment of Engineering Issues Related to Trial Testing for IP Transition,**" which Public Knowledge and CTC hope will be a valuable contribution to this issue.

In this detailed report, CTC discusses technical issues concerning the trials, offers advice as to their methodology, and CTC identifies ten attributes that require particular testing during the trials:

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|--------------------------------------|-----------------------|
| 1) Network capacity                  | 6) PSAP and 9-1-1     |
| 2) Call quality                      | 7) Cybersecurity      |
| 3) Device interoperability           | 8) Call persistence   |
| 4) Service for the deaf and disabled | 9) Call functionality |
| 5) System availability               | 10) Wireline coverage |

Without effective trials, hasty network upgrades could cause problems for network users, including homes, businesses of all sizes, and government agencies. Emergency calls might not be completed. Equipment such as credit card readers, fax machines, and computer systems might not work after an upgrade. After the network upgrade, some calls might not complete or could degrade in quality, and the customers of competitive carriers in particular might face reliability issues.

The purpose of these technical trials *should not be to settle public policy questions*. Rather, the trials will help policymakers and the public *be certain that new network technology serves the needs of users* as well or better than current technology.