



Title: *Overview & Analysis of FCC Part 68 Streamlining Order*

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Abstract:

New FCC rules will change and expedite the administrative process for obtaining U.S. regulatory approval for telecom terminal equipment (e.g., telephones, modems, FAX machines, etc.). This should result in faster time to market and reduced regulatory costs.

Manufacturers and/or suppliers of terminal equipment will have the option of either obtaining Telecom Certification Body (TCB) certification or of publicly self-declaring conformity to the same terminal attachment technical criteria. Regardless of approval method, the equipment will still need to be labeled in some yet-to-be-determined way, and will be listed in a publicly accessible database.

Prevention of harm to the telephone network is still a rule, but the specific technical requirements necessary to insure that will be privatized. The Order left a long "to do" list for industry, and it will be no less than 6 months before all the necessary process details will be in place.

This paper summarizes the complex changes described in the 75+ page FCC Report & Order, with some interpretive dialog. References are made to the applicable paragraphs in the Report & Order, and/or to the new Part 68 sections.

Overview & Analysis of FCC Part 68 Streamlining Order

26 January 2001
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Introduction

On 21 December 2000, the Federal Communications Commission (FCC) released its long-awaited Part 68 streamlining Report & Order (FCC 00-400, under Docket 99-216). This Order will fundamentally change the way telephones, FAX machines, and other telecom terminal equipment will be approved for connection to the public switched telephone network in the U.S.A. The FCC estimates this will save manufacturers millions of dollars annually, and will allow innovative products to reach the marketplace sooner, while still providing adequate network protection.

In the short term, nothing will change. Implementing this Order will require much work on the part of industry which will handle the implementation details. The FCC set a dateline (see Table 1 attached) for completion of certain milestones that key off the date when the Report & Order was published in the U.S. Federal Record (this occurred 24 January 2001). However, these tasks may take considerably longer than the anticipated 6 months. Meanwhile, the current rules and certification process should be followed.

Under the current process, manufacturers of telecom terminal equipment (telephones, answering machines, FAX machines, etc.) intended for connection to the public switched telephone network (PSTN) in the U.S.A. must first test the equipment for conformity to the existing Part 68, then apply for a certification or "Grant" from the FCC or a Telecommunications Certification Body (TCB). Testing typically occurs either in manufacturer-owned labs or at for-hire testing laboratories. Testing laboratories often also prepare the detailed technical report required for submittal with the application for certification. The implementation of the TCB program last year significantly shortened the time required for application review and certification, but receipt of the Grant is still necessary before putting the product on the market.

This Order effectively re-writes 47CFR Part 68, removing all technical requirements not associated with Congressionally-mandated rules such as those for hearing aid compatibility or consumer protection. The technical requirements will be converted into one or more industry standards, with oversight provided by an FCC-designated private sector "gatekeeper." The new process will give manufacturers the option of filing a "Supplier's Declaration of Conformity" (SDoC) attesting to conformity with those industry standards, then immediately taking their product to market. The FCC explicitly accepted the argument that strong economic incentives and competition between manufacturers would ensure compliance with the relevant standards and insure that customers will receive quality products that will not cause network harms. That is, there is little marketplace advantage to selling non-compliant products that might not work everywhere or might harm the network.

However, this SDoC process will be different from that used for computing equipment that fall under Part 15 because it will be necessary to file a special disclosure in a public database. The details are not settled, but it will be privately managed and not an FCC function. Products will continue to bear a label, but the details of this are also to be determined.

Finally, the SDoC process will promote international trade. It will reduce regulatory costs and delays for multinational suppliers, and will facilitate the use of mutual recognition processes with other countries and regions that also employ SDoC methods (see the Order, paragraph 102).

Fundamentals haven't changed

The new industry standard "technical criteria" for terminal equipment will look identical to the current Part 68 technical requirements, at least initially (para 77), and this rulemaking doesn't change the way the U.S. telephone network was designed. Consequently, terminal equipment will continue to be designed much the same way as now. What has changed is the administrative process for achieving approval to connect.

Technical criteria are effective in preventing network harms and so continue to be necessary, according to the FCC (para 16). Whatever form the Part 68 technical requirements evolve to when they become an industry responsibility, they will continue to be focused *exclusively* on preventing network harms (para 61). Network harms are defined as (para 15 & Section 68.3):

- 1) Electrical hazards to telephone company personnel.
- 2) Damage to telephone company equipment.
- 3) Malfunction of telephone company billing equipment
- 4) Degradation of service to other subscribers.

The FCC concluded that having private industry develop the technical criteria necessary to protect the network from harm would better serve the public interest than if the FCC were to continue doing this (para 18). Changing the rules to meet the needs of innovative technologies (such as was done recently for DSL) is likely to occur more quickly. Also, the FCC will retain its rules mandating hearing aid compatibility, volume controls (para 123), consumer protection (e.g. the "FAX header" requirement), and inside wiring (para 64-66).

In the Order, the FCC says it will "... give presumptive validity to the technical criteria adopted by the industry..." (para 20). The FCC believes this will work because:

- Industry (specifically manufacturers, test laboratories, and telecom carriers) possess relevant expertise to develop standards preventing network harms.
- Responsible manufacturers have a vested interest in producing equipment that does not harm the network.
- Industry has the incentive to establish criteria accommodating new technology on an expedited basis.

The "Gatekeeper" will manage the technical standards against network harms

The Order establishes a new regulatory paradigm by directing the creation of a "gatekeeper" organization, to be called the Administrative Council for Terminal Attachments (ACTA), to manage and maintain the technical criteria (para 31 & new Subpart G of Part 68). The ACTA will do this by working with existing industry standard development organizations (SDOs), and in accordance with the consensus process of the American National Standards Institute (ANSI). The ACTA will not develop standards itself, but will instead solicit, review, and approve standards submitted to it by ANSI-accredited SDOs (para 58), then publish the selected technical criteria for terminal equipment. It is specifically not to engage in standards development, policy setting, or dispute resolution (para 55). The FCC anticipates that most of the technical criteria will come from the Alliance for Telecommunications Industry Solutions (ATIS) committee T1E1 and Telecommunications Industry Association (TIA) committee TR-41 (para 59), however input from other SDOs is not precluded.

The ACTA will follow an FCC-mandated process for the adoption of technical criteria (para 52 & 54) where a notice will be published first detailing a proposal as received, followed by a 30-day comment and appeal period. If no appeals are filed, then the FCC will presume validity and the ACTA is free to publish (Section 68.608). (Consequently, industry will have strong incentive to propose technical criteria only when an industry consensus was achieved.) The ACTA will also be responsible for establishing and maintaining a database of equipment compliant with the technical criteria it establishes (para 53 & Section 68.610), and for responding to queries about those criteria or the SDoC process.

The FCC intends that the ACTA be a non-governmental committee of industry experts, fair and impartial, and not controlled or dominated by any particular industry segment (para 50). The FCC intends for small business and individuals to have the opportunity to participate (para 56). It will be convened by an industry sponsor or sponsors who will provide administrative and secretarial support for the Council, and insure that the membership is balanced and open in a manner that's consistent with ANSI criteria. The sponsor will otherwise not have any control over the ACTA (para 39). Some rotation of members may occur so all interested individuals will have a chance to participate (para 51). ACTA funding is responsibility of the sponsor (para 56).

The TIA and ATIS have agreed to co-sponsor the ACTA, and the FCC concluded that joint TIA-ATIS sponsorship will best serve their goal of ensuring broad-based industry participation (para 43). The FCC accepted their sponsorship (Section 68.602), and commended TIA and ATIS for their agreement.

The FCC was persuaded to take this approach because of the existing cooperative nature of industry in the creation of voluntary standards (para 23). They believe that allowing any ANSI-accredited SDO to submit technical criteria for terminal equipment will permit industry to continue its productive cooperation. Simultaneously, reliance on a single gatekeeper will insure uniformity and consistency in the new technical criteria.

Manufacturers must still demonstrate compliance

Manufacturers will still have to test their terminal equipment or take other necessary steps to ensure that the equipment will meet the new industry technical criteria (Section 68.320), but can choose one of two alternatives (para 98) for showing compliance:

- 1) Seek approval of a private Telecommunication Certification Body (TCB), who will review the test results and issue a "Grant" that certifies compliance (no change), or
- 2) Declare compliance by issuing a "Supplier's Declaration of Conformity," as defined by new rules in Section 68.324 and ISO/IEC Guide 22 (para 85).

While the FCC expressed confidence in the TCBs ability to perform their tasks (para 90-93), they agreed with several commenters that having an additional equipment approval method would expedite the bringing of innovative equipment to the market, without increasing the risk of network harm (para 86 & 100). Having both methods gives manufacturers a choice, especially small manufacturers who may see it as a competitive advantage to have TCB approval (para 93). They declined to create a regulatory hierarchy that specified which equipment would be subject to each approval method because that would be inconsistent with their deregulatory goals (para 87). Finally, laboratories used to perform the measurements supporting an SDoC need not have independent accreditation (para 99), however SDoC holders are required to retain a description of the testing facilities used (Section 68.346) and the test procedure used to make the conformance measurements (Section 68.326).

The exact appearance and content of this SDoC document is not yet determined, but the critical factor is that an SDoC must identify the party responsible for the product's compliance with the technical criteria for terminal attachment, thus insuring accountability (para 97). The SDoC will also show a conformity statement, a list of the referenced standards, the date and location where the declaration was made, and the signature, name, and function of the person making the declaration (para 99). Finally, the SDoC responsible party must be located within the U.S.A. (Section 68.321) - While this is new for telecom approvals, it is not different from other SDoC processes elsewhere, such as the DoC process under Part 15.

When issued, manufacturers will be required to:

- Ship a printed copy of the SDoC with every product they make, and make the SDoC readily and publicly available (the FCC specifically suggested using a web site for this purpose) (para 101).
- File a copy of the SDoC and any other information required by the ACTA with the Administrative Council, so that carriers and the general public can readily identify the manufacturer of any equipment found to produce network harm (para 53 + 101).
- Retain on file for at least 10 years after the product ceases to be manufactured a copy of the test report, including test procedures and any other documentation necessary to support the conformity declaration (para 101 & Section 68.326).

Even though the technical criteria will be privatized and approvals process relaxed, the FCC intends to continue enforcing compliance with the technical criteria for terminal attachment (para 119). Carriers retain the right to disconnect harmful terminal equipment (para 104 & 120), and the FCC promises that suppliers who "fail to comport with the [FCC or ACTA] rules may face

enforcement action...” (para 104). Any SDoC can be revoked by the FCC for good cause (Section 68.350).

Anyone can bring a complaint before the FCC regarding the non-compliance of terminal equipment (para 121), and the FCC reiterated its determination that consumers, and disabled persons in particular, receive the full level of enforcement currently in place (para 123). The FCC is bringing into Part 68 (new Sections 68.415, '417, '419, and '420) the same complaint process it developed for disabled accessibility complaints (47CFR Part 6). Suppliers of terminal equipment are also required to designate to ACTA one or more agents on whom service may be made of all complaints received or other matters related to Part 68. This appears identical to the "agent for service" requirement in Part 6, Section 6.18(b) except that ACTA is to receive the notice of agent instead of the FCC and ACTA will make this information public. The FCC intends to monitor the effectiveness of the TCB and SDoC processes (para 103). .

Product labels and the equipment database are tied together

As stated above, the ACTA will be responsible for implementing the equipment numbering and labeling requirements (para 114 & Section 68.612), and to maintain a database of all approved equipment (para 108 & Section 68.610).

The FCC declined to set specific equipment numbering or labeling rules (para 114), but requires that a non-discriminatory and fair labeling process be implemented by the ACTA that will contain enough information to satisfy the needs of telecom carriers, the FCC, and the U.S. Customs Service (para 115, Sections 68.354 and 68.612). While industry wrestles with the product labeling details, the existing numbering and labeling requirements remain in effect (para 115). (Work toward specifying product labeling and the database requirements has already begun within Working Group 1 of TIA subcommittee TR-41.11.)

The database will include all equipment certified by the FCC (some 30,000 products currently on record), by all TCBs, and by the SDoC process. The database will be widely accessible to consumers, telecom carriers (para 101 & 109), the FCC and U.S. Customs Service (para 110 & Section 68.610). If any of the information shown on the SDoC changes, the SDoC submitter is required to inform the ACTA (para 99), presumably to correct any information previously stored in the database.

But we can't start yet!

Much remains to be done before manufacturers can take advantage of this new process. The "to do" list includes:

- Establishment of the Administrative Council, along with its executive structure, charter, membership, and funding mechanism.
- Creation, approval and publishing of the technical criteria. (Continued harmonization with Canadian requirements is desirable.)
- Establishment, development, funding, and maintenance process for the approved equipment database.
- Development and specification of the new labeling requirement.

This won't happen soon. The FCC has established a timetable that has most of these things happening within 180 days (about 6 months) of the Order's publication in the U.S. Federal Register (para 78, and see attached Table 1) which occurred on 24 January 2001. This is also the time when the FCC hopes to discontinue its role in Part 68 equipment certification.

In the mean time, the current Part 68 technical rules will remain applicable (para 77). The first technical criteria are expected to be a simple copy of the current Part 68 rules written as an industry standard. It's hoped that this way there will be no lapse in network protection.

The Rulemaking Process – Democracy in Action

This R&O culminates over a year and a half of meetings, discussions, debates, and presentations by several interested industry trade associations and individual companies, and a formal rulemaking process by the FCC.

Formally, the name of this Report & Order is:

"2000 Biennial Regulatory Review of Part 68 of the Commission's Rules and Regulations,"
FCC 00-400, Docket 99-216

This Order is part of a much larger FCC effort to streamline its rules and remove those rules that are no longer needed or are excessively burdensome, as directed in the Telecommunications Act of 1996 (para 82). In this Act, Congress directed the FCC to review its rules every even-numbered year and to revise or repeal those rules no longer in the public interest. This revision of Part 68 was only one of several reviews done last year.

In this Order, the FCC made clear its belief that it is in the public interest for private industry to self-regulate terminal equipment attachment (para 82), and that this privatization of the approval process will provide the same degree of network protection as before (para 83). At the same time, this will let the Commission focus more of its energies on enforcement (para 84).

To Learn More

If you would like to download a copy of the 75-page Report & Order for yourself, see:
http://www.fcc.gov/Bureaus/Common_Carrier/Orders/2000/fcc00400.doc

A fact sheet giving the background of Part 68 terminal equipment rulemaking is also available at:
http://www.fcc.gov/Bureaus/Common_Carrier/Factsheets/CPErules.doc

TIA's committee TR-41, focused on "User Premises Telecommunications Requirements," maintains the "Part 68 Application Guide" and a Part 68 "frequently asked questions" database, both available from the Web at: <http://www.tiaonline.org/standards/sfg/tr-41/>

TIA will partner with the Alliance for Telecommunications Industry Solutions (ATIS) in the creation and maintenance of the Administrative Council for Terminal Attachment. The ATIS web site is at: <http://www.atis.org/atis/wwwpol.htm>

The ATIS committee T1 will probably take a very active part in these matters. Committee T1 has its own web site at: <http://www.t1.org/>

Table 1: Dateline for Part 68 Streamlining Events

When	What	R&O Reference	Remarks
T = 0 (January 24, 2001)	Report & Order is published in U.S. Federal Register.		
T+30 days (February 23, 2001)	1) New Part 68 rules (Appendix A of R&O) take effect.	Para 134	However, current Part 68 rules remain applicable and enforced until ACTA publishes its technical criteria (para 77).
	2) TIA and ATIS will formally notify industry of its intent to establish and populate the Administrative Council for Terminal Attachment (ACTA).	Para 78	
T+90 days (April 24, 2001)	Target date for ACTA to be fully populated.	Para 78	
T+120 days (May 24, 2001)	First official ACTA meeting. Schedule set for future meetings.	Para 78 & 79	FCC will transfer responsibility to ACTA at this first meeting. ACTA reports to FCC its progress to date.
T+180 days (July 23, 2001)	1) ACTA required to make public its draft charter detailing operations and procedures.	Para 55 & 78	FCC will review & presumably comment.
	2) ACTA publishes initial technical criteria for terminal attachment.	Para 78	Will initially be identical to current Part 68 technical criteria.
	3) ACTA will report to FCC its progress resolving outstanding labeling and numbering issues.	Para 78 & 115	Must meet needs of TCBs, the SDoC process, the FCC, and U.S. Customs.
	4) FCC will transfer responsibility for database of approved equipment to ACTA.	Para 78 & 111	ACTA is to file with FCC a detailed report on the database structure, its administration plan, and other details. (Section 68.610)
	5) FCC will no longer accept applications for certification to Part 68	Para 78	
4 years after ACTA established (May 24, 2005)	ATCA has option to vote and change its sponsoring organization and/or secretariat organization.	Para 47	