

Variance for  
The PPP Connection Control Protocol  
and  
The PPP Encryption Control Protocol

Status of this Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

Table of Contents

1. Variance .....	1
1.1 The Problem .....	1
1.1.1 History .....	1
1.1.2 Other Attempted Solutions .....	2
1.2 Variance to Procedures in RFC 1602 .....	2
1.3 The Solution .....	3
1.4 Perceived Benefits .....	3
1.5 Perceived Risks .....	3
Security Considerations .....	3
Author's Address .....	3
2. Appendix A -- Most Recent Communication from Motorola.	4
3. APPENDIX B -- Relevant Section of RFC 1602 .....	5

1. Variance

1.1. The Problem

1.1.1. History

The PPP Working group has developed two protocols, one to control compression on PPP links; the Compression Control Protocol (CCP), documented in draft-ietf-pppext-compression-04.txt. The second is the Encryption Control Protocol (ECP), used to control encryption on serial links, documented in draft-ietf-pppext-encryption-03.txt. During the development of these protocols, the Motorola Corporation informed the IETF that they may infringe on certain patents held by Motorola, specifically U.S. patents 5,245,614 and 5,130,993.

After development of the protocols was completed, they were submitted to the IESG for standardization. At this point, because of the outstanding patent claims, their progress was halted. Per the procedures of RFC 1602, the IESG Secretariat attempted to gain the licenses required by RFC 1602. In particular, per section 5.6 of RFC 1602, an attempt was made to acquire a form of the license and make it publically available via the Internet.

Motorola would prefer to provide a general statement indicating that licenses will be made available "to any party under reasonable terms and conditions that are demonstrably free of unfair discrimination."

#### 1.1.2. Other Attempted Solutions

An attempt was made to have the PPP working group develop revised versions of CCP and ECP that would not infringe on the patents. While technically possible, the proposed technical changes are viewed by some members of the working group as much less technically desirable than the original CCP and ECP and, in fact, these members have stated quite clearly that they will implement the original CCP regardless of the protocol standardized by the working group or accepted by the IESG. Note that while other members of the working group accepted the proposed changes, they did so more out of a sense that it was the only viable alternative rather than because of the alternative's technical merits. In short, technical changes did not meet with the IETF's traditional benchmark of Rough Consensus.

#### 1.2. Variance to Procedures in RFC 1602

The variance to the procedures of RFC 1602 are as follows.

Section 5.6 of RFC 1602 (relevant portions are included as Appendix B) requires that, to use proprietary technology in an Internet Standard, the holder of the technology 1) Agree to provide the ISOC a free license to use the technology and to grant to others a license to use the technology on fair and non-discriminatory terms, 2) That a form of this license be made electronically available on the Internet, and 3) That anyone may execute this license by downloading a copy of the form, fulfilling its requirements, and mailing an executed copy to the licensor. Standards track documents are not allowed to advance until these conditions are met.

The variance proposed in this request would allow the CCP and ECP to advance onto the standards track without meeting the above conditions. All that the community would obtain would be an assurance from the license holder that it will make licenses available.

### 1.3. The Solution

Within the Variance Procedure (published as RFC 1871), the IESG grants a variance on behalf of the PPP Working Group, to the procedures of RFC 1602 to allow the IESG to adopt the CCP and ECP as originally developed. The IESG accepts the statement by G. David Forney of Motorola, date 5 June 1995, (attached as Appendix A) that Motorola will make licenses available to use the technology covered by U.S. patents 5,245,614 and 5,130,993.

### 1.4. Perceived Benefits

The benefit to the community in adopting this procedure is that the IESG would then be able to standardize the CCP and ECP and the community would gain a standardized method of controlling data compression and encryption on PPP links. That this protocol has been under development for well over a year shows that the capabilities provided by the protocol are needed in the community.

### 1.5. Perceived Risks

This variance will raise the possibility that licenses are not granted in a fair and non-discriminatory manner. The license holder, if it were so inclined, could treat each request differently, advancing some, delaying others, and so on. This would be counter to the IETF's long, honorable, and successful, tradition of openness and equal access to technology.

### Security Considerations

Security issues are not discussed in this memo.

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## 2. Appendix A -- Most Recent Communication from Motorola

The following is an email message received by Steve Coya, Executive Director of the IETF, presenting Motorola's terms and conditions.

From: Dave\_Forney-LUSE27@email.mot.com  
Date: 5 Jun 95 12:08:46 -0600  
To: scoya@CNRI.Reston.VA.US  
Cc: John\_Fisher-AJF003@email.mot.com, Dj\_Stockley-ADS002@email.mot.com,  
Ray\_Wood-ARW004@email.mot.com  
Subject: RE: License agreement for CCP and ECP  
Message-Id: <"Macintosh \*/PRMD=MOT/ADMD=MOT/C=US/"@MHS>

Dear Mr. Coya:

Thank you for your e-mail message of June 1.

Motorola has had a license agreement for these patents available for some time, and has already provided it to several requesting companies. It would be most unusual, however, to attach such an agreement to a standard. Providing contact information should suffice. It could say something like this:

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Motorola, Inc. has advised the IETF that it holds two patents that it believes to be essential to the CCP and ECP standards, U.S. 5,245,614 and U.S. 5,130,993, and has declared its willingness to make licenses to these patents available to any party under reasonable terms and conditions that are demonstrably free of unfair discrimination. Parties interested in obtaining such a license may contact:

Mr. John A. Fisher  
Vice President and Intellectual Property Licensing Counsel  
Motorola, Inc.  
1303 E. Algonquin Road  
Schaumburg, Ill. 60196

\*\*\*

I trust that this statement will be satisfactory.

Sincerely,

G. David Forney, Jr.  
Vice President

### 3. APPENDIX B -- Relevant Section of RFC 1602

#### 5.6. Assurances

The agreement on assurances set forth below will normally be entered into between the owner of rights and ISOC at the time a standards track document in which proprietary rights are claimed reaches the "Proposed Standard" stage of maturity:

This is an agreement between \_\_\_\_\_ (hereinafter called "Rights Holder") and the Internet Society on behalf of itself and its trustees, officers, employees, contractors and agents, the Internet Architecture Board, Internet Engineering Steering Group, Internet Engineering Task Force, and other task forces, committees and groups coordinated by the Internet Society (hereinafter called "ISOC"), and for the benefit of all users of the Internet and users of any other networks which implement and use Internet Standards (hereinafter together with ISOC called "Internet community"). This agreement takes effect when signed on behalf of the Rights Holder and the Internet Society.

The Rights Holder represents that it has or will have rights in patent applications, patents, copyrights, trade secrets, and other proprietary rights in various countries (hereinafter called "Rights") which may block or impede the ability of the Internet community to implement and operate under the standards set forth in ISOC standards document \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ (the listed standards and any similar or related standards now existing or later developed are together hereinafter called "Standards"). The Rights as they presently exist are listed on attached Schedule A. The Rights Holder further agrees to review the Rights listed in Schedule A from time to time, and, in particular, immediately prior to the elevation of the Standards to the Internet Standard level of maturity in accordance with the Internet Standards Process, and to inform the Executive Director of the Internet Engineering Task Force Secretariat promptly upon learning of any new Rights in the Standards that should be added to the list in Schedule A.

The Rights Holder believes and affirms that it will derive benefits by permitting ISOC and the Internet community to implement and operate under the Standards without interference of any of the Rights. The policy of ISOC is not to propose, adopt, or continue to maintain the Standards unless written assurances are given by the Rights Holder with respect to proprietary rights. Accordingly, in consideration of the benefits noted above and other good and valuable consideration, the Rights Holder makes the assurances set forth herein.

The Rights Holder grants to ISOC a cost-free, perpetual, non-exclusive, world-wide license under the Rights with respect to implementing and operating under the Standards. The license extends to all activities of ISOC involving the Standards without limit, including the rights to reproduce, distribute, propose, test, develop, analyze, enhance, revise, adopt, maintain, withdraw, perform and display publicly, and prepare derivative works in any form whatsoever and in all languages, and to authorize others to do so. The Rights Holder also grants ISOC permission to use the name and address of Rights Holder in connection with the Standards.

The Rights Holder relinquishes any right or claim in any trade secret which is part of the Rights, and makes the trade secrets available without restriction to the Internet community. The Rights Holder hereby acknowledges that ISOC assumes no obligation to maintain any confidentiality with respect to any aspect of the Standards, and warrants that the Standards do not violate the rights of others.

The Rights Holder assures ISOC that the Rights Holder shall grant to any member of the Internet community, as a beneficiary of this agreement, a non-exclusive, perpetual, world-wide license under the Rights, with respect to operating under the Standards for a reasonable royalty and under other terms which are reasonable considering the objective of ISOC to assure that all members of the Internet community will be able to operate under the Standards at a minimal cost. The license discussed in this paragraph shall permit the licensee to make, have made, test, enhance, implement, and use methods, works, computer programs, and hardware as needed or desirable for operating under the Standards. Every license shall include a clause automatically modifying the terms of the license to be as favorable as the terms of any other license under the Rights previously or later granted by the Rights Holder.

A form of the license shall always be publicly accessible on the Internet, and shall become effective immediately when the member of the Internet community executes it and posts it for delivery to the Rights Holder either by mail or electronically. The initial version of the license shall be in the form attached as Schedule B.

The Rights Holder represents and warrants that its rights are sufficient to permit it to grant the licenses and give the other assurances recited in this agreement. The Rights Holder further represents and warrants that it does not know of any rights of any other party in any country which would block or impede the ability of ISOC and the Internet community to implement or operate under the Standards, or that would prevent the Rights Holder from granting the licenses and other assurances in this agreement.

This agreement shall not be construed to obligate the ISOC to propose, adopt, develop, or maintain any of the Standards or any other standard.

