

26 July 2007

Committee Secretary
Senate Standing Committee on Legal and Constitutional Affairs
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600

Email: legcon.sen@aph.gov.au

Dear Ms Morris

Inquiry into the Telecommunications (Interception and Access) Amendment Bill 2007

We have observed that item 12 of the Answers to Questions on Notice sent by the Attorney-General's Department to the Committee refers to information contained in EFA's initial submission and indicates the information provided by EFA was wrong.

We therefore provide the attached additional information on that matter.

The undersigned can be contacted via the above phone number or directly on 0412 997 163.

Yours sincerely

Irene Graham
on behalf of the Board of Electronic Frontiers Australia Inc.

**Electronic Frontiers Australia Inc. (EFA)
Supplementary Submission No. 2**

**To: Senate Standing Committee on Legal and Constitutional Affairs
Re: Inquiry into the Telecommunications (Interception and Access)
Amendment Bill 2007**

26 July 2007

We refer to item 12 of the Answers to Questions on Notice sent by the Attorney-General's Department^[1] to the Committee which states:

"EFA in their submission provided an example that relates to user-defined 'headers' to email messages. EFA states that whilst headers generally do not contain personal information or content, there is the capacity to include information in headers which are defined by the user. They argue that there is therefore confusion as to whether this information is considered data or content.

The EFA rely on an Internet Engineering Task Force (IETF) standard referred to as Request for Comment (RFC) 822. This is an obsolete standard that was superseded in 2001 by RFC 2822 and the relevant header fields stated by EFA cannot be found in the current standard. RFC 2822 also states that these obsolete fields 'MUST NOT be generated'."

EFA acknowledges that Internet Standard^[2] RFC 822^[3] has been obsoleted by Proposed Standard^[4] RFC 2822^[5] (a matter which was unintentionally overlooked during the short time available to research and prepare submissions).

However, all occurrences of the phrase "MUST NOT be generated" in RFC 2822 refer to "obsolete syntax" not field names.

User-defined fields (often referred to as "X-" fields) continue to be allowed to be generated by RFC 2822. As remarked by the Editor of RFC 2822, Pete Resnick, in a message dated 2 January 2004 to the "ietf-822" discussion mailing list^[6]:

... X- fields are perfectly legal in 2822 (they fall under "optional-field"); they simply are not given the special treatment of 822, that they won't ever be official published extensions to the standard. The only difference then between 822 and 2822 in this respect is that 822 gives publication guidelines for extensions where 2822 does not. This has absolutely *no* effect on implementations of the protocol. ...*

The relevant section of RFC 2822 states:

"3.6.8. Optional fields

Fields may appear in messages that are otherwise unspecified in this standard. They MUST conform to the syntax of an optional-field. This is a field name, made up of the printable US-ASCII characters except SP and colon, followed by a colon, followed by any text which conforms to unstructured.

The field names of any optional-field MUST NOT be identical to any field name specified elsewhere in this standard.

```
optional-field = field-name ":" unstructured CRLF
field-name    = 1*ftext
ftext        = %d33-57 /                               ; Any character except
               %d59-126                               ; controls, SP, and
               ; ":".
```

For the purposes of this standard, any optional field is uninterpreted."

As stated on Microsoft's site^[7] in information about Microsoft Exchange Server 2007:

"An X-header is a user-defined, unofficial header field that exists in the message header. X-headers are not specifically mentioned in RFC 2822, but the use of an undefined header field starting with "X-" has become an accepted way to add unofficial header fields to a message. Messaging applications, such as anti-spam, antivirus, and messaging server applications may add their own X-headers to a message. X-header fields are usually preserved but ignored by messaging servers and clients that don't use them."

The following pages provide information about how to add custom headers when using various email client software packages:

Custom headers - Thunderbird, and Mozilla Suite / SeaMonkey^[8]

Add Custom Header to Email in Mozilla or Netscape^[9]

Add Custom Header Lines to Emails in The Bat!^[10]

How to Add Custom Headers to Emails in Eudora^[11]

Add Custom Header Lines to Emails with KMail^[12]

Note: The above is not an exhaustive list of email clients providing such functionality and the above pages may or may not refer to the most recent versions of the email clients (EFA has not spent the time necessary to undertake exhaustive research). However, email clients which have had such functionality are most likely to continue to have the same or similar functionality in newer versions. Furthermore, some EFA members (including the signatory to the covering letter attached to this submission) are currently using email clients (versions released after RFC 2822) which enable the end-user to add custom headers to outgoing and incoming messages.

We also note that RFC 2822 defines informational fields, in addition to "Subject", which contain information that is content or substance rather than "telecommunications data":

3.6.5. Informational fields

The informational fields are all optional. The "Keywords:" field contains a comma-separated list of one or more words or quoted-strings. The "Subject:" and "Comments:" fields are unstructured fields as defined in section 2.2.1, and therefore may contain text or folding white space.

```
subject      =      "Subject:" unstructured CRLF
comments    =      "Comments:" unstructured CRLF
keywords     =      "Keywords:" phrase *( "," phrase ) CRLF
```

These three fields are intended to have only human-readable content with information about the message. The "Subject:" field is the most common and contains a short string identifying the topic of the message. When used in a reply, the field body MAY start with the string "Re: " (from the Latin "res", in the matter of) followed by the contents of the "Subject:" field body of the original message. If this is done, only one instance of the literal string "Re: " ought to be used since use of other strings or more than one instance can lead to undesirable consequences. The "Comments:" field contains any additional comments on the text of the body of the message. The "Keywords:" field contains a comma-separated list of important words and phrases that might be useful for the recipient.

EFA considers that, at the least, the Explanatory Memorandum should be amended to exclude not only the "Subject" header from "telecommunications data", but also the "Comments" and "Keyword" headers and also any other optional headers that are not specified by field name in RFC 2822.

1. Answers to Questions on Notice, Attorney-General's Department, July 2007
<http://www.aph.gov.au/senate/committee/legcon_ctte/telecommunications_interception/additional_information/ag_answers.pdf>

2. List of Internet Standards, RFC Editor (accessed 26 July 2007)
<<http://www.rfc-editor.org/categories/rfc-standard.html>>
See also: Official Internet Protocol Standards
<<http://www.rfc-editor.org/rfcxx00.html>>
 3. RFC 822
<<http://www.ietf.org/rfc/rfc822.txt>>
 4. List of Proposed Standards, RFC Editor (accessed 26 July 2007)
<<http://www.rfc-editor.org/categories/rfc-proposed.html>>
See also: Official Internet Protocol Standards
<<http://www.rfc-editor.org/rfcxx00.html>>
 5. RFC 2822
<<http://www.ietf.org/rfc/rfc2822.txt>>
 6. Pete Resnick, Editor - RFC 2822, message to the "ietf-822" discussion mailing list, 2 January 2004
<<http://www.imc.org/ietf-822/mail-archive/msg03808.html>>
 7. Exchange 2007 - Understanding Header Firewall, Microsoft
<<http://technet.microsoft.com/en-us/library/bb232136.aspx>>
 8. Custom headers - Thunderbird, and Mozilla Suite / SeaMonkey
<http://kb.mozillazine.org/Custom_headers>
 9. Add Custom Header to Email in Mozilla or Netscape
<<http://email.about.com/cs/mozillatips/qt/et030604.htm>>
 10. Add Custom Header Lines to Emails in The Bat!
<<http://email.about.com/od/thebattips/qt/et091704.htm>>
 11. How to Add Custom Headers to Emails in Eudora
<http://email.about.com/od/eudoratips/qt/et_extra_header.htm>
 12. Add Custom Header Lines to Emails with KMail
<<http://email.about.com/cs/kmailtips/qt/et032904.htm>>
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