Common Internet Message Header Fields

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Abstract

This memo contains a table of commonly occurring header fields in
headings of e-mail messages. The document compiles information from
other RFCs such as RFC 822, RFC 1036, RFC 1123, RFC 1327, RFC 1496, RFC
1766, RFC 1806, RFC 1864, RFC 1911 and RFC 2045. A few commonly
occurring header fields which are not defined in RFCs are also
included. For each header field, the memo gives a short description and
a reference to the RFC in which the header field is defined.

This document is a revision of RFC 2076. The following new header
fields, not included in RFC 2076, have been added:

Palme   [Page 1]

Also-Control, Content-Alias, Content-Conversion, Content-Features,
Disposition-Notification-Options, Disposition-Notification-To, Expiry-
Date, For-Approval, List-Archive, List-Help, List-ID, List-Owner, List-
Post, List-Software, List-Subscribe, List-Unsubscribe, Original-
Recipient, Originator, Originator-Info, Path, PICS-Label, Replaces,
Speech-Act, Translated-By. Translation-Of, X-Envelope-From, X-Envelope-
To, X-List-Host, X-Listserver, X-MIME-Autoconverted, X-No-Archive, X-
Priority, X-Sender, X-X-Sender, X-UIDL, X-URL, X-URI

Table of contents

1. Introduction

Many different Internet standards and RFCs define header fields which
may occur on Internet Mail Messages and Usenet News Articles. The
intention of this document is to list all such header fields in one
document as an aid to people developing message systems or interested
in Internet Mail standards.

The document contains all header fields which the author has
found in the following Internet standards: RFC 822 [2],
RFC 1036 [3], RFC 1123 [5], RFC 1327 [7], RFC 1496 [8], RFC 2045 [11],
RFC 1766 [12], RFC 1806 [14], RFC 1864[17] and RFC 1911[20]. Note in
particular that heading attributes defined in PEM (RFC 1421-1424) and
MOSS (RFC 1848 [16]) are not included. PEM and MOSS header fields only
appear inside the body of a message, and thus are not header fields in
the RFC 822 sense. Mail attributes in envelopes, i.e. attributes
controlling the message transport mechanism between mail and news
servers, are not included. This means that attributes from SMTP [1],
UUCP [18] and NNTP [15] are mainly not covered either. Headings used
only in HTTP [19] are not included yet, but may be included in future
version of this memo. Some additional header fields which often can be
found in e-mail headings but are not part of any Internet standard are
also included.

For each header field, the document gives a short description and a
reference to the Internet standard or RFC, in which they are defined.

The header field names given here are spelled the same way as when they
are actually used. This is usually American but sometimes English
spelling. One header field in particular, "Organisation/Organization",
occurs in e-mail header fields sometimes with the English and other
times with the American spelling.

The following words are used in this memo with the meaning specified
below:

heading   Formatted text at the top of a message, ended by a
                   blank line

header field   One field in the heading, beginning with a field
                   name, colon, and followed by the field value(s). The
                   words "heading field" and "header" are also
                   sometimes used with this meaning.

It is my intention to continue updating this document after its
publication as an RFC. The latest version, which may be more up-to-date
(but also less fully checked out) will be kept available for
downloading from URL
http://www.dsv.su.se/~jpalme/ietf/ietf-mail-attributes.html

Please e-mail me (Jacob Palme <jpalme@dsv.su.se>) if you have noted
header fields which should be included in this memo but are not.

2. Use of gatewaying header fields

RFC 1327 defines a number of new header fields in Internet mail, which
are defined to map header fields which X.400 has but which were
previously not standardized in Internet mail. The fact that a header
field occurs in RFC 1327 indicates that it is recommended for use in
gatewaying messages between X.400 and Internet mail, but does not mean
that the header field is recommended for messages wholly within
Internet mail. Some of these header fields may eventually see
widespread implementation and use in Internet mail, but at the time of
this writing (1996) they are not widely implemented or used.

Header fields defined only in RFC 1036 for use in Usenet News sometimes
appear in mail messages, either because the messages have been
gatewayed from Usenet News to e-mail, or because the messages were
written in combined clients supporting both e-mail and Usenet News in
the same client. These header fields are not standardized for use in
Internet e-mail and should be handled with caution by e-mail agents.

3. Table of header fields

3.1 Phrases used in the tables

"not for general usage"	Used to mark header fields which are defined in RFC 1327 for use in messages from or to Internet mail/X.400 gateways. These header fields have not been standardized for general usage in the exchange of messages between Internet mail-based systems.
"not standardized for use in e-mail"	Used to mark header fields defined only in RFC 1036 for use in Usenet News. These header fields have no standard meaning when appearing in e-mail, some of them may even be used in different ways by different software. When appearing in e-mail, they should be handled with caution. Note that RFC 1036, although generally used as a de-facto standard for Usenet News, is not an official IETF standard or even on the IETF standards track.
"non-standard"	This header field is not specified in any of referenced RFCs which define Internet protocols, including Internet Standards, draft standards or proposed standards. The header field appears here because it often appears in e-mail or Usenet News. Usage of these header fields is not in general recommended. Some header field proposed in ongoing IETF standards development work, but not yet accepted, are also marked in this way.
"discouraged"	This header field, which is non-standard, is known to create problems and should not be generated. Handling of such header fields in incoming mail should be done with great caution.
"controversial"	The meaning and usage of this header field is controversial, i.e. different implementors have chosen to implement the header field in different ways. Because of this, such header fields should be handled with caution and understanding of the different possible interpretations.

"experimental"	This header field is used for newly defined header fields, which are to be tried out before entering the IETF standards track. These should only be used if both communicating parties agree on using them. In practice, some experimental protocols become de-facto-standards before they are made into IETF standards.

3.2 Trace information

Used to convey the information from the MAIL FROM envelope attribute in final delivery, when the message leaves the SMTP environment in which "MAIL FROM" is used.	Return-Path:	RFC 821, RFC 1123: 5.2.13.
Trace of MTAs which a message has passed.	Received:	RFC 822: 4.3.2, RFC 1123: 5.2.8.
List of MTAs passed.	Path:	RFC 1036: 2.1.6, only in Usenet News, not in e-mail.
Trace of distribution lists passed.	DL-Expansion-History-Indication:	RFC 1327, not for general usage.

3.3 Format and control information

An indicator that this message is formatted according to the MIME standard, and an indication of which version of MIME is utilized.	MIME-Version:	RFC 2045: 4.
Only in Usenet News, contains commands to be performed by News agents.	Control:	RFC 1036: 2.1.6, only in Usenet News, not in e-mail.

Special Usenet News commands and a normal article at the same time.	Also-Control:	son-of-RFC1036 [21], non-standard, only in Usenet News, not in e-mail
Which body part types occur in this message.	Original-Encoded-Information-Types:	RFC 1327, not for general usage.
Controls whether this message may be forwarded to alternate recipients such as a postmaster if delivery is not possible to the intended recipient. Default: Allowed.	Alternate-Recipient:	RFC 1327, not for general usage.
Whether recipients are to be told the names of other recipients of the same message. This is primarily an X.400 facility. In X.400, this is an envelope attribute and refers to disclosure of the envelope recipient list. Disclosure of other recipients is in Internet mail done via the To:, cc: and bcc: header fields.	Disclose-Recipients:	RFC 1327, not for general usage.
Whether a MIME body part is to be shown inline or is an attachment; can also indicate a suggested filename for use when saving an attachment to a file.	Content-Disposition:	RFC 1806, experimental

3.4 Sender and recipient indication

Authors or persons taking responsibility for the message. Note difference from the "From " header field (not followed by ":") below.	From:	RFC 822: 4.4.1, RFC 1123: 5.2.15-16, 5.3.7, RFC 1036 2.1.1

(1) This header field should never appear in e-mail being sent, and should thus not appear in this memo. It is however included, since people often ask about it. This header field is used in the so-called Unix mailbox format, also known as Berkely mailbox format or the MBOX format. This is a format for storing a set of messages in a file. A line beginning with "From " is used to separate successive messages in such files. This header field will thus appear when you use a text editor to look at a file in the Unix mailbox format. Some mailers also use this format when printing messages on paper. The information in this header field should NOT be used to find an address to which replies to a message are to be sent.	From (not followed by a colon)	not standardized for use in e-mail
(2) Used in Usenet News mail transport, to indicate the path through which an article has gone when transferred to a new host. Sometimes called "From_" header field.	From or >From (not followed by a colon)	RFC 976: 2.4 for use in Usenet News
Name of the moderator of the newsgroup to which this article is sent; necessary on an article sent to a moderated newsgroup to allow its distribution to the newsgroup members. Also used on certain control messages, which are only performed if they are marked as Approved.	Approved:	RFC 1036: 2.2.11, not standardized for use in e-mail.

The person or agent submitting the message to the network, if other than shown by the From: header field. Should be authenticated, according to RFC 822, but what kind of authentication is not clear. Some implementations expect that the e-mail address used in this field can be used to reach the sender, others do not. See also "X-Sender".	Sender:	RFC 822: 4.4.2, RFC 1123: 5.2.15-16, 5.3.7, RFC 1036.
Sometimes used in Usenet News in similar ways to "Sender:"	Originator:	Non-standard
Some mail software expect "Sender:" to be an e-mail address which you can send mail to. However, some mail software has as the best authenticated sender a POP or IMAP account, which you might not be able to send to. Because of this, some mail software put the POP or IMAP account into an X-sender header field instead of a Sender header field, to indicate that you may not be able to send e-mail to this address. See also "X-X-Sender". Another use of" X-Sender:" is that some e-mail software, which wants to insert a "Sender:" header, will first change an existing "Sender:" header to "X-Sender". This use is actually often the same as that described in the previous paragraph, since the new "Sender:" is added because it is better authenticated than the old value.	X-Sender:	Non-standard

Even though some systems put the POP or IMAP account name into the "X-Sender:" instead of the Sender header field, some mail software tries to send to the "X-Sender:" too. To stop this, some systems have begun to use "X-X-Sender:" to indicate an authentication of the sender which might not be useable to send e-mail to. See also "Originator-Info:"	X-X-Sender:	Non-standard
Contains information about the authentication of the originator in a format which is not easily used to send email to, to avoid the problems with "Sender" and "X-Sender".	Originator-Info:	Non-standard [25]
Primary recipients.	To:	RFC 822: 4.5.1, RFC 1123: 5.2.15-16, 5.3.7.
Secondary, informational recipients. (cc = Carbon Copy)	cc:	RFC 822: 4.5.2, RFC 1123. 5.2.15-16, 5.3.7.
Recipients not to be disclosed to other recipients. (bcc = Blind Carbon Copy).	bcc:	RFC 822: 4.5.3, RFC 1123: 5.2.15-16, 5.3.7.
Primary recipients, who are requested to handle the information in this message or its attachments.	For-Handling:	Non-standard
Primary recipients, who are requested to comment on the information in this message or its attachments.	For-Comment:	Non-standard
Primary recipients, who are requested to approve the information in this message or its attachments.	For-Approval:	Non-standard

In Usenet News: group(s) to which this article was posted. Some systems provide this header field also in e-mail although it is not standardized there. Unfortunately, the header field can appear in e-mail with three different and contradictory meanings: (a) Indicating the newsgroup recipient of an article/message sent to both e-mail and Usenet News recipients. (b) In a message adressed to some mail to news gateways, indicates the newsgroup(s) that the message is to be posted to. (c) In a personally addressed reply to an article in a news-group, indicating the newsgroup in which this discussion originated.	Newsgroups:	RFC 1036: 2.1.3, not standardized and controversial for use in e-mail.
Inserted by Sendmail when there is no "To:" recipient in the original message, listing recipients derived from the envelope into the message heading. This behavior is not quite proper, MTAs should not modify headings (except inserting Received lines), and it can in some cases cause Bcc recipients to be wrongly divulged to non-Bcc recipients.	Apparently-To:	Non-standard, discouraged, mentioned in RFC 1211.
Geographical or organizational limitation on where this article can be distributed. Value can be a compete or incomplete domain names, also various special values are accepted like "world", "usenet", "USA", etc.	Distribution:	RFC 1036: 2.2.7, not standardized for use in e-mail.

Fax number of the originator.	Fax:, Telefax:	Non-standard.
Phone number of the originator.	Phone:	Non-standard.
If the recipient in the envelope (SMTP "MAIL FROM") is not included in the CC list, some mail servers add this to the RFC822 header field as an aid to clients which would otherwise not be able to display the envelope recipients.	X-Envelope-To	Non-standard.
If the sender in the envelope (SMTP "RCTP TO") is not the same as the senders in the "From" or "Sender" RFC822 header fields, some mail servers add this to the RFC822 header fields as an aid to clients which would otherwise not be able to display this information.	X-Envelope-From	Non-standard.
Information about the client software of the originator.	Mail-System-Version:, Mailer:, Originating-Client:, X-Mailer, X-Newsreader	Non-standard.

3.5 Response control

This header field is meant to indicate where the sender wants replies to go. Unfortunately, this is ambiguous, since there are different kinds of replies, which the sender may wish to go to different addresses. In particular, there are personal replies intended for only one person, and group replies, intended for the whole group of people who read the replied-to message (often a mailing list, anewsgroup name cannot appear here because of different syntax, see "Followup-To" below.).	Reply-To:	RFC 822: 4.4.3, RFC 1036: 2.2.1 controversial.
Some mail systems use this header field to indicate a better form of the e-mail address of the sender. Some mailing list expanders puts the name of the list in this header field. These practices are controversial. The personal opinion of the author of this RFC is that this header field should be avoided except in special cases, but this is a personal opinion not shared by all specialists in the area.		
Used in Usenet News to indicate that future discussions (=follow-up) on an article should go to a different set of newsgroups than the replied-to article. The most common usage is when an article is posted to several newsgroups, and further discussions is to take place in only one of them.	Followup-To:	RFC 1036: 2.2.3, not standardized for use in e-mail.

In e-mail, this header field may occur in a message which is sent to both e-mail and Usenet News, to show where follow-up in Usenet news is wanted. The header field does not say anything about where follow-up in e-mail is to be sent.		
Note that the value of this header field must always be one or more newsgroup names, never e-mail addresses.		
Address to which notifications are to be sent and a request to get delivery notifications. Internet standards recommend, however, the use of MAIL FROM and Return-Path, not Errors-To, for where delivery notifications are to be sent.	Errors-To:, Return-Receipt-To:	Non-standard, discouraged.
Whether non-delivery report is wanted at delivery error. Default is to want such a report.	Prevent-NonDelivery-Report:	RFC 1327, not for general usage.
Whether a delivery report is wanted at successful delivery. Default is not to generate such a report.	Generate-Delivery-Report:	RFC 1327, not for general usage.
Indicates whether the content of a message is to be returned with non-delivery notifications.	Content-Return:	RFC 1327, not for general usage.
Possible future change of name for "Content-Return:"	X400-Content-Return:	non-standard
Indicate that the sender wants a dispoisition notification when this message is received (read, processed, etc.) by its receipents.	Disposition-Notification-To	RFC 2298

For future options on disposition notifications.	Disposition-Notification-Options	RFC 2298
Original Recipient information for inclusion in disposition notifications.	Original-Recipient	RFC 2298

3.6 Message identification and referral header fields

Unique ID of this message.	Message-ID:	RFC 822: 4.6.1 RFC 1036: 2.1.5.
Unique ID of one body part of the content of a message.	Content-ID:	RFC 2045: 7.
Base to be used for resolving relative URIs within this content part.	Content-Base:	RFC 2110
URI with which the content of this content part might be retrievable.	Content-Location:	RFC 2110
Used in addition to Content-Location if this content part can be retrieved through more than one URI. Only one of them is allowed in the Content-Location, the other can be specified in Content-Alias.	Content-Alias:	Work in progress
Sometimes used with the same meaning as "Content-Location:", sometimes to indicate the web home page of the sender or of his organisation.	X-URL:	Non-standard
Similar usage as "X-URL". The URI can be either a URL or a URN. URNs are meant to become more persistent references to resources than URLs.	X-URI:	Non-standard

Reference to message which this message is a reply to.	In-Reply-To:	RFC 822: 4.6.2.
In e-mail: reference to other related messages, in Usenet News: reference to replied-to-articles.	References:	RFC 822: 4.6.3 RFC 1036: 2.1.5.
References to other related articles in Usenet News.	See-Also:	Son-of-RFC1036 [21], non-standard
Reference to previous message being corrected and replaced. Compare to "Supersedes:" below. This field may in the future be replaced with "Supersedes:".	Obsoletes:	RFC 1327, not for general usage.
Commonly used in Usenet News in similar ways to the "Obsoletes" header field described above. In Usenet News, however, Supersedes causes a full deletion of the replaced article in the server, while "Supersedes" and "Obsoletes" in e-mail is implemented in the client and often does not remove the old version of the text.	Supersedes:	son-of-RFC1036 [21], non-standard
Still another name for similar functionality as for "Obsoletes:" and "Supersedes:". This may become the most recommended header in the future, but is still under discussion in IETF standards development work.	Replaces:	non-standard, proposed in IETF USEFOR working group
Unique identifier for a message, local to a particular local mailbox store. The UIDL identifier is defined in the POP3 standard, but not the "X-UIDL:" header.	X-UIDL:	non-standard
Only in Usenet News, similar to "Supersedes:" but does not cause the referenced article to be physically deleted.	Article-Updates:	son-of-RFC1036 [21], non-standard

Reference to specially important articles for a particular Usenet Newsgroup.	Article-Names:	son-of-RFC1036 [21], non-standard
Reference to the Message-ID of a message, which the current message is a translation of.	Translation-Of:	non-standard
Mailbox of the person who made the translation.	Translated-By:	non-standard

3.7 Other textual header fields

Search keys for data base retrieval.	Keywords:	RFC 822: 4.7.1 RFC 1036: 2.2.9.
Title, heading, subject. Often used as thread indicator for messages replying to or commenting on other messages.	Subject:	RFC 822: 4.7.1 RFC 1036: 2.1.4.
Comments on a message.	Comments:	RFC 822: 4.7.2.
Description of a particular body part of a message, for example a caption for an image body part.	Content-Description:	RFC 2045: 8.
Organization to which the sender of this article belongs.	Organization:	RFC 1036: 2.2.8, not standardized for use in e-mail.
See Organization above.	Organisation:	Non-standard.
Short text describing a longer article. Warning: Some mail systems will not display this text to the recipient. Because of this, do not use this header field for text which you want to ensure that the recipient gets.	Summary:	RFC 1036: 2.2.10, not standardized for use in e-mail, discouraged.
A text string which identifies the content of a message.	Content-Identifier:	RFC 1327, not for general usage.

3.8 Header fields containing dates and times

The time when a message was delivered to its recipient.	Delivery-Date:	RFC 1327, not for general usage.
In Internet, the date when a message was written, in X.400, the time a message was submitted. Some Internet mail systems also use the date when the message was submitted.	Date:	RFC 822: 5.1, RFC 1123: 5.2.14 RFC 1036: 2.1.2.
A suggested expiration date. Can be used both to limit the time of an article which is not meaningful after a certain date, and to extend the storage of important articles.	Expires:	RFC 1036: 2.2.4, not standardized for use in e-mail.
Time at which a message loses its validity. This field may in the future be replaced by "Expires:".	Expiry-Date:	RFC 1327, not for general usage.
Latest time at which a reply is requested (not demanded).	Reply-By:	RFC 1327, not for general usage.

3.9 Quality information

Can be "normal", "urgent" or "non-urgent" and can influence transmission speed and delivery.	Priority:	RFC 1327, not for general usage.
Values: 1 (Highest), 2 (High), 3 (Normal), 4 (Low), 5 (Lowest). 3 (Normal) is default if the field is omitted.	X-Priority:	Non-standard [24]
Sometimes used as a priority value which can influence transmission speed and delivery. Common values are "bulk" and "first-class". Other uses is to control automatic replies and to control return-of-content facilities, and to stop mailing list loops.	Precedence:	Non-standard, controversial.

A hint from the originator to the recipients about how important a message is. Values: High, normal or low. Not used to control transmission speed.	Importance:	RFC 1327 and RFC 1911, experimental
How sensitive it is to disclose this message to other people than the specified recipients. Values: Personal, private, company confidential. The absence of this header field in messages gatewayed from X.400 indicates that the message is not sensitive.	Sensitivity:	RFC 1327 and RFC 1911, experimental
Body parts are missing.	Incomplete-Copy:	RFC 1327, not for general usage.
Ratings label to control selection (filtering) of messages according to the PICS protocol.	PICS-Label:	REC-PICS-labels, W3C document [23].

3.10 Language information

Can include a code for the natural language used in a message, e.g. "en" for English.	Language:	RFC 1327, not for general usage.
Can include a code for the natural language used in a message, e.g. "en" for English.	Content-Language:	RFC 1766, proposed standard.

3.11 Size information

Inserted by certain mailers to indicate the size in bytes of the message text. This is part of a format some mailers use when showing a message to its users, and this header field should not be used when sending a message through the net. The use of this header field in transmission of a message can cause several robustness and interoperability problems.	Content-Length:	Non-standard, discouraged.
Size of the message.	Lines:	RFC 1036: 2.2.12, not standardized for use in e-mail.

3.12 Conversion control

The body of this message may not be converted from one character set to another. Values: Prohibited and allowed.	Conversion:	RFC 1327, not for general usage.
Non-standard variant of Conversion: with the same values.	Content-Conversion:	Non-standard.
The body of this message may not be converted from one character set to another if information will be lost. Values: Prohibited and allowed.	Conversion-With-Loss:	RFC 1327, not for general usage.

3.13 Encoding information

Format of content (character set etc.) Note that the values for this header field are defined in different ways in RFC 1049 and in MIME (RFC 2045), look for the "MIME-version" header field to understand if Content-Type is to be interpreted according to RFC 1049 or according to MIME. The MIME definition should be used in generating mail. RFC 1766 defines a parameter "difference" to this header field. Various other Content-Type define various additional parameters. For example, the parameter "charset" is mandatory for all textual Content-Types.	Content-Type:	RFC 1049, RFC 1123: 5.2.13, RFC 2045: 5. RFC 1766: 4.1

Can give more detailed information about the Content-Type. Example:
 	
(& (color=binary)
    (image-file-structure=TIFF-S)
    (dpi=200)
    (paper-size=A4)
    (image-coding=MH)
    (MRC-mode=0)
    (ua-media=stationery))
 	
This header is meant to be used when you can choose between different versions of a resource, such as when using multipart/alternative.
	Content-Features:	non-standard

Information from the SGML entity declaration corresponding to the entity contained in the body of the body part.	Content-SGML-Entity:	non-standard
Coding method used in a MIME message body.	Content-Transfer-Encoding:	RFC 2045: 6.

Only used with the value "Delivery Report" to indicates that this is a delivery report gatewayed from X.400.	Message-Type:	RFC 1327, not for general usage.
Used in several different ways by different mail systems. Some use it for a kind of content-type information, some for encoding and length information, some for a kind of boundary information, some in other ways.	Encoding:	RFC 1154, RFC 1505, experimental.
Information about conversion of this message on the path from sender to recipient, like conversion between MIME encoding formats. Note: Auto-conversion may invalidate digital seals and signatures.	X-MIME-Autoconverted:	non-standard

3.14 Resent-header fields

When manually forwarding a message, header fields referring to the forwarding, not to the original message. Note: MIME specifies another way of resending messages, using the "Message" Content-Type.	Resent-Reply-To:, Resent-From:, Resent-Sender:, Resent-From:, Resent-Date:, Resent-To:, Resent-cc:, Resent-bcc:, Resent-Message-ID:	RFC 822: C.3.3.

3.15 Security and reliability

Checksum of content to ensure that it has not been modified.	Content-MD5:	RFC 1864, proposed standard.

Used in Usenet News to store information to avoid showing a reader the same article twice if it was sent to more than one newsgroup. Only for local usage within one Usenet News server, should not be sent between servers.	Xref:	RFC 1036: 2.2.13, only in Usenet News, not in e-mail.

3.16 Mailing list control

Contains URL to use to get a subscription to the mailing list from which this message was relayed.	List-Subscribe	RFC 2369 [26]
Contains URL to use to unsubscribe the mailing list from which this message was relayed.	List-Unsubscribe	RFC 2369 [26]
Contains URL to send e-mail to the owner of the mailing list from which this message was relayed.	List-Owner	RFC 2369 [26]
Contains URL to use to get a information about the mailing list from which this message was relayed.	List-Help	RFC 2369 [26]
Contains URL to use to send contributions to the mailing list from which this message was relayed.	List-Post	RFC 2369 [26]
Contains URL to use to browse the archives of the mailing list from which this message was relayed.	List-Archive	RFC 2369 [26]
Information about the software used in a mailing list expander through which this message has passed.	List-Software	Non-standard, has been considered for inclusion in [26].

Stores the URN of the mailing list, through which this message was distributed.	List-ID	Non-standard, has been considered for inclusion in [26].
Information about the software used in a mailing list expander through which this message has passed. Warning: "Listserv" is a trademark and should not be used for other than the "Listserv" product. Use, instead the "List-Software" header field.	X-Listserver	Non-standard.

3.17 Miscellaneous

Name of file in which a copy of this message is stored.	Fcc:	Non-standard.
Has been automatically forwarded.	Auto-Forwarded:	RFC 1327, not for general usage.
Can be used in Internet mail to indicate X.400 IPM extensions which could not be mapped to Internet mail format.	Discarded-X400-IPMS-Extensions:	RFC 1327, not for general usage.
Can be used in Internet mail to indicate X.400 MTS extensions which could not be mapped to Internet mail format.	Discarded-X400-MTS-Extensions:	RFC 1327, not for general usage.

This field is used by some mail delivery systems to indicate the status of delivery for this message when stored. Common values of this field are: U message is not downloaded and not deleted. R message is read or downloaded. O message is old but not deleted. D to be deleted. N new (a new message also sometimes is distinguished by not having any "Status:" header field. Combinations of these characters can occur, such as "Status: OR" to indicate that a message is downloaded but not deleted.	Status:	Non-standard, should never appear in mail in transit.
Do not archive this message in publicly available archives.	X-No-Archive: Yes	Non-standard
Speech act categoriztion of a message, examples of speeach acts are Question, Idea, More, Promise, Sad, Happy, Angry, summary, Decision	Speech-Act:	Non-standard

4. Acknowledgments

An earlier version of this list has been published as part of [13].

Copyright and disclaimer

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Appendix A:
Header fields sorted by Internet RFC document in which they appear.

RFC 822
----

bcc

cc
Comments
Date
From
In-Reply-To
Keywords
Message-ID
Received
References
Reply-To
Resent-
Resent-bcc
Resent-cc
Resent-Date
Resent-From
Resent-From
Resent-Message-ID
Resent-Reply-To
Resent-To
Return-Path
Sender
Sender
Subject
To

RFC 976

"From " (followed by space, not colon (:")

RFC 1036

Approved
Control
Distribution
Expires
Followup-To
Lines
Newsgroups
Organization
Path
Summary
Xref

RFC 1049

Content-Type

RFC 1327

Alternate-recipient
Auto-Forwarded
Autoforwarded
Content-Identifier
Content-Return
Conversion
Conversion-With-Loss
Delivery-Date
Discarded-X400-IPMS-Extensions
Discarded-X400-MTS-Extensions
Disclose-Recipients
DL-Expansion-History
Expiry-Date
Generate-Delivery-Report
Importance
Incomplete-Copy
Language
Message-Type Delivery
Obsoletes
Original-Encoded-Information-Types
Prevent-NonDelivery-Report
Priority
Reply-By
Report
Sensitivity

RFC 1505

Encoding

RFC 2045

Content-Description
Content-ID
Content-Transfer-Encoding

Content-Type
MIME-Version

RFC 1806

Content-Disposition

RFC 1864

Content-MD5

RFC 1911

Importance
Sensitivity

RFC 2110

Content-Base
Content-Location

RFC 2369

List-Archive
List-Help
List-Owner
List-Post
List-Software
List-Subscribe
List-Unsubscribe

son-of-RFC1036 [21]

Also-Control
Article-Names
Article-Updates
See-Also
Supersedes

draft-ietf-receipt

Disposition-Notification-To
Disposition-Notification-Options
Original-Recipient

World Wide Web Consortium (W3C) Recommendations

Pics-Label

Not Internet standard

"From " (not followed by ":")
Apparently-to
Content-Alias
Content-Length
Content-SGML-Entity
Encoding
Errors-To
Fax
Fcc
For-Approval
For-Comment
For-Handling
List-ID
Mail-System-Version
Mailer
Organisation
Originating-Client
Originator-Info
Phone
Return-Receipt-To
Speech-Act
Status
Supersedes
Telefax
Translated-By
Translation-Of
X-Envelope-From
X-Envelope-To
X-Mailer
X-MIME-Autoconverted
X-Newsreader
X-No-Archive
X-Priority

X-Sender
X-UIDL
X-URI
X-URL
X-X-Sender
X400-Content-Return

Appendix B: Alphabetical index