



Recordkeeping Standard

# **Australian Government Email Metadata Standard (AGEMS), Version 1.0**

**Chief Information Officer Committee**

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[www.naa.gov.au/recordkeeping/control/agems.html](http://www.naa.gov.au/recordkeeping/control/agems.html)

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## 1. INTRODUCTION

This document presents a standard set of metadata for use with electronic mail (email). The set is based on the *Recordkeeping Metadata Standard for Commonwealth Agencies* (RKMSCA), released in 1999 by the National Archives of Australia.<sup>1</sup> As such, this set represents a subset of that Standard, with some possible extensions.<sup>2</sup>

### 1.1 Background

The impetus for this work was discussions within the Chief Information Officer Committee (CIOC) and the Information Interoperability Working Group (IIWG) regarding standardising the metatagging of emails across Australian Government agencies. A major driver for this work is the need to introduce standardised security metatagging for emails that is compliant with the Australian Government *Protective Security Manual*, including those emails transmitted by or relayed to remote wireless devices. As a result of these discussions, a small IIWG working subgroup was formed to develop a set of metatags for use with emails, based on business requirements for the identification, processing, management, control and retrieval of email.

### 1.2 Document scope

Emails are a widely used and accepted form of official business communication by and within the Australian Government. As such, they provide essential evidence of the conduct of government business and are important information assets of the Australian Government. Formal government communications such as emails should be controlled by standardised business processes and within information management regimes that protect the interests of citizens and the Commonwealth in a cost-efficient manner.

Standardising the metadata for transmission with emails will facilitate corporate control and efficient processing and management of these important records for business purposes. It will enable automated processing of the distribution and control of emails, and allow important information about the business context of the communications to be captured into agency information systems with the emails themselves. In addition, assigning standardised metadata to business emails at the point of creation will facilitate the capture of these emails into agency systems designed to manage records.

This document presents a set of core metadata tags for transmission with business emails and describes the business rationale behind each tag. While the document does not specifically address metadata for non-business emails, this issue does raise a question as to what metadata, if any, would be appropriate to apply to such email. At a

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<sup>1</sup> This can be viewed online at [www.naa.gov.au/recordkeeping/control/rkms/summary.htm](http://www.naa.gov.au/recordkeeping/control/rkms/summary.htm).

<sup>2</sup> At the time of writing the RKMSCA is under revision. New elements incorporated in AGEMS will be included in the new version of the Standard, due for release in the first half of 2006.

minimum, it would be useful to incorporate a metadata field that allows non-business emails to be tagged as 'personal'.

This version of the document does not cover metadata tags for email attachments. The members of the Working Group recognise that there is a body of work to be done regarding metadata for attachments. The definition of metadata tags for attachments, such as subject, title, author and date, is required to enable the content of attachments to be revealed. The Working Group's intention is that version 2.0 of the *Australian Government Email Metadata Standard* (AGEMS) will cover metadata for the transmission of content, including attachment content.

In the interim, agencies are advised that the set of email metadata tags is extensible. Extra metadata tags can be added, provided no changes are made to the core set presented here.

This document makes no recommendations about how the tags might be implemented. However, it is worth noting that there are a number of possible means or combination of means by which metadata can travel with an email communication. It may not be necessary, or desirable, for all the metadata to be stored in one place. Places where metadata associated with email may be stored include:

- the message header (including the 'From', 'To' and 'Subject' fields)
- the body of the email message itself
- the S/MIME packaging of email.

Separate technical products, designed to assist Australian Government agencies in the implementation of this standard, are currently under development.

The IETF (Internet Engineering Task Force) Internet Mail Format Standard, RFC 2822, provides detailed descriptions of structured metadata fields for use in Internet email headers.<sup>3</sup> These fields are intended to carry most of the semantic information for email messages in transit between organisations. The majority of existing email software applications already make use of some of these structured metadata fields in message headers, or provide semantically equivalent proprietary fields.

As a result, the CIOC believes that business-critical metadata should, wherever possible, be transmitted with emails in suitably labelled metadata fields in message headers, using header fields as defined in RFC 2822, or proprietary fields that are semantically equivalent. This would facilitate the automated processing of the metadata upon despatch and receipt of messages and give agencies and/or users the ability to configure human interfaces to display relevant metadata for the end-user. While this can currently be achieved by re-engineering the desktop configuration of email applications and associated gateway processing protocols in individual agencies, it would be preferable if the Australian Government were to work with proprietary

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<sup>3</sup> This can be viewed online at [www.ietf.org/rfc/rfc2822.txt](http://www.ietf.org/rfc/rfc2822.txt).

software vendors and supporters of open source solutions to make such functionality a standard part of email software applications deployed by the government.

The intention of the Working Group is to institute procedures for the application of standardised metadata to business emails that are as non-onerous as possible for Australian Government agencies to implement and manage. The Working Group will develop business use cases and scenarios to assist agencies to implement the email metadata set. Compliance may also include the development and use of templates for the entry of the required metadata, and automated email gateway processing protocols.

## 2. RELATIONSHIP TO THE RECORDKEEPING METADATA STANDARD FOR COMMONWEALTH AGENCIES AND RFC 2822

### 2.1 RKMSCA and RFC 2822

The National Archives' RKMSCA specifies 20 metadata elements and 65 sub-elements for use in describing Australian Government records. The RKMSCA was used as a starting point for defining metadata for email; seven of its elements and 19 of its sub-elements were identified as being useful for describing email in a business context. A further five elements and sub-elements, not covered by the current RKMSCA, were also identified as being of use in the business context.

A number of the identified metatags are also semantically equivalent to header fields defined in the IETF Internet Mail Format Standard, RFC 2822, or could be considered as potential extensions to the header fields. Appendix 1 presents the proposed email metatags in a table and indicates, where applicable, semantic equivalence of the proposed metatags with RFC 2822.

### 2.2 RKMSCA element definitions

To aid understanding of the set of email metatags, descriptions of the relevant elements from the RKMSCA are reproduced below, along with a list of applicable sub-elements. While the descriptions refer broadly to records, they are also specifically applicable to electronic mail as a type of record.

*Table 1: Applicable RKMSCA elements and sub-elements*

Element name	Element description	Applicable sub-elements
1. AGENT	<p>A corporate entity or organisational element which is responsible for some action on or usage of a record.</p> <p>An individual who performs some action on a record, or who uses a record in some way.</p>	<p>1.1 Agent Type</p> <p>1.2 Jurisdiction</p> <p>1.4 Corporate Name</p> <p>1.6 Personal Name</p> <p>OR</p> <p>1.8 Position Name</p> <p>1.10 Email</p> <p>1.11 Digital Signature</p>

2. RIGHTS MANAGEMENT	Policies, legislation, caveats and/or security classifications which govern or restrict access to or use of records.	2.1 Security Classification 2.2 Caveat 2.3 Codeword 2.4 Releasability Indicator 2.6 Usage Condition 2.7 Encryption Details
3. TITLE	The name given to the record.	3.3 Title Words
4. SUBJECT	The subject or topic of a record which concisely and accurately describes the record's content.	4.1 Keyword
7. RELATION	A link between one record item and another, or between various aggregations of records.  A link between a record and another information resource.	7.1 Related Item ID 7.2 Relation Type
10. DATE	The date and times at which fundamental recordkeeping actions of creation, transaction and registration occur.	10.1 Date/Time Created 10.3 Date/Time Registered
14. RECORD IDENTIFIER	A unique identifier for the record(s).	—



















