

Send

From ▼ Concerned IT Pro

To... Australian Public Sector

Cc...

Subject We need to talk about this... [SEC=UNCLASSIFIED]

UNCLASSIFIED

We need to talk about email protective markings ...

*We need to stop doing this!*

It's time to stop putting protective markings in the email subject.

# We need to talk about email protective markings ...

- Published on September 12, 2017  
<https://www.linkedin.com/pulse/australian-public-sector-we-need-talk-email-markings-aaron-dinnage/>

If you work with Australian government organisations, you'll be familiar with the addition of a square bracketed label at the end of the subject line on email correspondence. It's called a protective marking, and it's there to ensure government information is handled appropriately according to its sensitivity.

Subject We need to talk about this... [SEC=UNCLASSIFIED]

For reference, the current version of the "*Email Protective Marking Standard for the Australian Government*" is available here:

<http://www.finance.gov.au/files/2012/04/EPMS2012.3.pdf>

Aside from informing the reader and helping avoid unauthorised disclosure, protective markings are used to route email according to a set of rules. For example, public networks can be used to transmit Unclassified email, but not classified messages.

These are good reasons to apply protective markings. However, times (and technologies) have changed. Where subject line labels were once a simple answer to difficult problem they are now an obsolete practice and should be phased out. Here's why ...

## **The case against subject line protective markings ...**

### **1 - The label is used as a security measure, yet it's trivial to manipulate.**

Any user can alter the subject line to change the apparent classification. This was a benefit back when typing the label was the only option. Today we use classification tools that can enforce classification rules and audit changes, making manual labelling seem archaic. So much so in fact that many government departments won't deploy new mail services or apps if they can't be configured to avoid manual labelling. Doing it by hand is simply too onerous these days. Particularly as more and more email is composed and consumed on mobile devices.

### **2 - Subject line markings are susceptible to mistakes.**

Not only are subject lines easy to manipulate, they are often accidentally modified, thereby damaging the label. The authors of the Australian standard themselves have called out this risk, advising that the subject line method "is prone to error", and "could be easily misinterpreted".

Subject

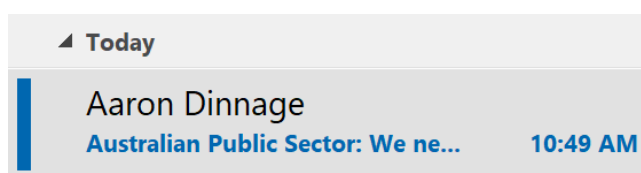
RE: Australian Public Sector: We need to talk about this... [SEC=UNCLASSIFIED Hi everyone,

### 3 - The label is almost never visible prior to opening the full message.

There are various studies that have measured average email subject length, many with sample sizes in the millions. The consensus is that subject lines average between 40 and 50 characters in length.

According to the Australian standards, "*Agencies SHOULD position the Protective Marking at the **end** of the Subject field*" (emphasis added).

I tested all the mail apps across my devices (phones, tablets, and PC) and found that the visible subject length on the email list view was anything from 31 to 44 characters. If the average subject length is over 40 characters and the protective marking is then placed at the end of that text, then the chances of the user being able to determine the label on the subject line prior to opening the message in full are low to non-existent.



The above screen clipping is from Outlook 2016 on my Surface Pro using the default email layout and view settings, the way I use it every day. A similar experience can be seen on an iPad and iPad Pro, as well as other tablets and phones of all makes and models.

### What's to be done?

Thankfully, there are some simple and modern alternatives to Subject Line labels. In fact, we need look no further than the Australian standard itself. The same document that details the subject line approach gives us the answer. Use a message header, "X-Protective-Marking".

*"The Internet Message Header Extension SHOULD be used in preference to the Subject Field Marking."*

The above quote is directly out of the Australian standard, and it's been the official position for over a decade!

The message header is superior in almost every way.

- It isn't easily manipulated by the user, which avoids mistakes and enhances security.
- It's more reliable for gateways and filters to interrogate.
- All the common mail labelling tools already support it.

The standard allows for the presence of both methods, and that is generally how we find it implemented across government today. However, according to the standards it is the message header that takes precedence when both labels are applied. This means that if the header is present, but the user alters the subject line to a different security classification then the header wins out, rendering the subject line not only wrong, but useless and confusing. Begging the question, why have the subject label at all?

*"Agencies have flexibility to place markings in **either** the Subject Field or the Message Header Extension. Email filter systems must be capable of accommodating markings in both locations."*

The message header method doesn't address the desire to identify the security classification prior to opening the email. However, take a look at your mobile device and it's likely you'll find a preview of the message directly under the subject.



Aaron Dinnage

▶ Australian Public Sector: We need to tal 10:49 AM  
UNCLASSIFIED We really need to talk abc

The common labelling tools can be configured to place the label name as the first line of the message itself, and this has become common practice across government. This ensures that the label shows up on a message preview, like in Outlook Mobile pictured above. If you don't want to preview the body of the message you can usually turn this feature off, in which case you'll be no worse off than with the subject line approach.

## **So why do we keep doing it this way?**

Given that we have a superior labelling mechanism and the tools to support it, why does government keep using the subject line for labels?

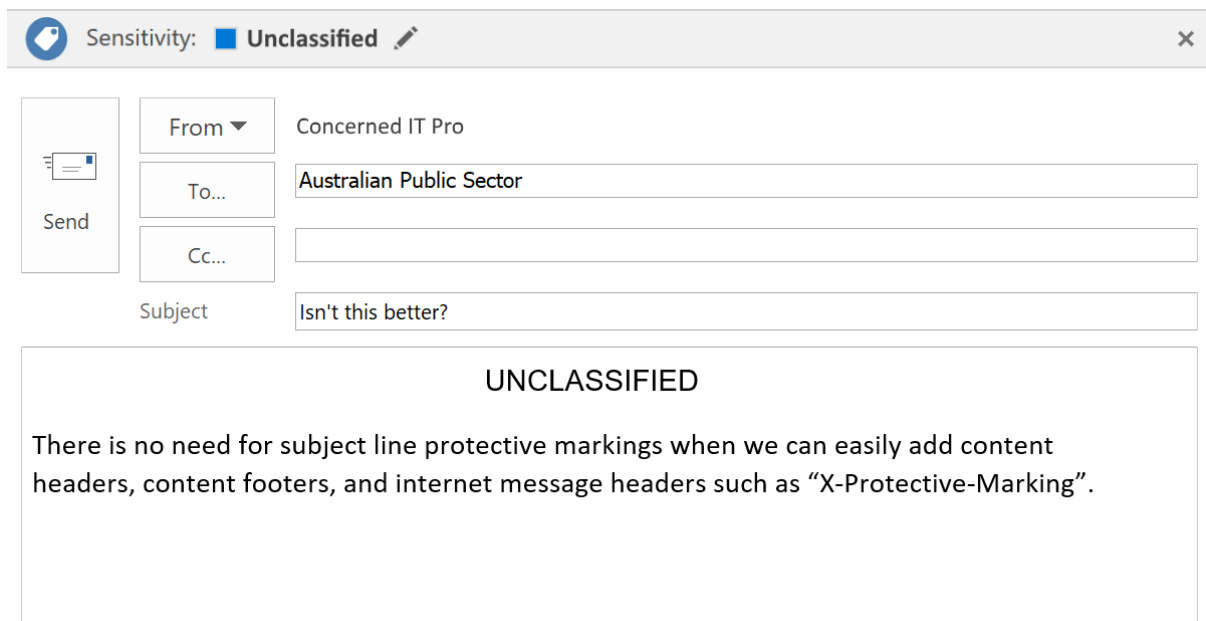
In my opinion, the answer is: inertia.

*Inertia (noun): a tendency to do nothing or to remain unchanged*

Until the standards are updated to phase out the subject line labels, government issues out of band guidance, or some brave agencies takes the lead, we can expect this practice to continue.

# Introducing Microsoft Azure Information Protection ...

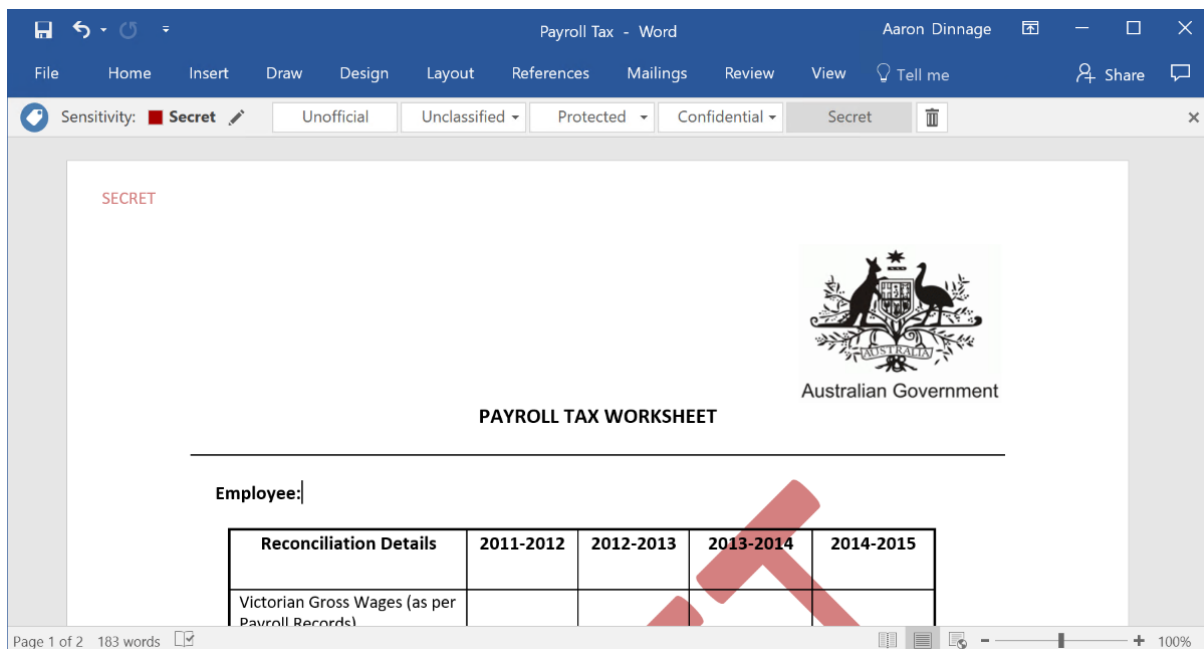
For those that would like to use a modern classification and labelling mechanism, integrated into the productivity tools they use every day, there is *Azure Information Protection*.



The screenshot shows an email composition window. At the top, a grey bar displays 'Sensitivity: ■ Unclassified' with a small edit icon and a close button (X). Below this, the email fields are visible: 'From' (Concerned IT Pro), 'To...' (Australian Public Sector), 'Cc...' (empty), and 'Subject' (Isn't this better?). To the left of these fields is a 'Send' button with an envelope icon. Below the email fields, a large white box contains the text 'UNCLASSIFIED' in bold, followed by a paragraph: 'There is no need for subject line protective markings when we can easily add content headers, content footers, and internet message headers such as "X-Protective-Marking".'

I'm working with a growing number of government departments and agencies that are looking to modernise their approach to classification, labelling, and protection (including encryption, tracking, and access revocation).

Using Azure Information Protection they're able to standardise on one solution that not only addresses their email requirements but also labels documents and provides deep integration into the Microsoft ecosystem, including across the Office application suite and throughout Office 365.



Azure Information Protection is already available today for Windows PCs, and over the coming months you'll see it roll out across all major device types and operating systems, including Mac, iOS, Android, and Office 365 web experiences.

We'll share more of our information protection roadmap at our annual [Ignite conference](#) starting the 25th of September in Orlando, Florida, and I'll update this article as we release more details then.

If you'd like to learn more about how Azure Information Protection can work for your Australian government organisation, then please reach out and we can set up a chat and a demonstration.

With Azure Information Protection we can make classification, labelling, and *protection* of content easier, integrated, and modern.