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**Military Message Handling System (MMHS) over SMTP**  
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**Abstract**

A Military Message Handling System (MMHS) processes formal messages ensuring release, distribution, security, and timely delivery across national and international strategic and tactical networks. The MMHS Elements of Service are defined as a set of extensions to the ITU-T X.400 (1992) international standards and are specified in STANAG 4406 Edition 2 or ACP 123. This document specifies how a comparable messaging service can be provided using SMTP and its extensions.

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## **1. Introduction**

A Military Message Handling System (MMHS) processes formal messages ensuring release, distribution, security, and timely delivery across national and international strategic and tactical networks. The MMHS Elements of Service are defined as a set of extensions to the ITU-T X.400 (1992) international standards and are specified in STANAG 4406 Edition 2 or ACP 123. This document specifies how a comparable messaging service can be provided using Email Message Format [[RFC5322](#)], SMTP [[RFC5321](#)] and their extensions.

## **2. Conventions Used in This Document**

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

## **3. Requirements on Mail User Agents**

A Mail User Agent (MUA) compliant with this specification MUST support

1. Internet Message Format [[RFC5322](#)].
2. Multipurpose Internet Mail Extensions (MIME) [[RFC2045](#)] [[RFC2046](#)] [[RFC2047](#)] [[RFC4288](#)] [[RFC4289](#)] [[RFC2049](#)]. [[Maybe be a bit more specific about what is required?]]
3. Parsing, processing and having the ability to generate MMHS header fields [[RFC6477](#)].
4. Parsing and processing of Multipart/Report Content Type for the Reporting of Mail System Administrative Messages [[RFC6522](#)] containing message/delivery-status [[RFC3464](#)] and Message Disposition Notification (MDN) [[RFC3798](#)].
5. The ability to request an MDN and the ability to generate an MDN in response to a request [[RFC3798](#)].

MUA can also take advantage of SMTP extensions advertised by MSAs (see [Section 4](#)).

## **4. Requirements on Mail Submission Agents**

In addition to the list of requirements specified in [[RFC6409](#)], an Mail Submission Agent (MSA) compliant with this specification MUST support:



1. SMTP Extension for Authentication [[RFC4954](#)].
2. SMTP Extension for Secure SMTP over TLS [[RFC3207](#)].
3. SMTP Service Extension for Returning Enhanced Error Codes [[RFC2034](#)].
4. Deliver By SMTP Service Extension [[RFC2852](#)].
5. SMTP extension for Message Transfer Priorities. [[RFC6710](#)]  
"STANAG4406" Priority Assignment Policy MUST be advertised in the EHLO response.
6. SMTP extension for Delivery Status Notifications [[RFC3461](#)].
7. SMTP Extension for 8-bit MIME transport [[RFC6152](#)].
8. SMTP Extension for Message Size Declaration [[RFC1870](#)].
9. SMTP Extension for Command Pipelining [[RFC2920](#)].
10. SMTP Extensions for Transmission of Large and Binary MIME Messages [[RFC3030](#)].

The following SMTP extensions are OPTIONAL to support in MSAs compliant with this specification:

1. SMTP Submission Service Extension for Future Message Release [[RFC4865](#)].

## **5. Requirements on Mail Transfer Agents**

A Mail Transfer Agent (MTA) compliant with this specification MUST support

1. SMTP Service Extension for Returning Enhanced Error Codes [[RFC2034](#)].
2. Deliver By SMTP Service Extension [[RFC2852](#)].
3. SMTP extension for Message Transfer Priorities [[RFC6710](#)].  
"STANAG4406" Priority Assignment Policy MUST be advertised in the EHLO response.
4. SMTP extension for Delivery Status Notifications [[RFC3461](#)].
5. SMTP Extension for 8-bit MIME transport [[RFC6152](#)].

6. SMTP Extension for Message Size Declaration [[RFC1870](#)].
7. SMTP Extension for Command Pipelining [[RFC2920](#)].
8. SMTP Extensions for Transmission of Large and Binary MIME Messages [[RFC3030](#)].

The following SMTP extensions SHOULD be supported in MTAs compliant with this specification:

1. SMTP Extension for Secure SMTP over TLS [[RFC3207](#)].

## **6. IANA Considerations**

This document doesn't ask for any action from IANA.

## **7. Security Considerations**

TBD

## **8. References**

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## **[Appendix A.](#) Acknowledgements**

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