

Spam Reporting & Abuse Feedback MARF SMS/MMS Extension

Alcatel-Lucent



Yigang Cai, Moh Torabi and Zachary Zeltsan

July 27, 2010

Goals

- Filling the existing gaps in "Message Abuse Reporting" among two leading standards setting organizations on the project
- Support abuse reporting of SMS, MMS, IM in IETF MARF with appropriate MIME type, transport and metadata scheme
- Support optional message corpus inclusion in the abuse reporting for SMS/MMS
- Support abuse detection information from message centers and/or user agent
- Add additional reporting attributes to reporting message headers

2 | MARF - ALU | July 28, 2010



Some Major Observed Gaps

OMA SpamRep Scope

- Applicable to email, SMS, MMS and IM message spam reporting
- Specifies HTTP as transport
- Attributes largely extracted from GSM MAP and SMPP fields,
- Single report but no human-readable part

IETF MARF Scope

- Specifies email only spam reporting/feedback protocol
- Uses SMTP as transport
- Uses RFC 5322 (email) style metadata/headers
- Both corpus and report metadata in the same multipart/report MIME part
- No clear aggregation of multiple reports, and report has a mandatory human-readable part

3 | MARF - ALU | July

28, 2010, 0

Options:

- Whole message body
- A part of message body which contains spam
- No message body

4 | MARF - ALU | July 28, 2010



Abuse Detection Information

Following optional fields from message centers or end user agent

- Abuse Type
 - spam, phishing, spoofing, fake sender address, unauthorized sender/recipient, suspicious network/domain, message flooding, denial of service attack, malware, unauthorized message, not spam, others (TBD)
- Abuse Detection Methods
 - Forbidden senders/receivers, forbidden network/domain, forbidden application entity screening, spam keywords match, spam multimedia match, spam pattern match, volume threshold per sender match, volume threshold per sending network/domain match, others
- Abuse Keywords
- Abuse Multimedia Elements
- Message Delivery Decisions: delivered, rejected with notification, dropped silently, on hold for instruction, others

5 Massage Handling Timestamps

28, 2010



Additional Optional Spam Reporting Attributes for SMS/MMS

- Message-ID
- Message Center ID
- Message Type
- Message Protocol ID
- Message Teleservice ID
- Message Language Indicator
- Message Segment Indicator
- Message Data Encoding
- Message User Data (Header)
- Message Addresses and Address Types

6 | MARF - ALU | July 28, 2010