

GSMA/OMA Parallel Activity

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Mobile Spam Activity

Email Spam

- 2000-2002: 20% abuse
 - Mass-mailing, simple spam
- 2003-2004: 35% abuse
 - Viruses, malicious HTML
- 2005-2006: 65%-80% abuse
 - Contest scams, phishing, image spam, spyware, botnets, stock spam
- 2007-present: 90-99% abuse

SMS Spam

- 2005-2006: <5% abuse
 - Mass texting, premium service scams, toll calls
- 2007-present: 20-30% abuse
 - Unlimited text plans, bank phishing, signaling fraud, tethered senders

Mobile Spam Activity

- So mobile is about ten years behind us on the abuse growth curve
- The GSMA (mobile service providers) and the OMA (consortium producing handset and infrastructure specifications) are interested in getting ahead of the problem

Mobile Spam Activity

- GSMA feels that mobile abuse is on the rise and affects all carriers
 - Customer confidence maintenance is critical
 - Opportunity for global inter-carrier co-operation
- They need to get help from subscribers to identify spam, but don't know how to engage them
- Looking at MARF (and MAAWG) to benefit from existing experience

Mobile Spam Activity

- French telecom federation (FFT) and mobile operators (AFOM) conducted a spam reporting experiment in 2008-2009
 - Forward spammy SMSes to a short code, 33.700
 - Operator requests that the subscriber then send the source information
 - Daily batches of completed spam reports forwarded to the abuse handling centre

Mobile Spam Activity

- After three months (Nov. '08-Jan. '09) 672,000 spam reports, 60-70% of which were completed
 - 495,000 of these were identified as spams with a “target number”
 - More than 460 numbers shut down, dozens of warnings sent

Mobile Spam Activity

- Some interesting trends observed
 - Common text properties, seasonal message changes
- Spammers began to move toward smaller operators

Mobile Spam Activity

- GSMA now preparing to conduct a similar pilot program with another short code
 - Global in scope
 - As a preliminary response while something more comprehensive is developed

Mobile Spam Activity

- In the future, seeking to put a “report spam” button directly on handsets
 - Role of the OMA to specify requirements
- This is where a mobile variant of ARF might be needed
 - Protocol between handsets and carriers
 - Inter-carrier reporting
 - Data sharing with bulk senders

Mobile Spam Activity

- OMA's "SpamRep" proposal
 - Specifies handset software changes
 - Includes ARF as an informative reference
 - Destination of SpamRep reports is provisioned by the provider to the device
 - MNO collects and aggregates data about spam reports and updates both content and blacklist filters
 - No direct provisioning for inter-carrier reports

Mobile Spam Activity

- One option includes the user selecting the ARF-style Feedback-Report type
- Some things SpamRep addresses that ARF doesn't:
 - Possibility of reporting only parts of a multipart SMS as objectionable content
 - Ability to query the MNO about their response to an abuse report (blacklist update, content filter rule added, measured effectiveness of both)