



Group Content Standards and Child Protection Programme

Vodafone Group policy on malicious and unsolicited communications

*ITU WSIS Thematic meeting on countering spam conference
Geneva 7th - 9th July 2004*

Some definitions:

In this document:

- **Malicious communications** are defined as person-to-person communications which harass or abuse, or are intended to harass or abuse an individual recipient. Traditionally voice calls, but now include SMS, e-mail or new forms of communication. Sometimes described as malicious **personal** communications to distinguish them from:
- **Bulk unsolicited communications (spam)** - messages sent in large volumes typically for commercial gain. These may be “*advertising*”, or may solicit a premium rate response. Alternatively, unsolicited communications may be abusive in general intent, but will have multiple occurrences rather than be directed at individual recipients.
- A **premium rate response** - a premium rate voice call, premium-SMS or other premium rate service made by a Vodafone customer who receives an unsolicited message. Part of the charge for the service is paid by Vodafone to an end company linked to the original sender of the unsolicited message. This payment is often via a number of intervening communications providers.

Introduction - malicious communications

- malicious personal phone calls have a history as long as telephony itself.
- Vodafone operating companies have existing procedures for customers to report malicious voice calls. Vodafone responds to customer concerns by attempting to reduce future exposure - typically by advice or by a change of customer number etc..
- in addition, operating companies liaise with national law enforcement where malicious personal calls are deemed to be particularly serious.
- as the range of services offered by mobile network operators increases, the range of potential malicious communications will also increase. We have seen this with SMS.
- MMS and video services open the door to visual forms of malicious communication. While not changing the basic phenomenon, these may well be perceived by customers as more intrusive and threatening than voice calls.
- malicious communications may affect customers of any age. However, recent growth of mobile penetration among younger customers means that they may now be more directly reachable. Younger customers may be exposed to malicious communications more directly through their mobile than in a world with only a household fixed phone .

Introduction - bulk unsolicited communications

- Vodafone customers are exposed to an increasing volume of bulk unsolicited communications (spam) on mobile. These may include:
 - a missed or 1-ring voice call designed to solicit a premium rate response;
 - an SMS or other mobile communication to solicit a premium rate response; or
 - an SMS or e-mail delivered to a mobile handset which is advertising a service.
- mobile phones with MMS, video and internet capabilities will increase the range of bulk unsolicited messages which can be delivered to mobiles.
- where unsolicited messages have a visual component, pornographic or illegal images may disrupt customer's use of new services. This may undermine wider acceptance of new mobile communications services vital to Vodafone's future.
- this is already a considerable problem in the fixed Internet environment where, e-mail spam, including pornographic spam, has a very high profile. Unchecked, this activity can be expected to migrate to mobile.
- bulk unsolicited communications are not directed at younger customers. However, younger customers may be a flash-point for more general concerns about spam on mobile. Again, this is already the case with pornographic spam on e-mail.

So what response from Vodafone and what do we need from policy makers?

Malicious and bulk unsolicited communications are two different and complex phenomena. There is no single solution which will address all examples of these problems. But both affect our customers' experience on mobiles adversely.

In summary, typical solutions must embrace a combination of measures:

- National and international legislation against malicious communications and spam. Coupled with practical support from data protection / communications regulators for direct action against unsolicited communications soliciting a premium rate response.
- Re-visiting our internal processes to ensure that Vodafone understands and reacts effectively to malicious communications and spam.
- Prioritizing action against customer complaints received: currently mobile SMS spam is the no1 target. Vodafone's strategy is to make this form of spam uneconomic.
- Ensuring that new Vodafone mobile services have economic and service characteristics which make them intrinsically resistant to spam.
- As fixed services (such as e-mail) migrate on to mobile ensure that Vodafone brand services adopt the lessons from the fixed environment – the filtering arms race.

National policy response

A common enabler of action against malicious and unsolicited bulk communications is a national policy consensus that these activities are illegitimate:

This means:

- outlawing of malicious personal communications. Legislation which is consistent and technologically neutral so that it captures new forms of mobile services and includes effective sanctions for individuals who are convicted of such offences.
- permission-based marketing regimes covering electronic communications. Legislation should include effective national sanctions for companies and individuals who breach these.
- specific legal or regulatory prohibitions on missed calls/1-ring calls which use premium rate numbers in Calling Line Identity to solicit a premium rate response.
- obtain regulators' support for robust commercial, technical and regulatory action against national and international senders of bulk unsolicited communications - particularly where they are soliciting a premium rate SMS or voice response.

This means firm regulatory support for mobile operators withholding interconnection and service provider payments where these have been generated by unsolicited messages soliciting a premium rate response.

Review and update malicious communications procedures

Each Vodafone Operating Company is reviewing its formal procedure for the management of malicious personal communications.

This should be based on established national malicious calls processes, and take account of new types of communications.

This should include:

- reporting by customers of any type of malicious communications received by them or by another customer through Vodafone customer care.
- logging malicious communications reports to identify intensity and trends.
- extending existing malicious calls procedures to new mobile services: SMS, MMS, video messaging, video calling etc.. Malicious personal communications reporting should cover all person-to-person services - consistently and accessibly.
- The formal procedure should have a clear escalation process with respect to malicious communications including Vodafone responses in given circumstances. This should include a review of good practice interaction with law enforcement.
- Vodafone should provide accessible information to customers on how to respond to malicious personal communications - and what we will do to support them.

Review and update unsolicited communications procedures

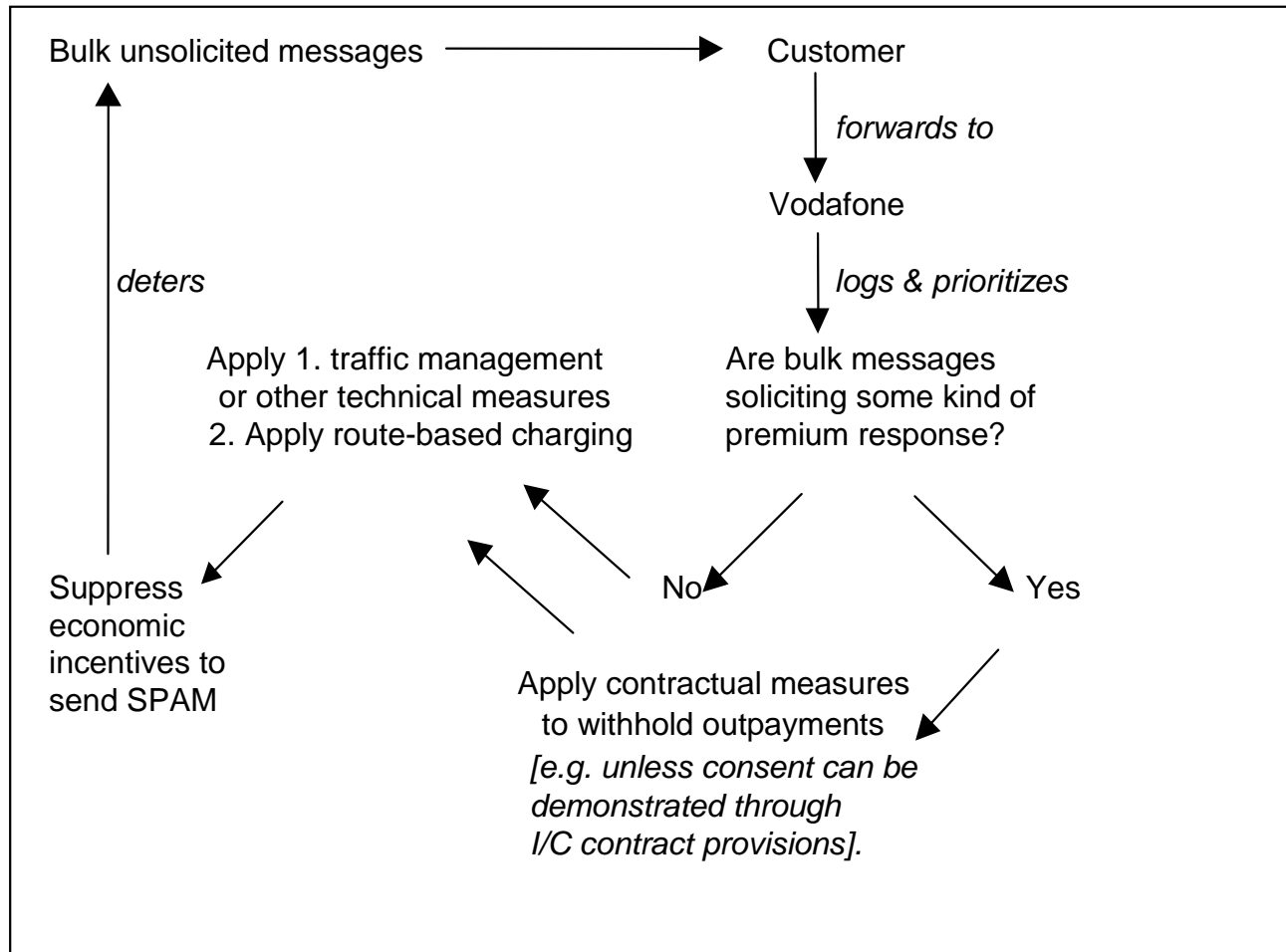
Each Vodafone Operating Company has in place procedures to combat unsolicited bulk communications.

Vodafone's immediate target is unsolicited SMS soliciting a premium rate response.

Vodafone will:

- provide customers with an automated reporting facility for unsolicited bulk communications which they receive on their mobiles. This should:
 - operate as a single, dedicated Vodafone short code to which unsolicited bulk SMS can be forwarded free of charge: example - vspam (87726) or spam (7726);
 - support new mobile messaging: MMS/video messaging spam reporting on the same code.
- log bulk unsolicited communications reported by customers or detected by network management tools to identify intensity, trends and priority actions to counteract spam.
- where through reports or other monitoring Vodafone detects unsolicited SMS or other messages soliciting a premium rate response this should be targeted by priority action to make such scams economically unviable.
- Again Vodafone should provide accessible information to customers on how to respond to bulk unsolicited communications - and what we will do to suppress them.

Stamp out SMS spam - by making it uneconomic



Avoid spreading spam to new mobile services

Implementation of new Vodafone mobile services with economic and service characteristics which make them intrinsically resistant to spam

Adoption of calling party pays will limit spam on new mobile services.

- Vodafone Group will generally seek to offer calling party pays commercial approaches to new forms of mobile call and message services to its customers.
- These commercial approaches should suppress bulk unsolicited communications. and avoid fixed e-mail experience where spam is now dominating message volumes and is creating an increasingly costly “*arms-race*” between ISPs and spammers.
- New mobile services such as MMS, video clips, video telephony etc. should not repeat the approach of SMS which was launched without a well-founded commercial regime in place - notably for international communication between MNOs.
- This will reduce spam on new mobile services to the status of an irritant. This will still need to be addressed through an appropriate permissions based regime - but will not act as a barrier to widespread personal and commercial service use.
- Positive customer experiences will support and encourage wider take up of new mobile services Vodafone is developing.

Invest in group-wide deployment of technical solutions

Where commercial or regulatory solutions are not available or effective Vodafone must rely on technical solutions - this means entering the spam “*arms race*”.

These will involve technical capabilities for Vodafone brand e-mail and handsets. Following proof of concept, these should be deployed group-wide.

- **Network-based** detection and suppression of bulk unsolicited communications where it is not realistically possible to apply per message charging. A key example would be a Vodafone brand e-mail proposition, sha-mail offered by Vodafone KK in Japan is in the same position.
- Vodafone brand e-mail services must offer the type of anti-spam protection which is already established good practice in the fixed internet - or we will fail to meet customers' expectations and will lose ground.
- **Handset-level** approaches which provide customers with greater control of exposure to malicious and unsolicited communications by allowing the examination of CLI or sender's address **before** opening/downloading a message.

There is no “*magic bullet*” but a combination of measures will combat malicious and unsolicited communications.

Summary of Vodafone approach:

National policy requirements

- Obtain regulator and policy maker support for commercial, technical and regulatory action against national and international senders of bulk unsolicited communications soliciting a premium rate response who ignore a permission-based marketing regime or use premium numbers in CLI

Review malicious communications procedures

- Based on established national malicious calls procedures, but taking account of new types of communications. Key steps are: 1/ reporting, 2/ logging and 3/ taking action against malicious communications - complemented by 4/ customer education.

Establish unsolicited communications procedures

- Where Vodafone detects unsolicited SMS or other messages soliciting a premium rate response this should be the subject of priority action to make such services economically unviable. Again key steps are: 1/ reporting /detection, 2/ logging, 3/ taking action and 4/ customer education.

Use of a calling party pays model for new mobile services

- New mobile services such as MMS, video clips, video telephony etc. should, in general, launch on a calling party pays basis.

Deploy technical measures

- Where commercial or regulatory solutions are not available or effective deploy technical measures built into products, key network level example is Vodafone sha-mail, key at handset level is allowing sender's details to be examined **before** a customer opens a message.

Annex: the economics of spam

- Spam is a numbers game. In the fixed e-mail environment a marginal message price of zero allows spammers to send extremely large numbers of e-mails to advertise their products. Even a very low response rate (some estimates as low as 5/100,000) covers costs and makes a profitable return. Where the “*product*” is actually a version of “*advance fee fraud*” a single converted response may justify millions of messages.
- For MNOs the most pernicious current form of spam is unsolicited SMS soliciting a premium rate response, although voice examples also exist (“*1-ring calls*”). In both cases these are designed to encourage customers to respond to a premium rate voice or SMS service. While not actually zero the price of sending bulk international SMS is very low - there is often no roaming termination charge so <1c is common.
- Part of the charge of any premium response generated is then paid by the MNO to an end company linked to the sender of the original unsolicited message. This payment is often via a number of intervening communications providers.
- For premium SMS, payment is made via an SMS aggregator who has a contract with the MNO. For premium voice payment is made via another telco (normally the fixed former monopolist) who the MNO has an interconnect contract with.
- To suppress these scams fully Vodafone will withhold payments unless the end premium rate service company can show customers consented to receive these messages and meets other relevant national legislation / regulation. This is typically easier with premium-SMS than premium voice where regulators’ support is required.