

TELECOMMUNICATIONS NUMBERING ADVISORY COMMITTEE**Mis-dialed calls to Police's "999" Emergency Services Centres (II)****Purpose**

At the 34th NAC Meeting held on 18 November 1999, Members discussed NAC Paper 16/1999 about the requests of Hong Kong Police Force (HKPF) to change the numbering plan to withhold the assignment of numbers ending with digits "999" to customers and number blocks with close resemblance to "999" to operators, and also to change the industry's practice of using digit "9" for seizure of outgoing trunks from the Private Automatic Branch Exchange (PABX) systems. The intention of HKPF was to avoid the mis-dialed calls to the "999" Emergency Services Centres.

2. Having discussed the above HKPF's requests, the Chairman considered that there would be a need for HKPF to provide the Committee with some actual figures and statistics on mis-dial calls e.g. showing the percentage and number of nuisance calls believed to be caused by mis-dialing, number of mis-dialed calls due to dialing behaviour of general public, mis-programming/human error etc. of such mis-dialed calls in order that the Committee can have an overall consideration of HKPF's requests. This paper is to report the findings and information supplied by HKPF and propose the way forward to deal with the issue.

Findings from HKPF

3. HKPF supplied the following statistics of "999" calls received at its New Territories "999" Emergency Service Centre for the month of September 1999 as follows:

Total number of calls received in this period	151,977
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The breakdown is as follows –

Number of calls abandoned in less than 8 seconds	49,341
Number of calls abandoned after more than 8 seconds	<u>1,631</u>
Sub-total:	50,972

Number of calls answered in less than 8 seconds	98,474
Number of calls answered after more than 8 seconds	<u>2,529</u>
Sub-total:	101,013

4. HKPF also advised that police operators would spend on the average 31 seconds on each genuine "999" call by confirming with the caller about the nature and location of the incident such that appropriate actions could be taken. It can be seen that the 50,972 abandoned calls i.e. 65% of total calls received have significantly occupied the resources of the Police's "999" system. However, it is unknown whether the abandoned calls were nuisance or mis-dialed calls and the proportion of each type of calls.

Proposed Approaches

5. In fact, HKPF may have the difficulties to differentiate whether the abandoned "999" calls are nuisance calls or mis-dialed calls by using the data captured at the centres. In order to tackle the issue, OFTA proposes two approaches to estimate the percentage and amount of mis-dialed calls. The two approaches are -

(a) to ask the network operators to produce statistics of all calls routed to "999" Centres for analysis; and

(b) to request Police's operators at the "999" Emergency Services Centres to take a survey and call back to some of the callers who have abandoned or mis-dialed the calls in order to ask for the reason of making such calls to the "999" Centres and the intended numbers for dialing.

6. For the approach (a), basically calls are coming from fixed and mobile networks. It is learned that any calls made on the fixed networks with the first three dialed digits representing "999" will be delivered immediately to the respective Police's "999" Emergency Services Centre. Any remaining digits dialed by callers in a mis-dialed call will be neglected and will not be recorded. Therefore, a fixed network operator cannot produce any record showing whether any calls to the Police's "999" Emergency Services Centre are mis-dialed calls. On the other hand, the mobile network operators are using "en bloc routing" mechanism. That is the network will receive the whole 8-digit number of a call and check the validity before the call is routed out. Mobile network operators can be able to activate the systems and produce records of such mis-dialed calls with the starting digits of "999". The amount of the mis-dialed calls collected from the mobile network operators can be used to project the amount of mis-dialed calls generated from the fixed networks.

7. For the approach (b), the Police's operators can take a survey on those abandoned and non-genuine calls by asking the callers whether the calls are mistakenly made and what numbers they actually intend to dial. Such survey may help identify the extent and nature of the problem.

8. It is recommended that the above two approaches would be used simultaneously to estimate the amount of mis-dialed calls and analyse the problems further before the Committee would be able to consider the HKPF's requests and draw a conclusion. The outcome will be reported at the next NAC meeting.

Advice Sought

9. Members of this Committee and HKPF are invited to give their comments on the approaches proposed in paragraphs 5 to 8 above or any other suggestions to tackle the issue.

Office of the Telecommunications Authority
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