



Submarine Cable Damages on 26 December 2006 and Measures to Improve Hong Kong's Preparedness

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What Happened

- Earthquakes struck at 2026H (magnitude 7.2) and 2034H (magnitude 6.7), 26 Dec (HKG time)
- Six major submarine optical fibre cable systems landing in Hong Kong passing through Luzon Strait completely damaged
- One system partially damaged
- Cable breakages occurred at different times from 2026H (26 Dec) to 0945H (27 Dec)
- Services affected: IDD, roaming, Internet services, IPLC, etc.

What Happened (2)

- Traffic rerouted through Mainland and submarine cables in Westerly direction
- IDD and roaming services restoration
 - 28 December 2006 (except Taiwan and South Korea)
 - Taiwan and South Korea on 31 December 2006
- Internet services
 - >80% capacity until cable repairs
- Submarine cable repair work
 - First stage completed at end-January 2007
 - Remaining work to be completed in February 2007

Backup and Diversity

- OFTA to discuss with operators on their contingency plans
- OFTA to consider issuing guidelines or codes of practice where necessary
- Investment in backup capacity and diversity routings largely driven by market forces
- OFTA to preserve commercial incentives in such investment decisions
- Government investment or central allocation of spare capacity may dilute market effectiveness

Reporting Mechanisms

- Submarine cable outages not included under existing reporting mechanisms to OFTA
- On 27 December 2006 morning, OFTA had to make enquiries with operators
- OFTA received confirmed reports from operators only in afternoon of 27 December 2006
- OFTA now working with operators to improve reporting mechanisms to OFTA
- Revised reporting mechanisms planned to be effective from February 2007

Dissemination of Information to Public

- Operators and OFTA have their respective roles
- Operators have first-hand information on operational status of their systems and services and should be responsible to provide prompt information and advice to their customers about outages
- For critical/major outages, operators should also report to OFTA under reporting mechanisms. If outage has significant and territory-wide implications, OFTA should promptly provide information and advice to the public

Engaging Authorities on Mainland and Other Countries

- OFTA and Government to discuss with counterparts on the Mainland or other countries to see what is appropriate at Government level to facilitate the acquisition of adequate backup capacity and route diversity

Community Awareness and Education

- OGCIO will enhance public awareness and education programmes to include more topics on business continuity planning, management and incident response
- Content in the Small and Medium Enterprise (SME) section of *one-stop information security portal* (www.infosec.gov.hk) and booklet on *SME Information Security Guideline* will be enriched to provide advice



Comments and questions welcomed