

Next Generation Networks (2)

Australian Regulatory Practice and Directions

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Topics to be covered

- Australia's emergency call service
- Law enforcement obligations
- Protection of communications
- Health and safety of customer equipment

Emergency call service



- Australia is made up of 6 states and 2 territories

Emergency Service Organisations

- Each state and territory has its own
 - Police service
 - Fire brigade
 - Ambulance service.
- These are called emergency service organisations (ESOs)



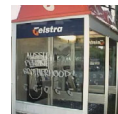
One nation, one number

- ESOs can be contacted through a national emergency call service
- The national emergency telephone number is 000
- Referred to as "Triple Zero" or "Triple oh"
- Calls are answered by Telstra
- Telstra connects callers to the requested ESO



Free access for all

- 000 calls can be dialled from any telephone in Australia
 - including fixed lined phones, mobile phones, public phones
- Calls to 000 are free of charge
- For emergency use only
 - situations where someone's life is in danger
 - when help is required urgently



Other emergency numbers



- **106**
- A text-based emergency call service
- Accessed using a computer modem or teletypewriter
 - Not by SMS
- For use by people who have hearing or speech impairment



Integrated Public Number Database

- A database containing details about every telephone number
- Includes name and address information
- Used for purposes relating to:
 - emergency call service (via ECLIPS database)
 - assisting the police with their investigations
 - publishing phone number directories

Benefits of this approach

- A national service ensures all ESOs can be contacted in a consistent manner
 - People only have to remember one number
 - Upgrades & improvements can be performed centrally
- Two call centres provides redundancy
- The IPND makes it is easy to identify and locate fixed line callers - but not necessarily VoIP users : flag system introduced

Call volumes

000

- About 11 million calls made each year
- About 35% are genuine and connected to an ESO

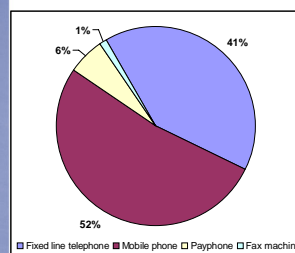
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- About 140,000 text-based calls made each year
- Less than 1% (about 350 calls) are genuine & connected to an ESO

Non-genuine calls

- Non-genuine calls are not emergency calls
- Causes of non-genuine calls include:
 - misdials
 - non-emergency calls
 - hoax calls and prank calls
- Non-genuine calls waste the time and resources of Telstra & ESOs
 - are an unnecessary burden

Origin of calls to 000



- 52% of all calls come from mobile phones
- 40% come from fixed phones
- 6% come from public payphones
- 1% come from fax machines
 - fax calls are non-genuine
 - due to misdials

Reducing non-genuine calls

- Key activity of ACA is to reduce the number of non-genuine calls via
 - connecting 'caller no response' calls to a recorded message
 - playing a recorded message at the beginning of calls in case people have dialled the wrong number
 - terminating calls when excess digits are dialled after the emergency number (example: 000xx)
 - the police contacting people who make multiple calls

Provision of assistance

- Industry must provide assistance to law enforcement & security agencies when requested
- Assistance is provided on a cost-recovery basis
- Access to call records only permitted where it is 'reasonably necessary'
 - Certain agencies can request this information without a warrant

Law enforcement obligations (1)

- All providers including network operators and resellers to do best to prevent use in commission of offences against laws
- All providers to give officers and authorities reasonably necessary help for the enforcement of the criminal law

Law enforcement obligations (2)

- Ensure networks and facilities have interception capability
- Operators pay for interception capability up to point of interception – delivery and formatting are agency responsibilities
- Attorney General can nominate that individual operators lodge annual interception plan

Law enforcement obligations (3)

- Operators to notify technological changes with material impact on provision of interception
- No introduction of technological change until agencies have opportunity to consult and specify delivery needs

Protection of communications (1)

- Operators prohibited from using or disclosing any information relating to –
 - the contents of communications
 - Services supplied
 - The affairs or personal particulars of other person

Protection of communications (2)

- Specified exemptions to above prohibition
 - during duties as an employee
 - Authorisation by law
 - Law enforcement and other national interest
 - Assisting other regulators
 - IPND
 - Threat to person or health
 - Consent or business needs of other operators

Health & safety re customer equipment (1)

- Technical regulation primarily by industry self-regulation
- ACA intervenes only for limited purposes relating to certain safeguards and may make standards for-
 - Protecting the integrity of networks
 - Protecting the health and safety of persons



Health & safety re customer equipment (2)

- Ensuring customer equipment access to emergency call services
- Ensuring interoperability of customer equipment with relevant networks
- Compliance required with Telecommunications Labelling Notice, amended for-
 - New or revised standards
 - New customer equipment technologies
 - Recognition of overseas type approvals/certification
 - Test reports from other than recognised test authorities
 - Harmonised for other requirements eg EMC and EMR