



Australian Government



Australian
Communications
and Media Authority

Responding to problems faced by telecommunications consumers in Australia

Three recent case studies

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Content, Consumer & Citizen*

communicating | facilitating | regulating

A decorative graphic at the bottom of the slide consisting of several overlapping, flowing waves in various colors: yellow, purple, blue, green, orange, and red. Some waves have a dashed outline, and there are fine, parallel lines within some of the colored areas, creating a sense of movement and depth.

Telecommunications regulation in Australia

- > Should
'...[promote] the greatest practicable use of industry self-regulation' and 'not impose undue financial and administrative burdens on industry participants'
- > Industry Communications Compliance
- > ADR
Telecommunications Industry Ombudsman
- > Sector specific regulation / regulator
ACMA
- > Economy wide regulation / regulator
ACCC, ASIC

Service Provider Rules and Acts of Parliament

- Formal Warning
- Remedial Direction
- Enforceable Undertaking
- Court imposed pecuniary penalty up to AUD\$10 million

Industry Standard (made by the ACMA)

- Formal Warning
- Court imposed pecuniary penalty up to AUD\$250,000

Registered Industry Codes (made by Industry and registered by the ACMA)

- Formal Warning
- Directions to Comply
 - breaching a direction to comply can result in a Court imposed pecuniary penalty up to AUD\$250,000

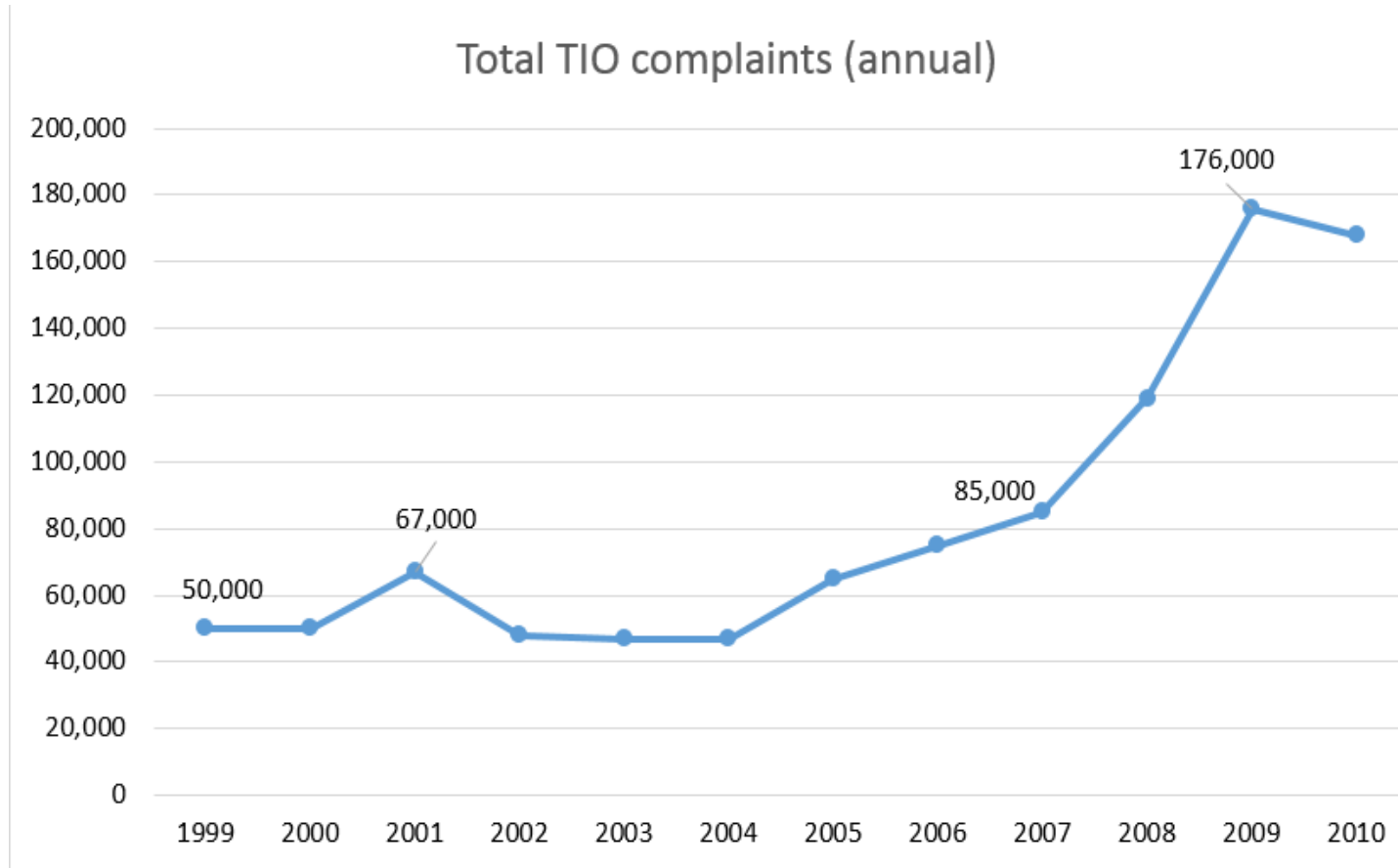
How do Australia and India compare?

	Australia*	India*
Population	24 million	1300 million
Landmass	7.692 million km ²	3.288 million km ²
Landlines	9.08 million	25.72 million
Mobiles (cellphones)	31.77 million	1009.46 million
Mobiles per person	1.3	0.8
Cricket tests won	40	24

*Australian data from the ACMA Communications Report 2015

Indian data from https://en.wikipedia.org/wiki/Telecommunications_statistics_in_India#Telephone_statistics

Complaints received by Telecommunications Industry Ombudsman 1999 - 2010



Case study 1: Reconnecting the Customer

Terms of Reference

The ACMA will:

1. Examine customer expectations and experiences in relation to customer service in the Australian telecommunications industry.
2. Identify the causes of customer dissatisfaction about customer service.
3. Identify best practice standards for customer service.
4. Identify barriers to the implementation of best practice customer service.
5. Examine customer expectations and experiences in relation to complaints-handling in the telecommunications industry.
6. Identify the causes of customer dissatisfaction about complaints-handling.
7. Identify best practice for complaints-handling.
8. Identify barriers to the implementation of best practice complaints-handling.
9. Identify the options for addressing any problems identified and their causes, including market-based, regulatory or institutional measures to facilitate best practice customer service and complaints-handling, having regard to the increasingly complex communications environment.
10. Where appropriate, consider any related systemic underlying problems that become apparent in the course of examining customer service and complaints-handling issues.

Reconnecting the Customer – inputs

- > Discussion paper seeking submissions – 135 received in response to our initial discussion paper and 43 in response to our draft report.
- > Conducted public hearings in five cities.
- > One on one stakeholder meetings.
- > Reviewed existing and commissioned new research:
 - > *Behavioural economics and customer complaints in communication markets* (Dr Patrick Xavier, Curtin University, May 2011).
 - > *Community research into telecommunications customer service experiences and associated behaviours* (Roy Morgan, June 2011).



Reconnecting the Customer – key findings

- > Unacceptably high level of complaints.
- > Root causes of complaints:
 - > unrealistic consumer expectations - owing to the quality of information available to customers pre-sale;
 - > receiving unexpectedly high bills.
- > Consumers valued having their issues resolved promptly but performance around customer care and complaint handling did not drive consumer choice or industry competition.
- > Impact of consumer behaviour:

Choice overload	Loss aversion
Heuristics	Hyperbolic discounting
Defaults	Endowment
Framing biases	

Reconnecting the Customer – proposals

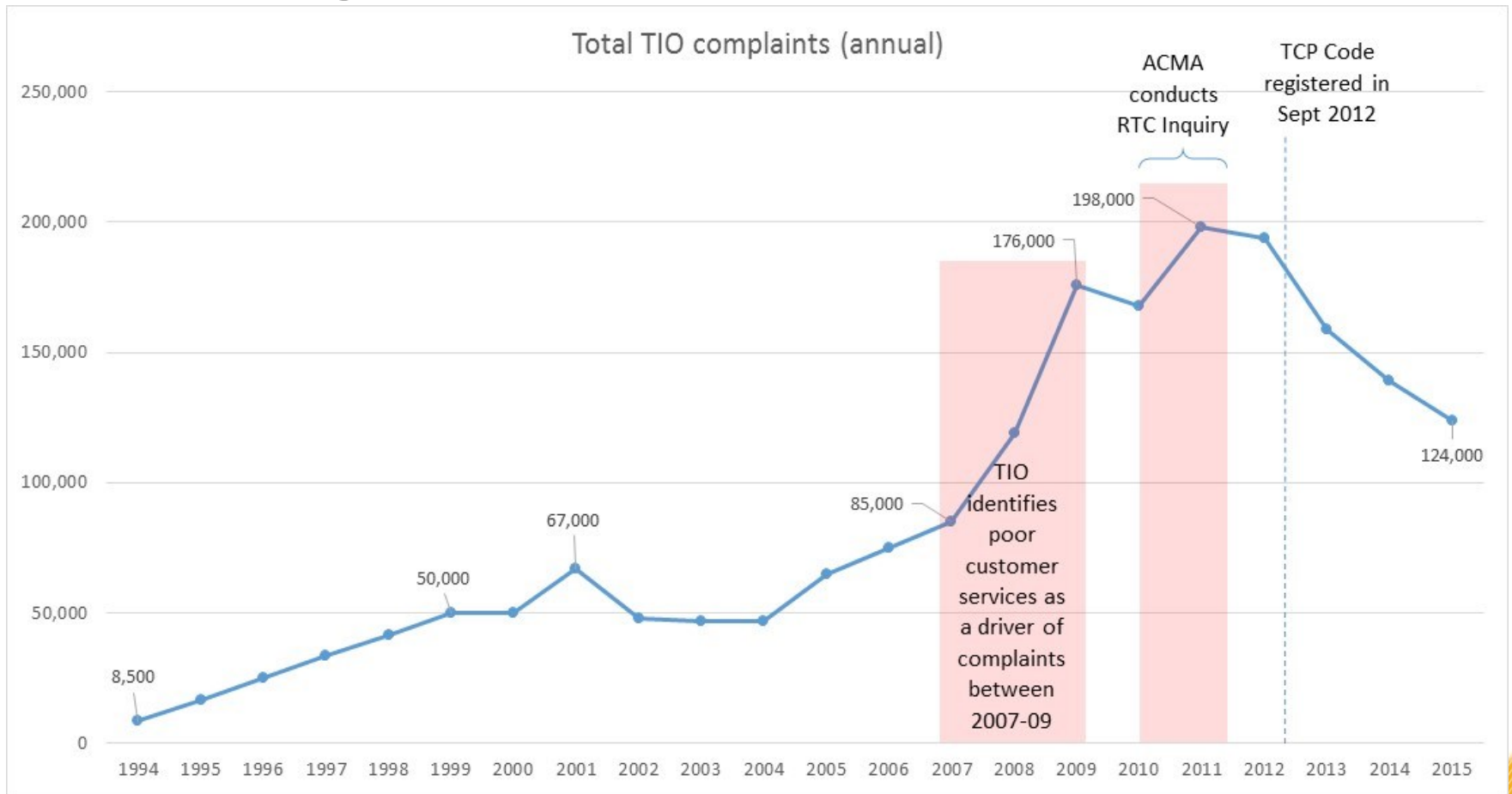
- > Improved advertising practices.
- > Improved product disclosure.
- > Performance reporting by telcos.
- > Expenditure management tools for consumers.
- > Better internal complaints handling by telcos.
- > Changes to the Telecommunications Industry Ombudsman Scheme.

Reconnecting the Customer – a new industry code

New Code registered July 2012 with significant enhancements:


- > Improved advertising including standardised pricing information in advertisements.
- > Improved pre-sale information – Critical Information Summaries.
- > Spend management tools including consumer notifications of ‘use’ at 50%, 85% and 100% of monthly plan value.
- > Stricter complaints-handling requirements.

Reconnecting the Customer – impact on complaints



Reconnecting the Customer – impact on experience

Quantitative impact was measured via national studies conducted by Newspoll in February 2013 and February 2015, finding:

- > reduction in the incidence and extent of bill shock;
 - > widespread use of and support for the SMS usage alert system.
- 


Reconnecting the Customer – economic impact

- > ACMA economics benefits assessment conducted during 2015.
- > Annual total consumer savings of \$545,343,016.

Type of benefit	Estimated annual saving since September 2012
Savings to consumers due to fall in TIO complaints	\$3,779,259
Savings from a reduction in the 'wrong contract' problem for post-paid mobile services (18yo+)	\$92,094,125
Savings from fewer unexpectedly high bills for post-paid mobile services (18yo+)	\$449,469,632
Total	\$545,343,016

- > Annual total industry savings of AUD \$3.2m due to a fall in complaints.

Reconnecting the Customer – markers of success

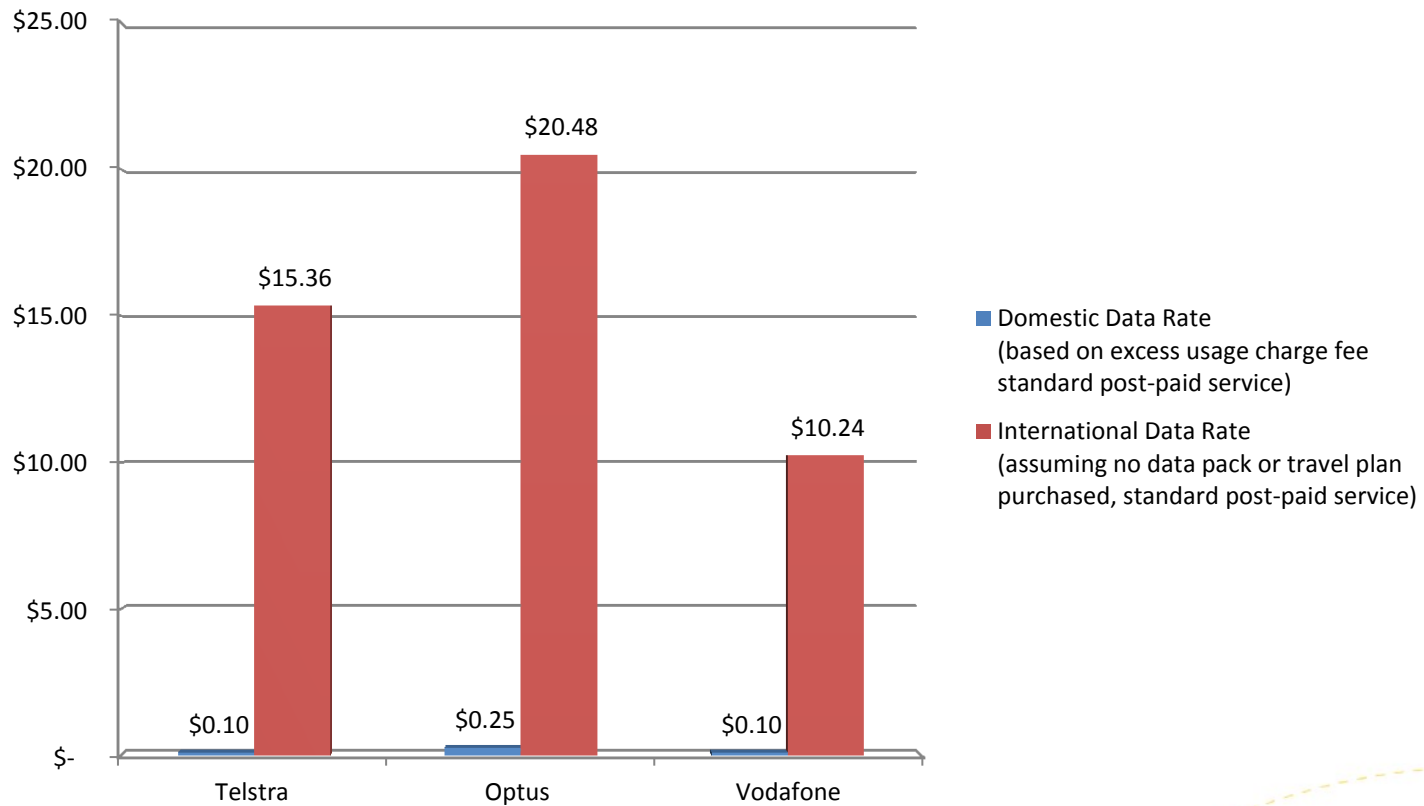
- > 40% reduction in complaints.
 - > 20% reduction in bill shock.
 - > Annual savings exceeding \$500m per year.
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Case Study 2: International Mobile Roaming Regulation

- > ACMA directed to make an International Mobile Roaming (IMR) Standard by the Minister for Communications.
- > IMR Standard to be made within 9 months, taking effect 3 months after being made.
- > Direction issued in response to high roaming charges and prevalence of bill-shock:
 - > One TIO complaint concerning a roaming bill incurred in the course of a 9-week European holiday of almost AUD\$150,000 (or double the average annual earnings for Australian workers).

International Mobile Roaming Standard – pricing

Domestic vs International Data Rates (per Mb)



International Mobile Roaming Standard – the Direction

- > *Mandatory*: All telcos were to be required to:
 - > give consumers information, on arrival at an overseas destination, about the charges applicable for the providers' international roaming services at that destination;
 - > enable consumers to decline continued provision of international mobile roaming services while overseas. The ACMA was given discretion to add further requirements.
- > *Discretionary*: Any other matters considered appropriate including measures enabling consumers to monitor and manage their roaming usage and costs.

International Mobile Roaming Standard – the environment

- > 3.4% TIO complaints concerned IMR involving more than AUD \$6 million annually.
- > Three Mobile Network Operators (MNOs) with up to 94% of the market.
- > Many Mobile Virtual Network Operators (MVNOs) which rely on MNOs for IMR wholesale services and pricing.
- > Complexity in bilateral arrangements between Australian and overseas MNO's.
- > Delays in transmission of usage information between overseas and Australian MNO's and between Australian MNO's and Australian MVNO's.
- > Data 72% roaming traffic.

International Mobile Roaming Standard – the measures

The final IMR Standard contains the following consumer protection measures:

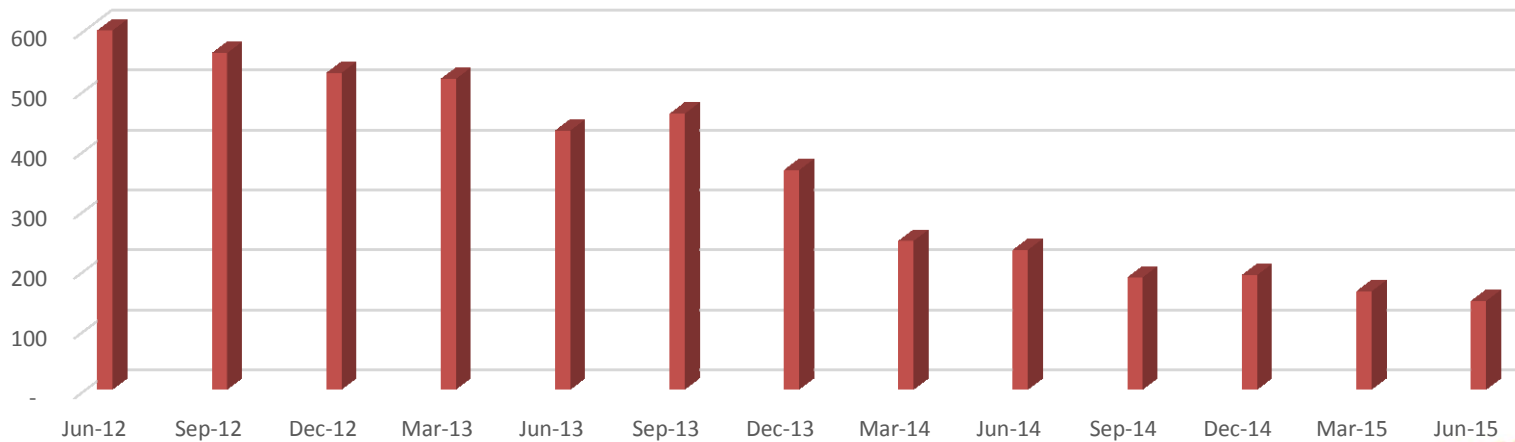
- > SMS notification to be sent to consumers who activate their mobile device overseas, warning them that significantly higher charges apply.
- > SMS containing maximum pricing information also to be sent.
- > SMS notifications when cost or usage milestones reached (\$100 or 50%, 80% and 100%).
- > Consumers to opt-out of IMR at any time.
- > Transitional rules for MVNO's who faces greater technical challenges.

International Mobile Roaming Standard – the impacts

Reduction in TIO Complaints post-implementation:

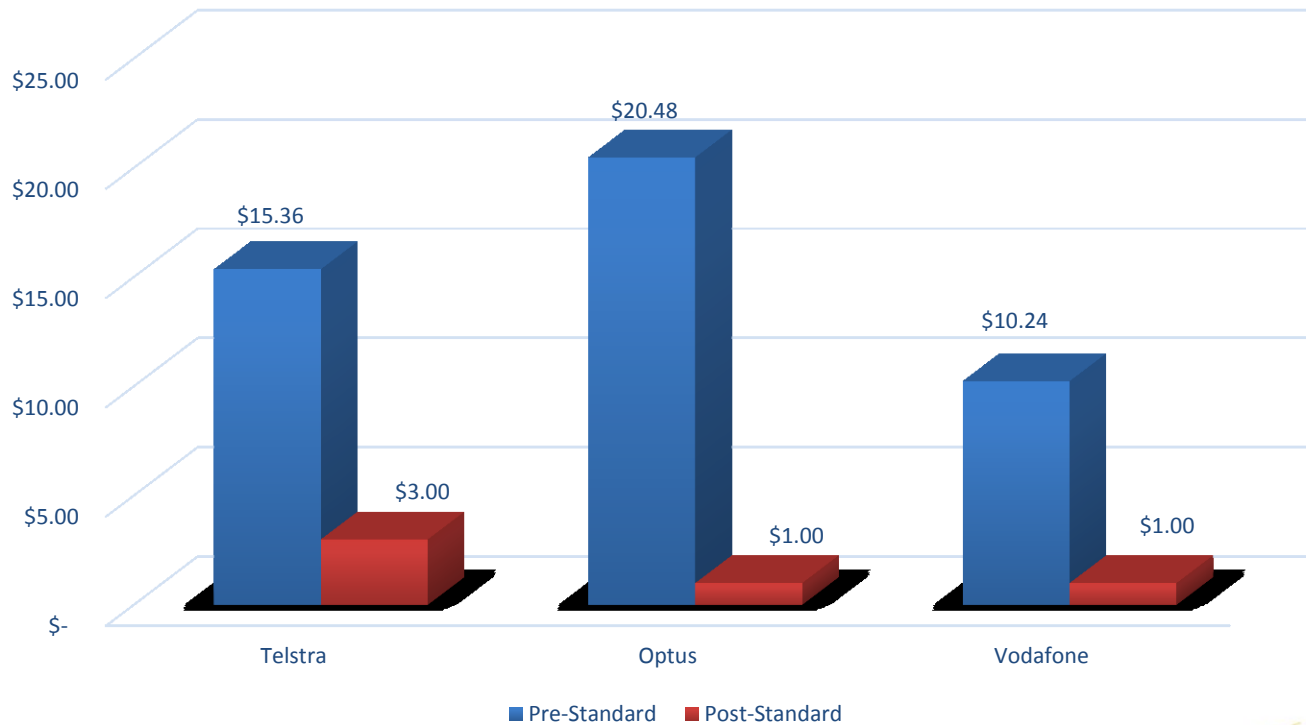
- > From September 2012 to 2013, 18 per cent reduction;
- > From September 2013 to 2014, 59 per cent reduction.

TIO mobile roaming complaints (quarterly)



International Mobile Roaming Standard – the impacts

Default data rates (in A\$):
Pre- and Post- IMR Standard



International Mobile Roaming Standard – imminent change

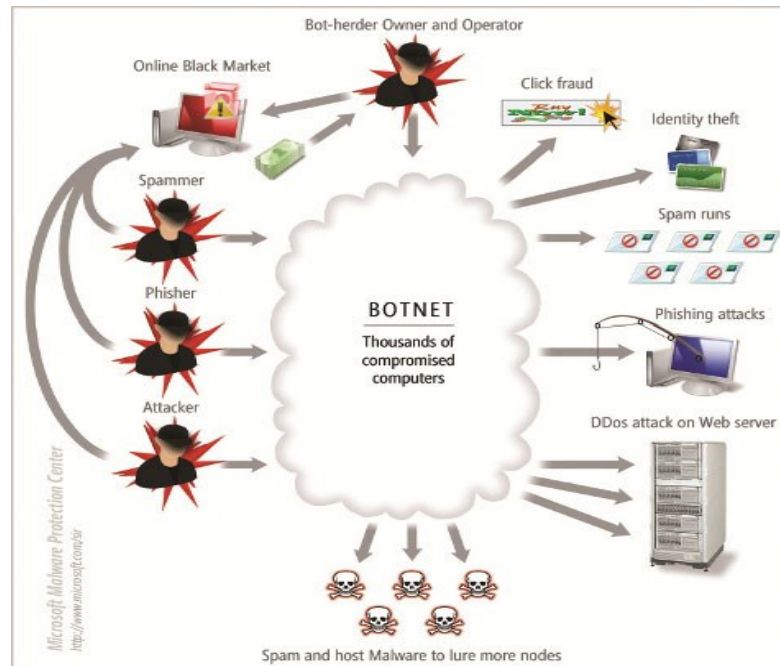
Last month, the Minister directed the ACMA to amend the IMR Standard. It is proposed to:

- > enable telcos to provide mandatory on-arrival roaming information to travellers in a single SMS rather than in multiple texts;
- > enable service providers to offer their customers the ability to opt out of receiving roaming usage alerts;
- > delay the requirements on MNO's to provide cost and usage SMS alerts until January 2019.




Case Study 3: the Australian Internet Security Initiative (AISI)

- > An anti-botnet program that has been running now for 10 years aimed at reducing the impact of malware infections on Australian networks.



What is the AISI?

- > Government / industry partnership responding to known malware threats.
 - > Operates similar to a clearing house.
 - > ACMA receives data from its information partners including Microsoft and Shadowserver foundation.
 - > ACMA assesses, standardises and reports to its ISP partners the IP addresses on their networks that are malware infected.
 - > ISP partners act on that information.
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Why is the AISI important?

- > Malware identified in June Australian Cyber Security Centre's 2015 report as *the predominant cybercrime threat in Australia in 2014*'.
- > Malware can:
 - > cause financial loss;
 - > enable access to sensitive personal information;
 - > be used to infiltrate business and corporate systems (the weakest link).



<https://portal.aisi.acma.gov.au>

aisi

✉ Contacts



Welcome to the AISI Portal

Helping ISPs improve the security level
of the Australian Internet

Sign in

The Australian Internet Security Initiative (AISII)

The ACMA developed the Australian Internet Security Initiative (AISII) to help address the problem of compromised computers (sometimes referred to as 'zombies', 'bots', or 'drones'). Computers can become compromised through the surreptitious installation of malicious software (malware) that enables the computer to be controlled remotely for illegal and harmful activities without the computer user's knowledge.

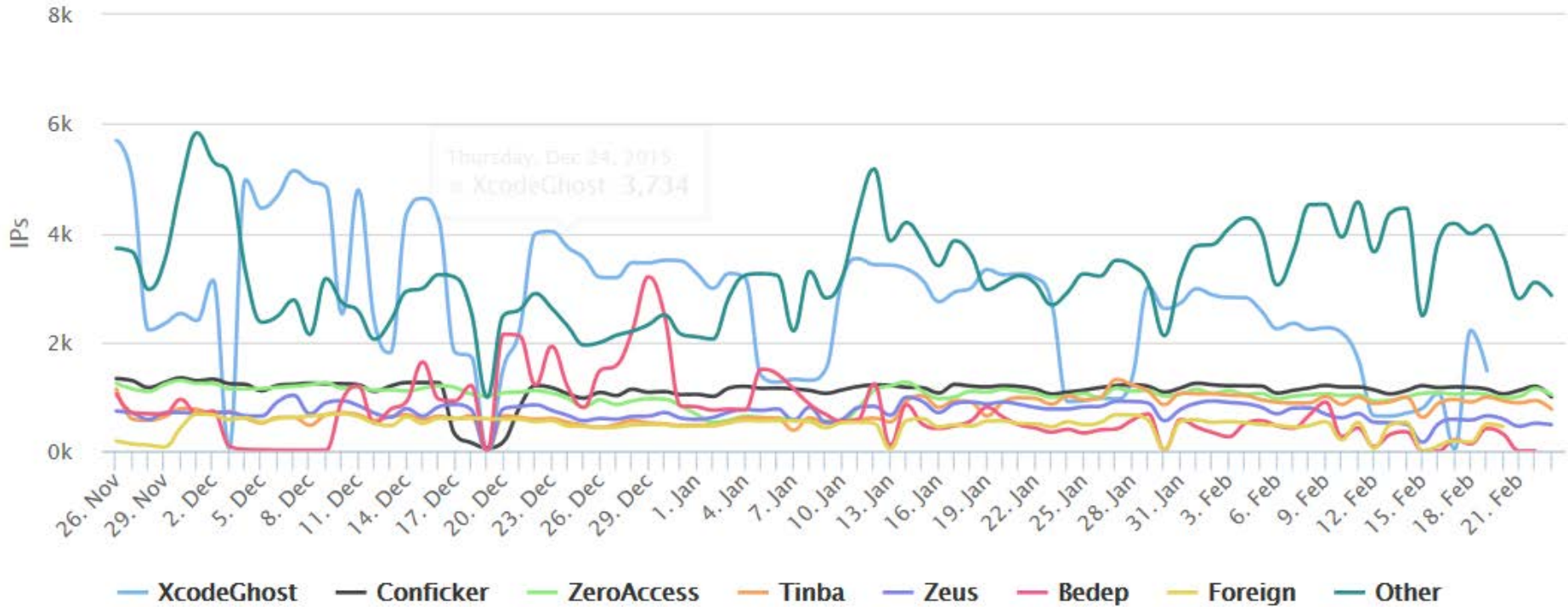
Compromised computers are often aggregated into large groups known as 'botnets'. Among other things, botnets are used to assist the mass distribution of spam and malware, the hosting of 'phishing' sites and distributed denial of service (DDoS) attacks on websites.

The AISII collects data from various sources on computers exhibiting 'bot' behaviour on the Australian internet. Using this data, the ACMA provides daily reports to internet service providers (ISPs) identifying IP addresses on their networks that have generally been supplied to the ACMA in the previous 24-hour period. ISPs can then inform the customer associated with that IP address that the customer's computer appears to be compromised by malware and provide advice on how they can fix it.

Reporting of daily AISI statistics

AISI Daily Observations per Malware Family

Source: Australian Communications and Media Authority



Reporting of ‘vulnerable services’ through the AISI?

- > Preventative – rather than responding to confirmed infections
- > Services either misconfigured or susceptible to known exploit
- > Vulnerabilities in websites/routers/NAS/VoIP systems
- > Vulnerabilities often in forgotten APIs, payment gateways, VPNs etc (main website often patched)
- > Important that system administrators are aware of potential threats so they have the opportunity to take action (if needed)

Types of vulnerable services currently being reported

- > *Vulnerable Services* such as
 - > HTTPS 'man in the middle vulnerabilities'
 - > DDoS amplifier vulnerabilities
- > **'Open Services'** such as
 - > Database like services:
 - > ElasticSearch
 - > Memcached
 - > MongoDB
 - > Redis and
 - > Intelligent Platform Management Interface services

Further information on the AISI

- [ACMA research report: The Australian Internet Security Initiative – Interviews with industry participants \(October 2015\)](#)
- www.acma.gov.au/aisi
- www.acma.gov.au/aisi-stats

Any further questions? Email us at: aisi@acma.gov.au



Thanks ITU –TRAI Participants

Questions?

