



Australian  
Competition &  
Consumer  
Commission

# **Proposed Audit of Telecommunications Infrastructure Assets**

## **Discussion Paper**

March 2007



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## Abbreviations

ACMA	Australian Communications and Media Authority
ADSL	Asymmetric digital subscriber line
CAN	Customer access network
CLLS	Conditioned local loop service
ESA	Exchange service area
HFC	Hybrid fibre-coaxial cable
LCS	Local carriage service
LSS	Line-sharing service
PSTN	Public switched telephone network
PSTN OTA	PSTN originating and terminating access
RKR	Record keeping and reporting rule
TPA	<i>Trade Practices Act 1974</i>
ULLS	Unconditioned local loop service
xDSL	refers to the ‘family’ of Digital Subscriber Line services (eg ADSL etc.)

## 1.1 Executive Summary

The Commission is proposing a new record keeping and reporting rule (RKR) which would require relevant telecommunications infrastructure owners to identify the key components and locations of their infrastructure assets.

This proposal is designed to fulfil an objective identified in the final determination of the Declaration Inquiry for the ULLS, PSTN OTA and CLLS (the 'Fixed Services Review'). In that Review the Commission indicated that it would develop an audit of infrastructure to further inform its analysis of the state of competition in relevant telecommunications markets in future processes, including decisions regarding future removal of regulation where these are no longer needed to promote the interests of end-users.<sup>1</sup>

In seeking additional data from industry, the Commission is mindful of appropriately minimising regulatory burdens while ensuring that its information needs are met. Accordingly, the Commission has undertaken a review of its existing RKRs to ensure that the new proposal avoids imposing similar requirements on industry. This review has identified two RKRs which could be revoked were this RKR to be issued. In addition, the Commission has been pursuing a number of other initiatives to reduce regulatory burdens – these are outlined at Attachment B.

The purpose of this discussion paper is to obtain the views of interested parties on the questions posed in this paper.

## 1.2 Making Submissions

Comments should be provided by the close of business on Friday 27 April 2007 and can be addressed to:

The General Manager  
Strategic Analysis and Development Branch  
Communications Group  
Australian Competition and Consumer Commission  
GPO Box 520  
MELBOURNE VIC 3001

In addition to a hard copy, those making a submission are encouraged to provide an electronic copy of the submission to: [communications.enquiries@accc.gov.au](mailto:communications.enquiries@accc.gov.au)

Telephone Enquiries: J Mortimer (03) 9290 1941

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<sup>1</sup> Page 52 of the Fixed Services Review report.

## **2.1 Infrastructure data collection**

### **2.2 Importance of this data**

The state of competition in a market will be determined by a number of factors, including but not limited to the number of competitors and the means by which they compete for end-users. The focus of this data collection exercise is on the extent to which, over time, competitive supply is increasingly taking place via facilities based, or quasi-facilities based competition. The extent of competitive supply via these means will act as an input to future considerations of the relevant geographic dimension of relevant markets, the state of competition within these markets and the need for on-going regulation of particular services under Part XIC of the TPA. The Commission has received information which suggests that infrastructure-based competition is developing unevenly across Australia. For this reason, an important forward-looking consideration will be the extent to which facilities and quasi-facilities based competition develops (or has the potential to develop) in different geographic areas. The Commission is specifically seeking data which will enable it to monitor these trends and use this information to assist the regulatory decision-making process.

The availability to the Commission of a coherent and consistent knowledge base of various telecommunications infrastructure assets is an important gap in its current stock of data. While the Commission receives detailed information on an ad hoc basis to various reviews and assessment processes, this information is generally not provided by parties in a manner amenable to time series analyses. In the Fixed Services Review (July 2006) the Commission indicated that it would collect further information on the level of competition in markets related to the ULLS and the PSTN OTA as well as developing an audit of infrastructure to inform its future analyses of the need for regulation of these and other services.

### **2.3 The mechanism by which data is obtained**

Before considering the content of any data request, there is a question as to whether the data should be sought pursuant to the Commission's rule making power under the TPA, or by voluntary survey.

Section 151BU of the TPA enables the Commission to establish record keeping and reporting rules (RKR) by written instrument. These rules require that carriers and carriage service providers maintain certain records and disclose identified information to the Commission.

However, the Commission is mindful of the regulatory burdens that a RKR can place on industry. As a result the Commission has, in the past, issued voluntary surveys to carriers to obtain information on infrastructure. The response rates to these surveys have been disappointing with only 56% responding to the most recent survey issued in 2005, with timeliness of responses also representing a difficulty.

An additional factor is that some of the information that may be sought under the proposals below may be prevented from voluntary disclosure by contractual arrangements or otherwise considered to be commercially confidential. In these situations a RKR is required to ensure that the data is provided to the Commission.

Given the identified need to obtain this data in a timely and accurate information, the Commission considers there is a case for the issue of a RKR, as opposed to a voluntary survey.

The next sections of this paper consider the extent of the proposed RKR, its reporting time frames and the parties to whom it would be addressed.

**Questions for submitters:**

1. Do submitters agree that there is a threshold case for the Commission to obtain infrastructure data?
2. The Commission seeks submitters' views on whether this information should be obtained by a record keeping and reporting rule, as opposed to a voluntary survey.

## 3.1 The Customer Access Network

The Customer Access Network represents the link between the core of the network and the customer.<sup>2</sup> From a telecommunications competition perspective, the CAN is of considerable significance as it represents a potential 'access bottleneck' ie. it is uneconomic to duplicate in particular geographic regions of Australia. In the current environment in Australia, the CAN can be broadly segmented between Telstra's copper-based CAN, and those alternative CAN's owned and operated by a broader group of commercial operators (including Telstra).

## 3.2 Telstra's copper-based CAN

Access to the ULLS, primarily provided by Telstra, is considered to be critical to the development of competition in downstream retail markets via quasi-facilities based competition.

At present the Commission does not collect data on ULLS take up at a sufficiently granular level to allow it to examine the extent to which the ULLS, and the Line Sharing Service (LSS), are being utilised by access seekers in any given exchange service area (ESA). The Commission considers it desirable to obtain this data - ie how many services in operation (SIOs) are operating out of exchange service areas, broken down by carrier and location. In addition, given the increasing prevalence of broadband services it is considered desirable to ascertain which exchanges are DSL enabled, and which grade of DSL Telstra's installed equipment is capable of providing ie ADSL 1 etc.

The collection of information at this level allows the Commission to commence its analysis at the correct 'building block' level in order to consider the aggregation of those geographic areas which exhibit similar competitive characteristics. This will assist the Commission not only to more accurately geographically delineate markets to reflect genuine differences in competitive dynamics and intensity, but will also improve its ability to accurately assess the state of competition in relevant markets, however defined.

Accordingly, the Commission proposes that a component of the proposed Infrastructure RKR require Telstra to disclose the following data relating to its exchanges:

- the name, ESA code and ULLS banding of each exchange;
- whether the exchange is DSL enabled, and if so which grade of DSL Telstra's installed equipment is capable of providing ie ADSL 1, ADSL 2+ etc;
- the total number of services in operation served by Telstra's equipment by exchange and split by:
  - wholesale

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<sup>2</sup> ACIF Code C569:2005 defines the customer access network as enabling the connection of customer equipment to switching equipment in a telecommunications network. It consists of a network of conduits and pipes with a mixture of cables.



- retail
- DSL; and
- voice.
- the names of access seekers in each exchange;
- the number of ULLS being used by each access seeker in each exchange;
- the number of LSS being used by each access seeker in each exchange; and
- the total number of cutovers<sup>3</sup> by exchange completed during a reporting period.

**Questions for submitters:**

3. Do submitters agree with the proposal to obtain data from Telstra on the ULL?
4. The Commission seeks submitters' views on the content of the proposed data sets in this section.

### 3.3 Alternative CANs

It is also important to obtain information on alternative CANs owned and operated by a broader group of commercial operators (including Telstra).

Accordingly the Commission proposes that the Infrastructure RKR require those carriers who provide wholesale or retail telecommunications services of a sufficient scale<sup>4</sup> utilising their own CAN to disclose the following information in relation to their CAN.

- What type of technology(ies) are deployed in your network?
- Provide geocoded electronic data<sup>5</sup> indicating the geographic extent of each type of technology deployed on a fixed network on a premises passed and capable of being served basis.
- If fixed wireless access (eg WiMAX, GSM, 3G) is being utilised on the network, provide geocoded electronic data indicating the geographic extent of coverage.
- If hybrid fibre coaxial cable is utilised on the CAN, provide geocoded electronic data indicating the geographic extent of it.

**Questions for submitters:**

5. Do submitters agree that the Commission should obtain data on alternative CANs?
6. The Commission seeks submitters' views on the content of the proposed data sets in this section.

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<sup>3</sup> Cutover refers to the action taken by Telstra to enable the provisioning of ULL and LSS to an access seeker.

<sup>4</sup> See 6.4 below for discussion of this definition.

<sup>5</sup> The reference to geocoded data refers to "digital geographic information system format". The purpose of seeking information relating to geographic extent in this format is discussed in 6.3 below.

## 4.1 Inter Exchange Transmission Network

The issue of the availability and pricing of backhaul transmission is of relevance when considering the state of competition in telecommunications markets. The effectiveness of competition in specific backhaul and inter-regional transmission links is heavily dependent on the number and capacity of links available from competing providers on specific point-to-point links.

The following data is proposed for inclusion.

- geocoded electronic data indicating the geographic extent of your optical fibre core network on a point-to-point basis;
- geocoded electronic data indicating the geographic extent of your microwave radio core network on a point-to-point basis.

### **Questions for submitters:**

7. Do submitters agree that the Commission should obtain data on the inter-exchange transmission network?

8. The Commission seeks submitters' views on the content of the proposed data sets in this section.

## 5.1 Mobile Network Coverage

The take up of mobile telephones and the use of mobile networks for data services is now sufficiently developed that the Commission considers that the Infrastructure RKR should seek data on mobile network coverage.<sup>6</sup>

The following data is proposed for inclusion.

- geocoded electronic data indicating the geographic extent of coverage for each of your mobile networks;
- geocoded electronic data indicating the geographic extent of data service coverage where this is not contiguous with voice service coverage.

The Commission notes that the inclusion of a request for this information is not intended to be an expression of its views on the substitutability of mobile telephony or data services for those provided by fixed networks at this point in time.

### Questions for submitters:

9. Do submitters agree that the Commission should obtain data on mobile network coverage?

10. The Commission seeks submitters' views on the content of the proposed data sets in this section.

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<sup>6</sup> The Commission understands that ACMA collects data of this type. However ACMA has advised that due to the operation of relevant legislation it is not possible for this information to be shared with the Commission at the present time.

## **6.1 Regulatory impost arising under the proposed RKR**

### **6.2 Frequency**

In setting a frequency for reporting, the Commission is mindful to strike a balance between regulatory burdens on industry and the need for up-to-date data. The Commission is of the provisional view that the frequency of reporting does not need to be the same for all components of the RKR.

In relation to the Telstra CAN component, the Commission is of the view that the quarterly provision of data is appropriate. This time-frame is chosen on the basis that take-up levels of the ULLS and the LSS change on a reasonably frequent basis.

In the case of other aspects of the RKR, the Commission considers that yearly reporting would be appropriate. The Commission considers that this time-frame is appropriate given that, as opposed to quasi-facilities based investments, facilities based investments face longer lead times and the information to be collected is not likely to alter sufficiently so as to justify more frequent collection.

### **6.3 Format**

A key objective for the Commission from this process is the effective electronic manipulation of the data obtained.

To enable faster manipulation of the data, the Commission intends to ask Telstra for CAN take-up data to be submitted electronically in an Excel spreadsheet in a specified format.

The Commission intends to ask reporting parties providing information sought in relation to the geographic extent of infrastructure to do so in geocoded electronic format ie digital geographic information system format, so that it can be analysed in map form.

### **6.4 Addressees**

The Commission proposes that the RKR require only those carriers who provide wholesale or retail telecommunications services of a sufficient scale utilising their own infrastructure to disclose the information sought.

ACMA issues an annual assessment of revenue for carriers in connection with the Universal Service Obligation. The Commission proposes to use this assessment to identify potential infrastructure owners operating other than on a relatively small basis.

Having reviewed the assessment for 2005-06 the Commission proposes to set the threshold at \$3 million and above (in eligible revenue as determined by ACMA). The Commission has written to the carriers (see Attachment A) who have revenue above this figure to confirm whether their telecommunications infrastructure falls within one of the categories identified in this paper. These responses will then be used to finalise the list of addressees for the RKR.

## 6.5 Cost

The Commission recognises the cost that record keeping and reporting places on industry. Accordingly, the Commission seeks an itemised estimation of the costs of compliance with the proposed Infrastructure RKR from reporting parties captured by the definition in 6.4.

### **Questions for submitters:**

11. Do submitters agree with the proposed quarterly frequency for the Telstra CAN component of the proposed RKR?
12. Do submitters agree with the proposed annual frequency for the other elements of the proposed RKR?
13. Do submitters agree that reporting parties should provide information sought on issues relating to geographic extent to do so in geocoded electronic format?
14. The Commission seeks submitters' views on the proposed criteria for inclusion in the RKR including:
  - (a) the use of the ACMA eligible revenue assessments; and
  - (b) the threshold of \$3 million.
15. The Commission seeks from reporting parties an itemised estimation of the costs associated with meeting the requirements of the proposed RKR.

## 7.1 Identification of duplicative reporting under any proposal in this paper

The Commission is keen to ensure that no component in the proposed RKR replicates similar reporting under existing RKR.

At present the Commission does not impose an RKR in relation to infrastructure. However, the Commission has identified two relevant RKR which are currently applied on Telstra as potential candidates for revocation. These are:

- Telecommunications Industry Record Keeping and Reporting Rules (the ‘exchange access RKR’) and
- Unconditioned Local Loop Access (Service Delivery) Record Keeping and Reporting Rules (the ‘service delivery RKR’).

The exchange access and service RKR were introduced against the background of the then recent declaration of the ULL service.<sup>7</sup>

The exchange access RKR requires Telstra to provide information on a range of issues relating to access by seekers to Telstra’s exchanges including:

- The timeliness afforded to Telstra’s competitors in gaining access to exchanges;
- The steps taken by Telstra when accepting or rejecting requests;
- The reasons why Telstra rejected an application.

The service delivery RKR requires Telstra to report on the following processes:

- An access seeker’s request for a ULL service qualification query ie ‘testing the line’;
- An access seeker’s ordering of a specific ULL service;
- Activation of a copper pair/jumpering the service from the Telstra main distribution frame to the access seekers own xDSL equipment; and
- Fault handling and rectification.

### *Operational Separation*

The Commission notes that the Operational Separation framework requires Telstra to report similar information to that under the exchange access and service delivery RKR. Specifically, Telstra is required to commit to key performance indicators which measure the equivalence of delivery of services to other telecommunications service providers including the ULLS.<sup>8</sup>

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<sup>7</sup> A declaration of the ULLS was made pursuant to section 152AL(3) of the *Trade Practices Act 1974* on 4 August 1999.

<sup>8</sup> Operational separation is implemented as a statutory condition of Telstra’s carrier licence specified in Part 8 of Schedule 1 to the *Telecommunications Act 1997* and took full effect on 1 December 2006.

The relevant key performance indicators require Telstra to:

- record the percentage of ULLS individual cutovers completed within a prescribed timeframe;<sup>9</sup>
- record the percentage of ULLS mass network migration<sup>10</sup> cutovers completed within a prescribed timeframe;<sup>11</sup>
- report the percentage of faults rectified within the target timeframes.<sup>12</sup>

After the end of the financial year, Telstra will compile an annual compliance report and place it on its website. The Commission notes that Telstra has made available on its website a number of documents about its operational separation performance including on ULL cutovers. Provided that Telstra continues to regularly publish documents concerning its performance under operational separation, there is a case for removing the requirement for separate reporting under the exchange access and service delivery RKR.

*Commission's view*

The Commission is of the view that given the proposal for the Telstra CAN element of the Infrastructure RKR and the existing operational separation framework, the views of submitters on the revocation of the exchange access and service delivery RKR should be obtained.

**Questions for submitters:**

16. The Commission seeks submitter's views on the case for revocation of the exchange access and service delivery RKR given the introduction of operational separation and the proposal for the Telstra CAN element of the RKR.

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<sup>9</sup> Metric 15, Key Performance Indicators Operational Document, available from Telstra Wholesale Website

<sup>10</sup> This refers to the practice whereby an access seeker pools the number of cutovers to be performed in a single instance.

<sup>11</sup> Metric 16

<sup>12</sup> Metric 17

**Attachment A - ACMA eligible revenue assessment 2005-06 – carriers  
with revenue in excess of \$3m**

	COMPANY	
1	Telstra Corporation Ltd	
2	Optus Mobile Pty Ltd	
3	Optus Networks Pty Ltd	
4	Vodafone Australia Ltd	
5	AAPT Ltd	
6	Hutchison 3G Australia Pty Ltd	
7	Hutchison Telecommunications (Australia) Ltd	
8	Primus Telecommunications Pty Ltd	
9	Verizon Australia Pty Ltd	
10	PowerTel Ltd	
11	Soul Pattinson Telecommunications Pty Ltd	
12	Agile Pty Ltd	
13	Macquarie Telecom Network Carrier Services Pty Ltd	
14	Uecomm Ltd	
15	Chime Communications Pty Ltd	
16	Telstra Multimedia Pty Ltd	
17	XYZed Pty Ltd	
18	Personal Broadband Australia Pty Ltd	
19	TransACT Capital Communications Pty Ltd	
20	Windytide Pty Ltd	
21	Digital Distribution Australia Pty Ltd	
22	Swiftel Communications Pty Ltd	
23	AARNet Pty Ltd	
24	SCCL Australia Ltd	
25	Unwired Australia Pty Ltd	
26	Amcom Pty Ltd	
27	Optus Vision Pty Ltd	
28	Datafast Telecommunications Pty Ltd	
29	Chariot Ltd	
30	Inmarsat plc	
31	Quantum Multimedia Communications Pty Ltd	
32	Nextgen Networks Pty Ltd	
33	Pivotal Group Pty Ltd	
34	ETSA Utilities	
35	Victorian Rail Track	
36	Australia-Japan Cable (Australia) Ltd	
37	Southern Cross Telecommunications Pty Ltd	
38	Regional Internet Australia Pty Ltd	
39	Leading Edge Internet Pty Ltd	
40	Reach Networks Australia Pty Ltd	
41	NewSat Networks Pty Ltd	
42	Veridas Communications Pty Ltd	
43	PanAmSat Asia Carrier Services Inc	
44	Ergon Energy Telecommunications Pty Ltd	
45	PIPE Networks Ltd	
46	Access Providers Operations Pty Ltd	
47	Adam Internet Pty Ltd	
48	Vertical Telecoms Pty Ltd	
49	A.C.N. 088 889 230 Pty Ltd	
50	Southern Phone Company Ltd	
51	Silk Telecom Pty Ltd	
52	Global Dial Pty Ltd	



## **Attachment B - Rationalising Record Keeping and Reporting Rules**

Over recent months the Commission has been conducting a review of reporting requirements imposed on industry to ensure that RKR's are rationalised wherever possible. While this review is ongoing, the key results to date are listed below.

### **ACCC/ACMA duplication of data collection**

The Commission and ACMA have been working together to streamline and coordinate industry data collection practices. The two agencies have identified that their direct overlaps of data requests is minimal. In addition, relevant legislation prohibits the sharing of information obtained under RKR's at this time. Nevertheless both the Commission and ACMA are committed to consulting the other before issuing data requests to ensure that opportunities to reduce regulatory burdens are maximised.

### **Proposed revocation of weekly ULLS reporting**

As noted in the discussion paper<sup>13</sup>, the Commission is proposing the revocation of two RKR's which currently require the weekly reporting of certain data relating to the ULLS. The Commission will continue to adopt the approach of identifying and where appropriate, revoking similar RKR's when considering the imposition of fresh RKR's.

### **Internet Interconnection RKR**

In March 2005 the Commission issued a RKR to 19 leading internet service providers as part of a three year monitoring regime. The monitoring program is aimed at identifying how interconnection of internet networks works in practice, and how it affects markets that rely on interconnection. As indicated when the RKR was first introduced, the Commission has now begun a review of the data and its effectiveness.

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<sup>13</sup> See 7.1 of the discussion paper