



## **Australian Competition & Consumer Commission**

**UNCONDITIONED LOCAL LOOP SERVICE**

**Discussion Paper – May 2007**

## **TransACT Capital Communications Pty Ltd**

**Response**

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## 1 Introduction

TransACT Capital Communications Pty Ltd (TransACT) is pleased to provide a brief response to the Australian Competition & Consumer Commission's (ACCC) Discussion Paper examining a possible variation to the service declaration for the Unconditioned Local Loop Service (ULLS).

It is TransACT's view that given:

- the ongoing discussions on proposals for the deployment of a Fibre to the Node (FTTN) network; and
- existing difficulties experienced by Access Seekers (AS) in accessing Telstra Remote Integrated Multiplexer (RIM) or Customer Multiplexer (CMUX) cabinets for ULLS Point of Interconnection (PoI) at remote Customer Access Modules (CAM) and/or at other locations in the sub-loop;

it is important to review the current ULLS declaration in order to provide clarity and certainty of access so as to ensure the continued strong investment and competition across the sector.

TransACT's response addresses the questions posed by the ACCC (under section 4 of the Discussion Paper) and the proposed ULLS variation under section 3.2.

## 2 Extent of current service description

***Do you consider that a pillar, node or other remote device is 'associated with a CAM', within the meaning of the current ULLS service description? Please provide reasons.***

Under the current service description, TransACT considers that a pillar, node or other remote device (such as a RIM and/or CMUX cabinet) is associated with a CAM *only* where those devices are co-located with the CAM.

Where a pillar, node or other remote device is *not* co-located with a CAM, it would appear that such a device would not be associated with the CAM and therefore would not be covered under the current ULLS declaration.

***Do you consider that there is sufficient certainty around this issue? If no, what do you consider should be done to overcome this uncertainty?***

As noted above, it is TransACT's view that there are aspects of the current ULLS service description that would benefit from further clarification.

TransACT considers that there is sufficient certainty around the current ULLS declaration in that the ULLS is "*an unconditioned communications wire between the*

*boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential PoI located at or associated with a CAM and located on the end-user side of the CAM".*

However, some uncertainty does arise when a pillar, node or other remote device is *not* co-located at or associated with a CAM (i.e. the CAM is located at a Telstra exchange and the pillar, node or other remote device is located some distance away in the Customer Access Network (CAN)).

It has been TransACT's experience that Telstra applies different requirements where an Access Seeker (AS) requires 'remote' access. In this manner Telstra is able to effectively prevent ASs from gaining the required access. TransACT believes that an amendment to the service description would assist in clarifying this issue.

### **3 Demand for the ULLS and sub-loop access**

***To what extent have access seekers sought to access the ULLS at RIM cabinets and other remote access units?***

TransACT has not lodged a formal application with Telstra for ULLS access to a specific RIM cabinet location.

However, for some time TransACT has been (unsuccessfully) negotiating with Telstra in an attempt to gain access to RIM cabinets. TransACT has been seeking to amend its current Customer Relationship Agreement (CRA) to provide for such access, on the basis that at a future date TransACT may require ULLS access at a RIM/CMUX cabinet. To date, TransACT has not been able to conclude the negotiations.

***Have you experienced difficulties in accessing RIMs or other RAUs? Please outline the nature of these difficulties. If there are commercial in confidence issues involved, provide a general discussion, if possible.***

As noted above, TransACT has experienced difficulties in attempting to establish access to RIM/CMUX cabinets.

Although the negotiations undertaken to gain such access have not been entirely consistent, Telstra has most recently insisted that TransACT provide the specific locations where TransACT would be requesting access before execution of an amended agreement. TransACT has advised Telstra that an exact site location has not been finalised as this is dependent on where Telstra deploys RIM/CMUX technology. In TransACT's view it is appropriate that the details of an exact trial site for External Interconnection Cable (EIC) at a remote CAM be notified to Telstra as per the existing Ordering and Provisioning clause of the CRA between Telstra and TransACT, and as further detail and/or information on Telstra's deployment plans become available.

***Have you sought access to the sub-loop? What were the terms of access, if any?***

To date, TransACT has not sought access to the sub-loop other than for ULLS access at a RIM/CMUX cabinet.

***Do you plan to seek access to the sub-loop in the future? In what circumstances (if any) will you seek access to the sub-loop?***

In TransACT's view, there would certainly be a requirement to seek ULLS access to the sub-loop in the future.

Circumstances where this may apply would include:

- where a carrier other than Telstra is to pursue the deployment of a FTTN network and would require certainty regarding its right to request point of interconnection to the communications wire at the pillar, node or other remote device;
- where Telstra currently deploys FTTN technology and an AS requires access to the ULLS from the node, pillar or other remote device; and
- where Telstra performs network modernisation of its current network, which may result in an AS requiring access to the ULLS from the node, pillar or other remote device.

***To what extent would the deployment of a fibre-based network affect the ability of access seekers to compete in downstream markets?***

The extent to which the deployment of a fibre-based network affects the ability of an AS to compete in downstream markets would be dependent on a number of factors, including:

- commercial principles for wholesale access arrangements in an FTTN environment;
- the declaration of the fibre transmission at reasonable commercial rates;
- clarity on the declaration of the ULLS from a node, pillar or other remote device;
- technology capabilities to support AS products and services;
- technical and operational matters for transitioning to and operating in an FTTN environment;
- AS maintenance and customer fault reporting platform.

***How will deployment of a fibre-based network affect demand for the ULLS/or the sub-loop?***

The demand for the ULLS or the sub-loop based on the deployment of a fibre-based network would be dependent on the final network architecture and regulatory access regime.

It is important however that ULLS is available at all points of possible interconnection on the communications wire including:

- a pillar, node or other remote device; and
- where the communications wire forms part of an IP based network that does not use a CAM as defined in the current ULLS service description (i.e. where there is not an associated device that provides ring tone, ring current or battery feed to an end user's Customer Premises Equipment).

#### **4 The supply of sub-loop access**

***Is sub-loop access currently being provided by Telstra and/or other access providers? On what basis?***

TransACT is not aware of any sub-loop access that is being provided by Telstra and/or any other Access Providers (AP).

TransACT has attempted to negotiate with Telstra for sub-loop access at the RIM/CMUX, as detailed in section 3 above.

***Is it technically feasible to connect to the local loop at a RAU such as a node? How? Are there any technical impediments?***

It is TransACT's view that it is technically feasible to connect to the local loop at a RAU such as a node.

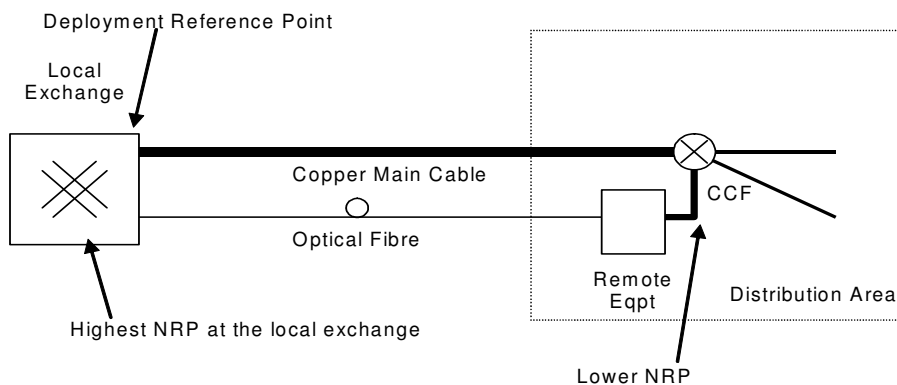
TransACT notes that there may be some technical impediments associated with interconnection at this point that would require consideration, including:

- the injection of a spectrally asymmetrical service, such as ADSL, when another spectrally asymmetrical service is being injected at a different Network Reference Point (NRP);
- sufficient capacity being available to terminate an AS External Interconnection Cable (EIC) at an RAU such as a node; and
- the distribution cable type, condition and capacity in the sub-loop from the RAU to the end-user's premises.

*Is it possible for access to be provided at the exchange at the same time as access further along the communications cable at a RAU? Does this affect the quality of services supplied from either point? In what way (if any)? How can this be overcome?*

It is technically possible for access to be provided at the exchange at the same time as access further along the communications cable at a RAU, although there are limiting factors to consider.

Using the definitions in ACIF Code C559, the Deployment Reference Point (DRP) is the Highest Network Reference Point. In this case it is at the exchange MDF (see diagram below).



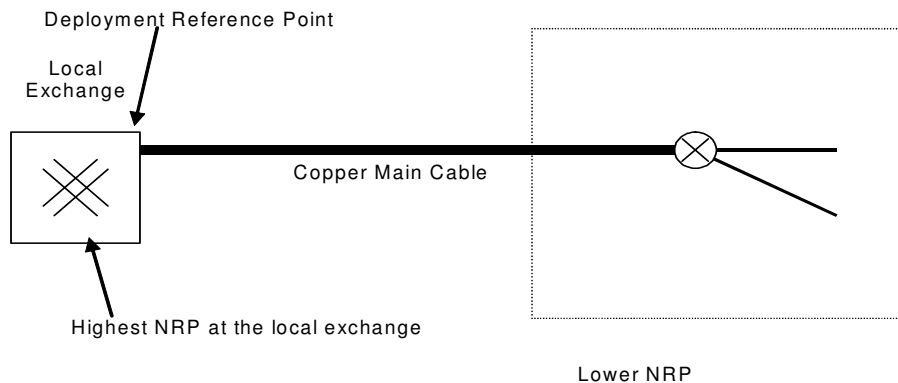
*Spectrally asymmetrical service delivered on copper main cable from local exchange and also from remote equipment over optical fibre from local exchange.*

In this scenario, precedence is given to the Highest Network Reference Point known as the DRP. Where a spectrally asymmetric service is being delivered from the local exchange and also from the remote equipment, the power levels of the two services would be at a different level at the remote unit.

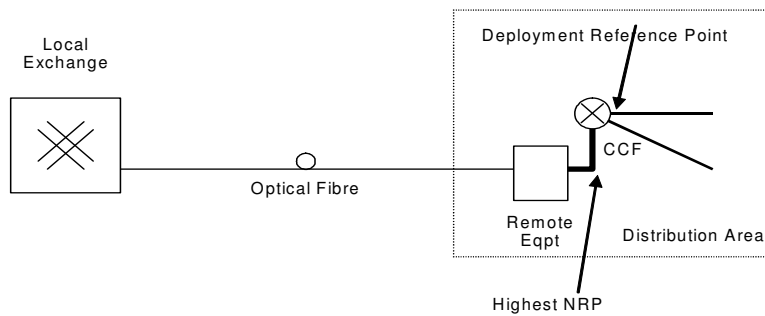
The power level at the remote unit would be at a higher level than that of the service being transmitted from the local exchange on copper main cable, which could result in interference to the local exchange service being delivered over the copper main cable.

In this instance, one way to overcome possible interference to the local exchange service being delivered over copper main cable would be to pad or attenuate the signal being injected at the remote equipment. This is to ensure that it is at the same power level as the signal from the local exchange on copper main cable at that point to avoid possible signal interference. The definition for Unacceptable Excess Power can be found under section 2.4 of ACIF Code C559, Part II. Access to the communications wire at the remote equipment is sometimes referred to as Mid-Point Injection or Sub-Loop access.

Using the definitions in ACIF Code C559, the two other network architectures where the service is provided either from the local exchange only over a copper main cable, or from remote equipment connected back to the local exchange on fibre, can be represented as per below.



*Spectrally asymmetrical service delivered only on copper main cable from local exchange.*



*Spectrally asymmetrical service delivered only from remote equipment over optical fibre from local exchange.*

***How will deployment of a fibre-based or IP-based network to locations beyond the exchange (eg. the node) affect access seeker's ability to use their current equipment? Does this depend upon whether access is regulated at multiple points along the communications cable? In what way (if any)?***

It is difficult at this time to make detailed or specific comment on how a deployment of a fibre-based or IP-based network may affect an AS's ability to use their current equipment without having a comprehensive understanding of the technical and operational matters for transitioning to and operating in any FTTN environment.



An AS would need to understand in more detail the technology capabilities to support AS products and services of any proposed FTTN network and the technology capabilities for future proofing and network sustainability.

Whether there is ability to use an AS's current equipment would depend on the technical and operational environment of any proposed FTTN network and the manner of regulation of that network at multiple points along the communications cable.

***How will deployment of a fibre-based or IP-based network to locations beyond the exchange affect investment plans of industry participants?***

There are a number of industry participants who have already made significant investment in the deployment of DSLAM technology in local Telstra exchanges. As a result of these investments, this sector of the industry has seen keen competition, resulting in the availability of products and services and decreasing prices to consumers. TransACT would strongly argue that these existing investments should be protected for a period of time, and that the future deployment of a fibre-based or IP-based network does not impede the future deployment of DSLAM technology from the local exchange on any existing communications wire that would support the delivery of that technology, in order to ensure the strong competition and investment currently evident within this sector continues.

The issues surrounding the deployment of a fibre-based or IP-based network to locations beyond the current reach of an existing communications wire from a local exchange are those that require more clarity, definition and possible declaration.

## 5 Proposed ULLS variation

Box 2: The proposed ULLS variation

<p><b>Service description</b></p> <p><del>The</del> <u>An</u> unconditioned local loop service is the use of unconditioned communications wire between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at or associated with:</p> <p><u>(a) a customer access module;</u></p> <p><u>(b) a junction or concentration point for two or more communications wires; or</u></p> <p><u>(c) any other physically accessible point of interconnection on a communications wire or any section of it.</u></p> <p><u>For the avoidance of doubt a request by an access seeker for access at one point of interconnection on a communications wire is not satisfied by the provision of access at another point of interconnection on that communications wire, and located on the end-user side of the customer access module.</u></p> <p><b>Definitions</b></p> <p>Where words or phrases used in this declaration are defined in the <i>Trade Practices Act 1974</i> or the <i>Telecommunications Act 1997</i>, they have the meaning given in the relevant Act.</p> <p><i>boundary of a telecommunications network</i> is the point ascertained in accordance with section 22 of the <i>Telecommunications Act 1997</i>;</p> <p><i>communications wire</i> is a <del>copper-metallic</del> based wire forming part of a public switched telephone network;</p> <p><i>customer access module</i> is a device that provides ring tone, ring current <del>and</del> <u>or</u> battery feed to customers' equipment <u>or facilitates the provision of a listed carriage service over a communications wire</u>. Examples are Remote Subscriber Stages, Remote Subscriber Units, Integrated Remote Integrated Multiplexers, Non-integrated Remote Integrated Multiplexers, <del>and</del> <u>the customer line module of a Local Access Switch and a Digital Subscriber Line Access Multiplexer;</u></p> <p><i>public switched telephone network</i> is a telephone network accessible by the public providing switching and transmission facilities utilising analogue and digital technologies.</p>
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TransACT supports the proposed ULLS variation, as outlined above. TransACT notes that under the definition of a CAM other examples of such a device could include:

- Customer Multiplexers (CMUX);
- Asymmetric DSL Access Multiplexer (ASAM);
- Intelligent Services Access Manager (ISAM); and
- the customer line module of a Local Access Switch (LAS) or a Remote Access Unit (RAU).

## **6 Contact Details**

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