EXPLANATORY STATEMENT

This is the Explanatory Statement for the C559:2012 ***Unconditioned Local Loop Service (ULLS) Network Deployment*** Industry Code (the Code).

This Explanatory Statement outlines the purpose of the Code and the factors that have been taken into account in its development.

The Code replaces the ACIF C559:2006 ***Unconditioned Local Loop Service (ULLS) Network Deployment*** Industry Code published by the Australian Communications Industry Forum (ACIF) in August 2006.

Background

In July 1999 the Australian Competition and Consumer Commission (ACCC) released its report titled "Declaration of Local Telecommunications Services" (the ACCC report) on "the declaration of an unconditioned local loop service, local PSTN originating and terminating services, and a local carriage service under Part XIC of the Trade Practices Act 1974". The unconditioned local loop service involves the use of unconditioned (metallic) communications wire between the network boundary (on the end user's side) and a point at which the wire terminates. Declaration of the unconditioned local loop service allows service providers to connect their own networks to communications wires in order to deliver services.

In parallel with this regulatory development in Australia there has been a rapid international growth in demand for services over access networks which operate at higher data rates than previously available. For example, dial up access over analogue PSTN lines by consumers is generally at rates up to 56 kilobits per second. The use of Digital Subscriber Line (DSL) technology can permit access at speeds 10 to 100 times faster than previously available over the metallic access loop.

This evolution in technology and corresponding growth in demand has reduced the cost of the services and of the related equipment, which in turn has resulted in more widespread use of the services. The increased use of wideband services has increased the risk of interference occurring between them. The nature of the interference varies from a reduction in the data rate on the service to effectively rendering the service unusable.

Minimising this risk requires a coordinated approach to the operation of services over the affected access networks. This Industry Code offers that coordinated approach and defines the "technical and network rules dealing with spectral compatibility and the operation of services using xDSL technology on the local loop" identified as key areas of work in the ACCC report. It is imperative that network performance requirements and rules relating to operation of services are formally agreed upon and adhered to by all relevant industry players.

The Working Committee members who developed the original version of this Code (*ACIF C559:2001Unconditioned Local Loop Service (ULLS) – Network Deployment Rules* Industry Code) made a number of compromises in reaching agreement on the performance requirements in the Code, Deployment Classes and Deployment Rules. At the time the Working Committee recommended that industry members review this Code within 12 months of the original publication of this Code in light of field experience and emerging standards.

A review of ACIF C559:2001 commenced in 2002 and resulted in ACIF C559:2003 Unconditioned Local Loop Service (ULLS) – Network Deployment Rules Industry Code. This Code addressed some known editorial oversights in ACIF C559:2001 and updated the content of ACIF C559:2001 that had been based on prepublication versions of international recommendations to align with published recommendations.

A review of ACIF C559:2003 commenced in December 2003 and resulted in this Code [*ACIF C559:2005 Unconditioned Local Loop Service (ULLS) – Network Deployment Rules* Industry Code]. This Code introduces some new Deployment Classes that may not have been finalized in international fora at the time of publication of ACIF C559:2003. It also removes some Deployment Classes that have not been widely deployed in Australia and have been superseded by substitutes that are more effective in their management of the risk of interference between systems.

Current Regulatory Arrangements

One of the objects of the *Telecommunications Act 1997 (Commonwealth)* is that telecommunications is regulated in a manner that promotes the greatest practicable use of industry self-regulation and does not impose undue financial and administrative burdens on industry participants. The Act provides that bodies and associations that represent sections of the telecommunications industry may develop Industry Codes.

The lack of specific industry accepted performance requirements for the operation of systems using the ULLS means that industry risks uncertainty and inconsistency in the development of the unconditioned local loop service. The lack of performance requirements governing network deployment and compatibility requirements would likely cause significant detriment for all users of telecommunications services, not only users of the unbundled local loop service, due to the increased likelihood of interference and incompatibility.

The Australian Communications Industry Forum (ACIF) was established in 1997 to develop and administer industry technical and operational arrangements that promote both the long-term interests of end users and the efficiency and international competitiveness of the Australian communications industry.

ACIF, through its ***High Capacity Local Loop (Copper)*** Working Committee, developed the original version of this Industry Code because, prior to its development, there were no regulatory arrangements that defined performance requirements for the operation of systems using the ULLS.

How the Code Builds on and Enhances the Current Regulatory arrangements

This Code consists of three parts:

Part 1 - ULLS Performance Requirements.

This Part sets out the performance requirements for the operation of systems using ULLS.

Part 2 - Spectral Compatibility Determination Process.

This Part sets out the process for determining spectral compatibility of systems using ULLS.

Part 3 - Requirements for Deployment Class Systems.

Part 3 sets out Deployment Classes and associated Deployment Rules that, if complied with, ensures a party to this code meets the obligations in Part 1.

The Working Committee believes that regulatory arrangements to establish these performance requirements and deployment rules will promote the long term interests of end users and the efficiency of the Australian communications industry.

What the Code will Accomplish

This Industry Code sets out the performance requirements and deployment rules for operation of systems using the ULLS. This is intended to minimise the risk of interference between systems using separate ULLSs and to ensure network integrity.

It will promote consistency and transparency in the operation of systems using the ULLS. It will assure end users, industry participants, regulators and government that the networks and services of carriers and service providers are being deployed in accordance with acceptable levels of network and service quality and integrity. This results in greater confidence in the overall performance of services using the ULLS than without the Industry Code.

Review of Code

Any proposal to introduce a deployment class for a system that uses spectrum on the ULLS that is not currently used by current Deployment Classes may be used to trigger a review of this Code. This is essential to ensure that the future integrity of systems deployed on the ULLS is not compromised in any way that will reduce efficient competitive outcomes for all End Users.

How the Objectives will be Achieved

Upon registration of the Code, all relevant sections of the industry may be required to comply with the Code.

After the Code is registered by the ACMA, the ACMA will have the ability to use its enforcement powers under Part 6 of the Act where it is satisfied that a participant in a relevant section of the telecommunications industry is breaching or has breached the Code.

Anticipated Benefits to Consumers

The operation of systems using the ULLS without this Industry Code would have occurred in a more ad hoc and less coordinated manner. This would have led to inefficient and ineffective utilisation of access networks for such services.

This Industry Code provides a coordinated approach for operation of systems using the ULLS, which will ensure more predictable and reliable performance of services, especially higher speed services. This should result in a lower average cost to supply the services.

Anticipated Benefits to Industry

The anticipated benefits to industry are expected to result in economic growth for the industry.

This Code will assist in the efficient, equitable and responsive delivery of the unbundled local loop service to service providers, and by clearly defining performance requirements and deployment standards the Code will encourage market participation by all sectors of the telecommunications industry.

An example of a benefit to industry is the reduced risk of interference between systems deployed on the ULLSs when those systems are deployed in accordance with this Industry Code. This will reduce the incidence of faults and therefore reduce the total cost of rectifying faults that occur compared to the costs that would arise without this Industry Code.

Anticipated Cost to Industry

There will be costs to the industry associated with the establishment and operation of a ULLS and to comply with this Code. The Working Committee anticipates that these costs will be offset by greater benefits to industry.

Other Public Interest Benefits or Considerations

The Working Committee anticipates this Code will allow many more consumers to browse the Internet at significantly higher data rates than currently possible, which will enable more innovative applications to be offered to end users.

2011 Revision

The Code has been revised to:

- Update some cable loss values for 0.4mm PIUT cable in Table A-2 of Part 1 of the Code;
- Add cable loss values for all cable types at 3750kHz in Table A-2 of Part 1 of the Code;
- Update parameter values for conductance in section 5.1 of Part 2 of the Code;
- Remove unnecessary reference to the network boundary point; and
- update references from 'ACIF' to 'Communications Alliance' plus correct some typographical errors.

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WC34 : ULLS Network Deployment Revision Working Committee