#### **MEMORANDUM**

**TO:** Members of the LLU/nDSL Working Parties

**FROM:** Tony Baldwin

**DATE:** 26 September 2006

SUBECT: LLU/nDSL WORKSHOP PROPOSAL<sup>1</sup>

#### Context

In our first two meetings, each organisation:

- Outlined its goals, expectations and initial understanding of the issues at a high level; and
- Reported on international experience in addressing a particular set of issues relating to LLU.

These initial contributions were valuable and positive. They also confirm that our overall workload is substantial.

#### **Process objectives**

Looking forward, I would suggest we need to:

- Progress some of the key work-streams in parallel (to achieve well the 'phase 1' project goals);
- Deploy our joint resources and expertise more efficiently matching issues and expertise more closely, and creating smaller, tighter groups;
- Follow a consistent and robust analytical methodology across the full suite of issues to be addressed; and
- Promote a climate of intellectual openness and rigour (particularly during this 'discovery' stage).

<sup>&</sup>lt;sup>1</sup> This memorandum is based our conference call on Friday, 22 September, and the initial draft discussed

## **Proposal**

To these ends, it is proposed that the Working Parties form four Workshop Groups:

- Physical interface
- Spectrum and Interference
- Information Disclosure
- OSS
- Legal Policy

The initial list of issues to be addressed by each Workshop Group at the first workgroup meeting are summarised in Annex 1.

# Concept and approach

- A Workshop Group is to proxy a project team like an individual company may form, deploying an optimal mix of in-house and external expertise.
- In concept, therefore, the people available to the Working Parties are viewed as if they work for the same organisation and can be deployed to form tight and integrated project teams, not a collection of parties representing competing companies.
- Membership of a Workshop Group should therefore be determined by a (self-selecting) allocation of people to tasks that best fit their skills, expertise, and time availability.
- Each Workshop Group is to approach its task with an intellectually open mind, applying a consistent set of criteria in an objective manner. At this stage, the Workshop Groups are about exploring and testing ideas, not protecting or advancing a company's position.
- This approach will assist in producing outcomes that are robust for the industry as a whole, and capable of Commerce Commission approval. It will also provide a stronger foundation for 'phase 2' of the project.
- Annex 1 outlines the options and issues that the Workshop Group should focus on at the first workgroup meeting. At this stage, keep the options at a reasonably high level (avoid descending quickly into fine detail).

## Workshop responsibilities

- Apply a common template/methodology namely:
  - define the meaning of key terms (to ensure a common understanding of scope)
  - agree objectives (with particular focus on how the competition objective applies to the particular topic)
  - define each issue (including a range of specific scenarios)
  - specify possible options to address each issue
  - evaluate each option against a common set of criteria. The proposed criteria are in Annex 2.
  - set out the menu of options in a ranked order based on results of evaluation against criteria. Consider how the options for each issue combine to form an overall package. Evaluate the alternative combinations.
- A member 'holds the pen' for the part of the workshop allocated to it in Annex
- Each member is to prepare and circulate in advance of the Workshop Group meeting an analysis of the relevant issue and options<sup>2</sup>.
- Work with the Chair and Administrator on initial papers (to promote consistency across members and groups).
- Exchange thoughts and drafts with other members of the Working Party not on the Workshop Group if valuable input can be obtained.
- All workshop participants to actively input to Workshop Group discussions.
- Each Workshop Group to report back to the Working Parties (which may be integrated into a single Steering Group to be decided after initial try out of Workshop Groups).
- Workshop Groups are *not* decision-making or negotiating forums. This is the role of the Steering Group(s).
- Non-participation in a Workshop Group will *not* exclude or limit the flow of information to Steering Group members. All members will have an opportunity to engage in all issues.

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<sup>&</sup>lt;sup>2</sup> The core of the consultation report due at end of 'stage 1' (mid-December) should come from a ready integration of each participant's written analysis to the Workshop Groups

## Workshop participants

- As noted above, membership of a Workshop Group should be determined by a (self-selecting) allocation of people to tasks that best fit their skills, expertise, and time availability.
- Given that the Working Groups are about exploring and testing ideas, not protecting a company's position, it should be possible for organisations with a depth of capacity to deploy their experts to particular Workshop Groups. Different people on different Workshop Groups should not give rise to coordination and control issues for participating organisations.
- For now, membership would appear to be as follows:
  - Physical Interface

All organisations represented on the LLU Technical Standards Working Party $^{\rm 3}$ .

- Spectrum + Interference

Telecom, TelstraClear, Vodafone, CallPlus, Orcon

Information Disclosure

Telecom, TelstraClear, ihug, TUANZ

- OSS

Telecom, TelstraClear, Convergex, Ihug, Orcon, THL

- Legal

Telecom, TelstraClear, Vodafone, Vector

# Numbers and timing

- I would strongly encourage each organisation to provide one person for each Workshop Group in which it is participating. More than one will make it hard to establish tight and focused discussion. Organisations with a range of specialists available may wish to bring in a particular person to cover a particular topic within a Workshop Group.
- Frequency and mode of meeting, and relationship with the existing Working Parties, can be determined after some initial Workshop Group meetings.

# **Next steps**

• First Workshop Group meetings – OSS and Information Disclosure on Monday 2<sup>nd</sup> October and Physical Interface and Spectrum and Interference workstreams on 3rd October.

<sup>&</sup>lt;sup>3</sup> As most organisations wish to participate in this group, it would be more efficient to have everyone involved and treat is as the Technical Working Party (in full) for the purposes of the 'physical interface' issues – rather than repeating the Workshop Group's analysis to the Technical Group for the benefit of a few parties not on this Workshop Group

- The initial allocation of topics and allocation of tasks for the first workshop is attached as Annex 1. This Annex will be expanded to include all the issues identified to date and redistributed later this week.
- Participants who have been allocated tasks are to prepare initial analysis of allocated issues and options for distribution to the work shop participants prior to the relevant workshop. Liaise with Chair on approach (to promote consistency of approach across participants).
- Advise the TCF Administrator the names of the people within each organisation allocated to a workgroup so that the relevant contact lists can be established and everyone knows who to talk to on an issue relevant to a particular workgroup.

Tony Baldwin Chair

#### **ANNEX 1**

#### **ALLOCATION OF ISSUES**

# Outline

An initial tranche of work for the first Workshop Group meetings on 2 and 3 October is set out below. Other issues will be added and allocated for subsequent meetings.

Please apply the steps outlined in the covering memorandum – namely:

- Define the meaning of key terms (to ensure a common understanding of scope)
- Agree objectives for each issue (with particular focus on how the competition objective applies to the particular issue)
- Define each issue (including the specific scenarios likely to arise)
- Specify possible options to address each issue (at a high level)
- Evaluate each option against a common set of criteria (in Annex 2).

When all the key issues and options have been considered, the next will be to set how the options for each issue combine to form an overall package, and evaluate the alternative combinations.

The outline for each issue is set out in detail below. This table summaries the parties responsible for delivering the initial paper:

Work Group	Issue	Party
Physical Interface Group (all Working party members)	Exchange co-location	Orcon
	Cabinet co-location	Orcon
	Choice of type	Telecom
	Technical interface boundaries (demarcation)	Telecom
	Rules on allocation + prioritisation of 'space'	TCL
	Installation	Orcon
	Overall policy on BH provision	Vector Communications
	Levels of backhaul	Vector Communications
	Range of backhaul technologies	TCL
Spectrum management	Key principles	CallPlus
(Telecom, TelstraClear, Vodafone, CallPlus, Orcon)	Protected technologies	Orcon
	Types of deployment rules	TCL
	Approach to new systems	Telecom
OSS (Telecom, TelstraClear, Convergex, Ihug, Orcon, THL)	Pre-ordering + pre- qualification	Convergex
	MACs	Orcon
	KPIs and standards	IHUG
	Performance measurement + reporting	Orcon
Information (Telecom, TelstraClear, IHUG, TUANZ)	Categories	TCL
	Principles	TCL
	Options	Telecom + ihug

# **Physical Interface Group**

# **Issue 1:** Exchange co-location – possible types:

[Illustrative options]

- Co-mingling (contiguous racks)
- Separate floor space (not contiguous racks)
- Caged (separate area, physically separated by some 'barrier')
- Virtual (separate building)

# **Issue 2:** Cabinet co-location – possible types

[Illustrative options]

- Co-mingling (contiguous racks)
- Virtual (separate building)
- Other options

# **Issue 3:** Choice of type – how to decide (who decides) in a given situation

[Illustrative options]

- Rules in code (hierarchy of defaults depending on scenario)
- Access seeker's choice (assuming agreement on costs)
- Combine options 1 + 2
- Telecom fixed offering to all-comers
- Other options (?)

# **Issue 4:** Technical interface boundaries (demarcation) – who decides and how determined

[Options to come]

**Issue 5:** Rules on allocation + prioritisation of 'space' (including for Telecom Retail) for backhaul. (Rules may be different for particular space availability scenarios, so need to address each main space scenario)

[Illustrative options]

- Auction/tender
- First-in first-served from notice of availability
- 'Wait list' queue (first in time on list)
- Rotating queue (take turns on new using new space)
- Specific individual 'order' (contract) from ISP with Telecom

Options may need to be refined for each 'space' scenario

**Issue 6:** Installation - Rules of access to exchanges and cabinets for installation. (Different rules for different parts of the facility? MDF, HDF,  $3^{rd}$  party backhaul cables,  $3^{rd}$  party DSLAMs etc)

[Illustrative options]

- Supervised + fee + notice (set hours)
- Pre-qualification of personnel + not supervised + fee
- Pre-qualified + not supervised + no fee
- Other variations

**Issue 7:** Overall policy on BH provision (including levels of freedom for non-Telecom parties to design BH networks)

[Options to come]

Issue 8: Levels of backhaul

[Illustrative options]

- Street-side to exchange
- Exchange to metro
- Exchange to exchange
- Inter-metro

# Issue 9: Range of backhaul technologies

[Illustrative options]

- Ethernet only
- Industry agreed range
- No limit open to competitive offerings

# **Spectrum Management Group**

For the initial workshop of this group, it would be helpful to focus on defining the key issues and options to be addressed. These may include (from TCL's review of overseas practice):

- Key principles for rules
- Whether to agree on protected technologies
- Which technologies to protect
- Types of deployment rules
- Approach to cabinet deployment
- Approach to new systems
- Types of cables
- Quality of records

#### **OSS Group**

For the initial workshop of this group, it would be helpful to focus on defining the key issues and options to be addressed. These may include (from the reviews of overseas practice by TCL and IHUG):

- Pre-ordering + pre-qualification
- MACs
- KPIs and standards
- Performance measurement and reporting

#### **Information Group**

For the initial workshop of this group, it would be helpful to focus on defining the key issues and options to be addressed. These may include (from Telecom's review of overseas practice):

- Different categories of information (to which different principles and rules may apply) namely:
- Information relating to market opportunities and the development of Access Seekers' business models;
- Information relating to the deployment and maintenance of Access Seekers' gear in Telecom exchanges and cabinets
- Information relating to the on-going servicing of Access Seekers' customers using LLU or nDSL services
- Principles the may apply to (and help develop) rules for each category of information
- Options for disclosure under each information category what type and level of information
- Mode of disclosure automatic v on request.

Part of this initial workshop will include a briefing from Glen Simons of Telecom on their information systems.

#### **ANNEX 2**

#### **INITIAL CRITERIA FOR COMPARING OPTIONS**

#### Context

When the Bill is passed, any provision of LLU or nDSL services must be consistent with the Standard Access Principles (SAPs), as set out in Schedule 1, subpart 2 of the Telecommunications Act 2001.

Clearly, any LLU and nDSL service will be made up of many elements. Within each element, various options are available. These can, no doubt, be assembled in a variety ways that will meet the SAPs.

At least two levels of evaluation are therefore relevant to our work:

- Is an option (in combination with other elements to form a package) consistent with the SAPs; and
- How do potentially SAP-consistent options compare with each other.

At this stage, the Working Parties are focused on comparing (at a high level) the various options for key technical and operations elements. This is the second level mentioned above. The criteria at this level of evaluation can (and need to) be more extensive than simply the SAPs.

#### Proposed criteria for options comparison

- Equivalence between Telecom Retail and Access Seekers
- Timeliness time to implement
- Implementation costs for Telecom v for ISP
- On-going costs for Telecom v ISP
- Technical and operational practicability
- Network security & safety
- Consistency with Telecom's existing legal duties
- Telecom unable to comply with reasonable conditions
- Consistency with international best practice:
  - Overseas precedent for option (where)
  - o Overseas outcomes from option (relative success)
- Expected impact on competition/choice for ISPs

- Expected impact on LLU uptake by end-customers
- Likely durability of option (how 'future-proof'?)
- Degree of interdependency with other issues