



**Submissions to the Commerce Commission (New Zealand) in
relation to the Draft Standard Terms Determination for Co-location on
Cellular Mobile Transmission Sites Service - Public Version (25 July
2008)**

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1 Overview

- 1.1 Tarantula.net NZ Ltd welcome the opportunity to put in a submission on the Draft Standard Terms of Determination dated 25th July 2008.
- 1.2 We acknowledge the time and effort put in by all parties in developing and contributing to the draft standard terms of determination (STD) for co-location of mobile services in New Zealand.
- 1.3 The purpose of this document is to provide feedback on the Draft Standard Terms of Determination for co-location (public version 25th July 08) – in particular section point 31 Common Site Database for the co-location process, listed in the operational manual.

The document will discuss the benefits of an independent central online system for the implementation of the end-to-end co-location process defined in the complete STD. The merits will be based on the experience of implementing a central co-location system for the UK mobile industry end-to-end co-location process.

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2 Background

- 2.1 Tarantula.net are a niche service provider that have 7 years comprehensive experience in delivering a independent central system for co-location/sharing in the UK, for all the carriers and tower operators.

We have worked with the entire UK mobile industry since 2001, implementing a central independent on-line workflow co-location service (site-share.com). This involved migrating from a disparate offline system based on multiple spreadsheets, word documents/forms and emails across multiple carriers.

The 'site-share.com' software system, is a web-based 24x7 end-to-end telecom ERP service for tower management. The 'site-share' (co-location) module has been implemented across the UK industry as centralised software platform for searching, applying and managing the process for co-locations.

The system has been implemented by tower companies in India (for TATA telecom & Quippo Infrastructure) to manage not only sharing but the complete rollout, asset management, supply chain and lease management of mobile infrastructure towers. Carriers and tower companies can utilise any 'site-share.com' modules internally for their own purposes e.g Lease Management, asset management.

For the purpose of our submission we will be drawing upon our experience and learning from implementing a central co-location system for the UK mobile industry.

3 The UK – co-location context

- 3.1 The key driver for a centralised co-location system for the UK industry was to address the Mobile Operator Association (moa) commitment on co-locations.¹ In particular the government and industry required regular reporting from an independent and transparent source on level of sharing of masts/towers, which commitment 3 aimed to address.

“Publish clear, transparent and accountable criteria and cross industry agreement on site sharing, against which progress will be published regularly” MOA – Commitment 3

Since implementing a centralised system in the UK, the following has occurred:

- Increased transparency of the end-to-end co-location process between seeker/carrier. This has highlighted trends where delays occur in the end-to-end process and where the seeker can also delay the process.
- Faster time to market and a movement away from the industry stigma of a co-location is the ‘last resort’ and takes ‘too long’. To a perception level of transparency and an option co-locations must be considered for all new roll-out sites.
- Independent reporting, with government receiving quarterly reports from the central on-line system on performance and the number of co-locations occurring.

See appendix B for an extract from an independent audit of commitment number 3 in 2005 by Deloitte & Touche for the MOA.

¹ In the UK co-locations are called site-share’s or site-sharing

4 General Overview NZ context

- 4.1 The actual implementation of the co-location process will be central to facilitating the mobile telecom industry expansion in New Zealand. This is a new process across all carriers and has not been implemented across the industry yet.
- 4.2 The current STD operations manual provides a comprehensive and lengthy process for the management of co-locations within New Zealand. It is a complex multi-party process that can take a significant amount of time², with a multitude of milestones and considerable operational management to deliver/track progress throughout the lifecycle.
- 4.3 Currently the STD envisages implementation using a manual offline process for the management not only of the master site list (defined as a common site database in a excel spreadsheet format), but also the multitude of forms and signoff points in the operational manual and appendix that are required throughout the process.

5 Drawbacks of non central – offline system

- 5.1 From our professional industry experience, in order to promote/facilitate co-location sharing and achieve key industry Service Level Agreements (SLA's) it is critical to have an independent system in place, that is on-line, transparent and that drives the co-location end to end process. The UK experience illustrates that, separate offline process driven by a word/paper/spreadsheet based system of forms lead to:
 - I. Inaccuracy of data being captured, with no business or data validation rules being included in offline forms submitted for co-locations throughout the process.
 - II. No version control, meaning managing change becomes very difficult in complex process's that can take upto 2 years, with multiple parties internal and external being involved.
 - III. Poor transparency throughout the process of multiple party's involvement. Communication is not audited or managed.
 - IV. SLA's/KPI's are very difficult to manage in an offline system as the seeker and carrier can have conflicting information.
 - V. Disputes can quickly occur and cost money in missed time to market due to no centralised communication between all parties and tracking.
 - VI. Process Improvement becomes very difficult to quantify and manage, as there is no standard data from any offline/manual system, or standardised data entry. Identifying bottlenecks in the process becomes increasingly difficult when analyzing trends across multiple co-locations.
 - VII. Stigma of co-locations being 'slow' are linked to any offline process, as within a 400 day time frame, multiple people can leave an organisation and achieving continuity of process and information is often not possible.

² Appendix D of the STD operational manual provides a full breakdown of tasks that can take upto 400 days from initial application to site build

6 Benefits of a central independent online system

The overall principle is that without a central independent system where a co-location can be tracked and audited, there will be multiple documents and versions of the 'truth'. Moving to a fully independent central on-line system for the management of the end-to-end co-location process, provides the following benefits, highlighted by the UK experience:

- Correct data is entered 'first time' around, with clear business process rules ensuring quality of data submitted. The process rules are reinforced within the data entry forms ensuring consistency of data. Without correct entry of data you cannot progress further in the co-location application process.
- Common information is auto populated by the system e.g. antenna types, ensuring duplication is not required. This speeds up the process as less time is wasted filling in forms.
- An on-line system ensures the business process is followed, and dates/actions are tracked /audited. Actual dates once entered cannot be changed and any forecast dates that do change are tracked/audited.
- Communication within the process is streamlined allowing all parties to be linked electronically to the co-location application including 3rd party contractors. When dates or attachments such as plans or drawings are added, all contacts are automatically notified via email, this is audited and logged.
- In 3 clicks, a seeker or carrier has access to all details relating to a site and its co-location. This becomes increasing useful overtime where a seeker can view who is presently co-located on a site, with complete historic data being available. This could save time, as a seeker may decide not to select a site due to planning or capacity issues.
- Both seeker & carrier can search information relating to a site with knowledge/information being shared rather than it residing in emails and other offline 'private' forms.
- Time to market is quicker with priorities of co-location applications clearly indicated by the seeker at the start of the co-location process
- Speeds up the RMA process by ensuring all the appropriate documentation is provided by the seeker in the first instance through the on-line process. Seekers cannot submit a co-location without the mandatory information being inputted into the system first time.
- Delays can occur on the 'seekers' side within the process and it is not always the carrier who is delaying the process. The UK context has highlighted, having an independent central online system ensures both parties can be tracked in the process and responsibility for delays can be identified.

This becomes important when penalties are put in place as specified in the STD in section 7 & 8. The UK context has highlighted that seekers can delay the process by not approving offers and/or providing revision(s) in a timely fashion. Independently identifying where the delay has occurred, that impacted the carrier's SLA is extremely important to stop disputes occurring when penalties are due.

- Schedule 2 of the **mobile co-location service level terms** of the STD provides an extremely clear framework for the measurement of SLA's and penalties. It will become extremely difficult to track and audit these timescales without an independent, on-line system. For example schedule A stipulates that at the

'proposed solution engagement' the carrier has 4 hours to acknowledge the application, with a 99% SLA in place. Measuring this level of detail will become very difficult in any offline process. The UK central online co-location system records this level of detail by the minute; no party can then dispute the 'facts' as the system 'initiate's' the sending and acknowledging of these time/dates when the action occurs. It is not recorded in a separate offline system or email process.

- It provides the TCF, carriers and other regulatory bodies with a clear and transparent view of the success/KPI/Service Level measurements on the end-to-end co-location process; this cannot be done accurately or independently via any offline system.

7 General Observations

- I. Outsourcing a central function such as a 'common central co-location industry system' that is funded by the carriers is not uncommon within the telecom space and has precedent. For example in Australia the Telecom Ombudsman has been outsourced to an external party and is funded by the carriers. The UK context also provides a clear precedent that a central co-location system has been implemented successfully and is funded by the UK carriers since 2001.
- II. There are significant cost savings for the industry collaborating on a central online platform for co-locations as it ensures faster time to market, less duplication and lowers investment costs, as each carrier does not have to develop separate systems. The UK carriers have saved £5.4 million pounds alone in time/efficiency savings each year through using an online co-location system³.
- III. Timesavings achieved through an online central system where the seeker and carrier approve, reject and manage the entire end-to-end process have achieved significant timescale improvements. In the UK context an improvement of 320% was gained when moving to an on line system⁴.
- IV. New Zealand is in a unique position to adopt an on-line co-location process with the start of the implementation of the STD that the industry can benchmark, rather than adopting an offline process. Early adoption will save considerable time and cost for all parties involved in the co-location process and ensure swifter time to market. It will also provide transparent data during any 'soft launch' of how the co-location end-to-end process is actually working.

³ This is based on an average of each user saving 5 hours per week, based on a survey conducted in 2007 of all users of the UK site share system.

⁴ In the UK from September 2002 through to 31st October 2002 (offline process), the inter-operator average was 48 working days against an SLA of 30 working days – for Receipt/Offer stage of the co-location process. For this same period in September 2003 to 31st October 2003 (on-line system/process in place) these timescales have been reduced to 15 working days.

8 Appendix A:

8.1 General comments on how an example of a off-line form could be converted to an on-line form within a central system to streamline the process - appendix U of operations manual

| Area | | General comment | <i>Examples of how parts of the form could be converted</i> |
|--------------------------|----------------------------------|--|--|
| 8.2 <i>Appendix U</i> | <i>PLANNED WORK PROJECT PLAN</i> | This is a core document for communicating on the co-location and its progress to all interested parties. Currently this format is offline and static and quickly different versions will exist, as multiple people are involved. There is no real way to ensure all people have been communicated with an update when a change occurs in the document, as there is no audit trail. This can create issues within the process and potentially increase costs due to incorrect information not being available to all parties. | <p>Section 3 - By moving this entire project plan into an on-line eApplication⁵ will ensure all milestone forecast dates and contacts are linked via email. When a change is made to the system all parties are informed of this automatically via email.</p> <p>Section 4 - Actual dates cannot be changed in the on-line system once entered. The SLA data is automatically set via the online project milestone management once the eApplication is first lodged so the user can review. Dates can be linked to a particular action e.g. 'AP issues approval to build', the date is only populated when 'on-line approval' has been given.</p> <p><i>Contractors can log into the system and update milestones for which they are responsible for. Auditing is in place to track who has been informed and when, this ensures clear transparency of the process and ensures no party can say 'they did not receive an update'.</i></p> <p>All parties can view the latest correct version online, 24x7. If personell change/leave within an organisation, all parties still have access to the project plan and only one version is ever available via the online system.</p> <p>Section 5 - Moving Key Risk and H&S data online will ensure reporting can occur and highlight any urgent issues via email/alerts automatically.</p> |

⁵ The UK co-location system uses a concept of an eApplication that stores all data/forms relating to once single co-location application by a seeker. Over time, multiple eApplications will exist against a single site.

9 Appendix B:

UK Commitment 3 – audit by D&T 2004

deloitte_240105_commitment 3.pdf (page 57 of 81)

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Implementation Review of the Ten Commitments
April 2004 – September 2004

4.2. Findings regarding other Commitments

4.2.1. Commitment 3: Publish clear, transparent and accountable criteria and cross industry agreement on site sharing, against which progress will be published regularly

A cross-industry Site Share Working Group has been established. The Group meets quarterly, and representatives from the MOA, each Operator, Crown Castle International and NTL attend. Progress in site sharing is discussed, which is quantified using statistics from the Site Share Database, www.site-share-olo.com. The number of sharing requests and the speed of response, as well as successful shares, can be determined by Operator from these statistics. This information contributes to the quarterly Site Share government report.

Evidence of Good Practice:
Local Planning Officers and Operators holding round table discussions to identify:

- Level of detail needed on reasons why sites cannot be shared from Operators & Agents
- Areas where technical information is either unnecessary or needs explanation

Quarterly Operator meetings to review site share request levels as well as response and action speeds.
Agents and third parties have access to central database to view and apply for share options, as well as track process.

Towards the end of 2002 a database and Common Service Level Agreements had been established and Deloitte have been informed are being used by all five of the Operators. The Service Level Agreements specify timescales for major steps in the process of site sharing (including post application build and a standard set of charges up to build stage).

The database was upgraded in August 2003, introducing a workflow system. This ensures that date fields, used to measure the Service Level Agreements, cannot be altered by the Operators. Service Levels have been maintained, but the database now allows the sharer to request different deadlines for the Service Level Agreement milestones. This can enable an Operator to request a site to be progressed at a faster/slower rate than normal.

The database has approximately 1,000 users, as of November 2004, and can be accessed by both third party site providers and Site Acquisition Agents.

The database is posted on a website accessible by each of the Operators (www.site-share-olo.com). Access to the website is controlled by passwords held by the operators. Operators informed Deloitte that the database is an internal workflow system for the Operators and is not appropriate for public access (please refer to published performance data below).

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10 Appendix C:

Links to further information on the site-share.com platform used in the India & UK.

- 1) Case Study of the UK industry experience:

http://www.site-share.com/SiteShare/Templates/success-stories_161_1_166_Graphical.aspx

Customer Testimonials India & UK:

http://www.site-share.com/SiteShare/Templates/What-Blue-Chip-Mobile-Service-Providers-Say_168_1_26_Graphical.aspx