

Telstra Corporation Ltd.

**Report on Appropriateness of Demand
Assumptions
(Public Version)**

Michael Potter

15 April 2005

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1. INSTRUCTIONS AND SCOPE

Instructions

- 1.1 I have been engaged by Mallesons Stephen Jaques ("**Mallesons**"), solicitors for Telstra Corporation Limited ("**Telstra**"), to provide a report in respect of the use of average or year-end Services in Operation ("**SIOs**") to calculate a specific cost recovery for Telstra's Unbundled Local Loop Service ("**ULLS**") and Spectrum Sharing Service ("**SSS**"). Attached as Annexure 1 is a copy of my instructions.

Relevant qualifications and experience

- 1.2 I qualified as a Chartered Accountant in 1990 and am a director of Axiom Forensics Pty Ltd. Prior to my role at Axiom Forensics Pty Ltd I was a partner of the forensic accounting division of Ferrier Hodgson. For the past 7 years I have provided expert accounting reports in litigation matters, undertaken financial investigations and fraud investigations and provided general consulting services. A copy of my resume is attached as Annexure 2 to this report.

2. DOCUMENTS RELIED UPON

- 2.1 The documents I have relied upon in preparing this report are as follows:
- (a) Australian Competition and Consumer Commission ("Commission") – "A Final Report on the assessment of Telstra's undertaking for the Line Sharing Service" dated August 2004 (Public Version);
 - (b) Telstra's submissions to the Commission in support of undertakings on 13 December 2004 in respect of SSS and ULLS;
 - (c) The Commission's confidential discussion paper entitled "Telstra's Undertakings for the Line Sharing Service" dated March 2005;
 - (d) The Commission's confidential discussion paper entitled "Telstra's Undertakings for the Unconditioned Local Loop Service" dated January 2005;
 - (e) Draft report prepared for the Commission by The Telecommunication and Media Policy Institute, University of Canberra and AAS Consulting Pty Ltd entitled "*Review of Telstra's ULLS – Specific Costs*";
 - (f) Final Report prepared by the Commission by The Communication and Media Policy Institute, University of Canberra and AAS Consulting Pty Ltd entitled "*Review of Telstra's ULLS – Specific Costs*"; and
 - (g) Electronic copies of the SSS and ULLS Specific Costs models.
- 2.2 The documents I have relied upon above have not been the subject of an audit or independent verification by me and as a consequence I have no opinion on the accuracy or reliability of the information provided. In view of this limitation, I reserve the right to amend my opinions and conclusions should further information be made

available to me subsequent to the date of this report which materially affects the expressions of opinion contained herein.

3. INTRODUCTION

- 3.1 Telstra has undertaken calculations to recover certain of its specific costs in providing the ULLS for a period of six years from 1 July 2000 to 30 June 2006¹ and the SSS for a period of four years from 1 July 2002 to 30 June 2006. The specific costs sought to be recovered are constant over the six year and four year periods respectively.
- 3.2 Annexure C of Telstra's ULLS Monthly Charges Submission and Annexure B of Telstra's SSS Monthly Charges Submission state that the specific costs comprise:
- (h) an annual capital charge for the labour cost of developing the ULL Carrier Interface System and the SSS Carrier Interface System and implementing changes to a number of Telstra's existing systems to incorporate the ULLS and the SSS. The annual capital charge is calculated on the basis of a tilted annuity formula assuming the assets have a life of 5 years; and
 - (i) direct and indirect operating and maintenance costs.
- 3.3 The monthly specific costs to be recovered are derived from the calculation of the net present value ("**NPV**") of specific costs over the six year period for the ULLS and the four year period for the SSS divided by the NPV of the estimated demand for the ULLS and the SSS respectively over that period.
- 3.4 In order to address the appropriateness of demand assumptions used by Telstra and ACCC for both the ULLS and the SSS I have used the demand for the SSS in the examples below. The demand principles for both services are the same and accordingly I have not repeated the examples for the ULLS.

4. SSS DEMAND USED

- 4.1 I have been provided with the actual number of SIOs for the years ended 30 June 2002 to 30 June 2004 and Telstra's forecast of the number of SIOs at 30 June 2005 and 30 June 2006 as set out in the table below. It is apparent the total number of customers within each year and over the four years is increasing.

¹ In respect of ULLS the majority of capital expenditure portion of specific costs occurs in the years up to 30 June 2002. The system constructed has a life of 5 years and hence there is a period after 2006 for which costs are not sought to be recovered in the period up to 2005/06. The same applies to SSS.

Year End	SIO Numbers
30 June 2002	"c-i-c"
30 June 2003	"c-i-c"
30 June 2004	"c-i-c"
30 June 2005	"c-i-c"
30 June 2006	"c-i-c"

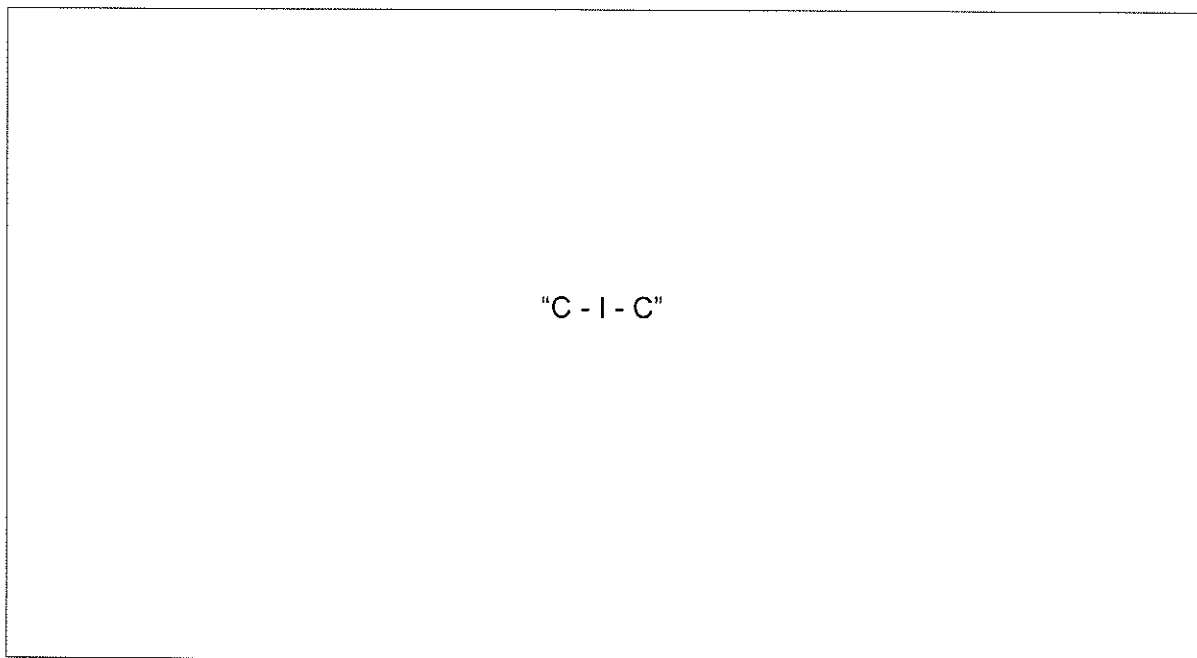
- 4.2 I am instructed that Telstra estimated SIO demand in its calculation of the ULLS and SSS specific costs recovery to be the average of the SIOs within each financial year. The estimated average was calculated using a simple average of the SIOs at the end of the preceding financial year and the SIOs at the end of that particular financial year.
- 4.3 For example, using the assumption of SSS SIO take up based on Telstra's demand, the number of SIOs at the beginning of the 2003 – 2004 period (1 July 2003) is "c-i-c", and at the end of the 2003 – 2004 period (30 June 2004) the total number of SIOs is "c-i-c". That is, the number of SIOs is increasing throughout the period from "c-i-c" at the beginning of the period to a maximum of "c-i-c", at the end of the period. The demand assumed by Telstra is the simple average of "c-i-c" ie. $(\text{"c-i-c"} + \text{"c-i-c"})/2$.
- 4.4 The Final Report on the Assessment of Telstra's undertaking for the Line Sharing Service indicates at Appendix 3 that the ACCC has assumed in its calculation that the aggregate year-end SIOs is the appropriate basis upon which to estimate demand. Using the above period for illustration, the ACCC assumes that the maximum number of SIOs in that period of "c-i-c" is the estimated level of demand for the entire 2003 – 2004 period, and that the "c-i-c" SIOs are paying the monthly charge for the entire 12 month period.
- 4.5 The following table is a summary of the year-end SIO numbers (ACCC) and the year average SIO numbers (Telstra).

Year End	ACCC Year End SIO Numbers	Telstra Year Average SIO Numbers
30 June 2002	"c-i-c"	"c-i-c"
30 June 2003	"c-i-c"	"c-i-c"
30 June 2004	"c-i-c"	"c-i-c"
30 June 2005	"c-i-c"	"c-i-c"
30 June 2006	"c-i-c"	"c-i-c"

- 4.6 In my opinion the appropriate method for estimating the level of demand in any one period where that demand is increasing throughout the period is to use an average of the maximum and minimum SIO numbers in that period. The assumption of year-end SIOs is not appropriate because it has the effect of over-estimating demand if SIOs are increasing in the calculation with the consequence the costs are not fully recovered. These issues are addressed below.

5. ACCC OVERESTIMATED DEMAND

- 5.1 The graph below represents the SSS estimated level of demand in each financial year used by Telstra and the ACCC to calculate the cost per SIO. The triangular areas noted as "Area of overestimation of demand by ACCC" represent the level of demand or SIO customers assumed to exist for the entire year in the ACCC calculation.



- 5.2 To illustrate the effect that these two differing approaches have on the calculation of the ULLS and SSS specific costs, I have prepared an example of the calculation of cost per SIO. To simplify the example for the purpose of illustration I will assume that the relevant cost for one year is \$78.00. I have also assumed that demand for ULLS and SSS will increase by one customer per month for 12 months. The cost per service (monthly) would be calculated as follows:

Index		ACCC	Telstra
A	Cost	\$78	\$78
	SIO Numbers		
B	Beginning	1	1
C	End	12	12
D	Average $[(B + C) \div 2]$	6.5	6.5
E	Number of SIOs used in Calculation (ACCC "C", Telstra "D")	12	6.5
F	Cost per SIO per year $[A \div E]$	\$6.50	\$12.00
G	Cost per SIO per month $[F \div 12]$	\$0.542	\$1.000

5.3 The ACCC assumption of a year high demand of 12 in the above example, in my view, does not represent the actual pattern of demand, which is one of increasing SIOs throughout the relevant period. Growth within a year might be uneven but on balance an average of the beginning and ending SIOs is a reasonable accommodation for possible variability. The use of average SIOs in NPV modelling is, in my experience, usual industry practice because it results in a recovery of the costs.

5.4 The application of a monthly charge based upon the maximum SIO numbers in any one year (ACCC) would have the effect of reducing the cost per SIO, such that if this charge were applied to the estimated level of demand, which is increasing throughout the relevant period, the total cost of providing that service would not be recovered as illustrated in the following table:

ACCC		Month												Total
Index	ACCC	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
A	Cumulative SIOs	1	2	3	4	5	6	7	8	9	10	11	12	
B	ACCC monthly Charge	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	
C	Cost Recovery (A x B)	\$0.54	\$1.08	\$1.63	\$2.17	\$2.71	\$3.25	\$3.79	\$4.33	\$4.88	\$5.42	\$5.96	\$6.50	\$42.25
D	Cost per example													\$78.00
E	Estimated Over / (Under) recovery													(\$35.75)

5.5 The application of a monthly charge based upon the average SIO numbers in any one year (Telstra) applied to the estimated level of demand results in the total cost of providing that service being recovered as illustrated in the following table:

Telstra		Month												Total
Index	Telstra	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
A	Cumulative SIOs	1	2	3	4	5	6	7	8	9	10	11	12	
B	Telstra monthly Charge	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
C	Revenue (A x B)	\$1.00	\$2.00	\$3.00	\$4.00	\$5.00	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00	\$11.00	\$12.00	\$78.00
D	Cost per example													\$78.00
E	Estimated Over / (Under) recovery													\$0.00

5.6 The above examples show that the effect on the monthly charge calculation of the ACCC demand assumption is that the ULLS and SSS specific costs are not fully

recovered. The Telstra demand assumption results in full recovery of the ULLS and SSS specific costs.

6. CONCLUSIONS

- 6.1 The ACCC assumes that the total year-end SIOs are paying the monthly charge for the entire year. In my opinion the ACCC assumption is inconsistent with growth of SIOs in any one year in that the total number of SIOs at the beginning of the year will be less than the SIOs at the end of the year.
- 6.2 In my opinion the ACCC assumption results in the over estimation of the total number of customers in any one year period paying the monthly charge. This has the effect that the calculated recovery using the aggregate of the year-end SIOs is materially less than the ULLS and SSS costs which are sought to be recovered.
- 6.3 It is my experience that, because of the type of distortion demonstrated in this Report, usual industry practice when modelling SIOs is to assume averages rather than end of year numbers.

Dated this 15th day of April 2005



Michael Potter

Director
Axiom Forensics Pty Ltd

Annexure 1
to
Report on Appropriateness of Demand
Assumptions
(Public Version)

Michael Potter

15 April 2005

MALLESONS STEPHEN JAQUES

Confidential & Privileged communication

8 April 2005

Mr Michael Potter
Director
Axiom Forensics Pty Ltd
Level 16
44 Market Street
Sydney NSW 2000
By email

Dear Michael

Demand methodology used for the purposes of calculating service specific costs of Spectrum Sharing Service (“SSS”) and Unconditioned Local Loop Service (“ULLS”)

We confirm that we act for Telstra Corporation Limited (“**Telstra**”).

The purpose of this letter is to:

- 1 confirm your retainer by us to prepare an expert report for Telstra’s use in respect of the appropriateness of Telstra’s demand methodology in the calculation of monthly service specific costs for ULLS and SSS; and
- 2 provide you with information and instructions to assist you in the preparation of that report.

General background

In September 2003 Telstra lodged an undertaking with the Australian Competition Consumer Commission (“**Commission**”) in respect of monthly charges for SSS (“**SSS Undertaking**”). The Commission rejected the SSS Undertaking in a final report dated August 2004 (“**Final Report**”), a copy of which can be found on the Commission’s website at <http://www.accc.gov.au/content/index.phtml/itemId/534075>.

On 13 December 2004 Telstra submitted undertakings in respect of the SSS and ULLS to the Commission (“**December 2004 Undertakings**”). We enclose:

- (a) Telstra’s submissions in support of the December 2004 Undertakings;
- (b) the Commission’s confidential discussion paper entitled “*Telstra’s Undertakings for the Line Sharing Service*” dated March 2005 (“**SSS Discussion Paper**”);

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MALLESONS STEPHEN JAQUES

- (c) the Commission's confidential discussion paper entitled "*Telstra's Undertakings for the Unconditioned Local Loop Service*" dated January 2005 ("**ULLS Discussion Paper**");
- (d) draft report prepared for the Commission by The Communication and Media Policy Institute University of Canberra and AAS Consulting Pty Ltd entitled "*Review of Telstra's ULLS-Specific Costs*" ("**draft ULLS Report**");
- (e) final report prepared for the Commission by The Communication and Media Policy Institute University of Canberra and AAS Consulting Pty Ltd entitled "*Review of Telstra's ULLS-Specific Costs*" ("**final ULLS Report**"); and
- (f) soft copies of the SSS and ULLS Specific Costs models ("**the Models**").

We advise that the demand used in the Models is as follows:

	SSS	ULLS
1999/00	"c-i-c"	"c-i-c"
2000/01	"c-i-c"	"c-i-c"
2001/02	"c-i-c"	"c-i-c"
2002/03	"c-i-c"	"c-i-c"
2003/04	"c-i-c"	"c-i-c"
2004/05	"c-i-c"	"c-i-c"
2005/06	"c-i-c"	"c-i-c"

Telstra's calculation of SSS and ULLS monthly specific costs

As set out in paragraph 10 of Annexure C of the ULLS Monthly Charges Submission and paragraph 9 of Annexure B of the SSS Monthly Charges Submission, Telstra has calculated the ULLS and SSS specific costs using the average of demand for those services in a particular year. The average is calculated by using a simple average of:

- (a) the services in operation ("**SIOs**") at the end of a given year; and
- (b) the SIOs at the end of that preceding financial year.

For example, the demand for SSS as at 30 June 2005 is forecast by Telstra to be "c-i-c" and as at 30 June 2006 to be "c-i-c". Therefore the demand figure for the period 30 June 2005 to 30 June 2006 used to calculate the SSS service specific costs is "c-i-c" + "c-i-c" divided by 2. This equals "c-i-c", which is the demand figure used by Telstra for 2005/06 to calculate the SSS service specific costs in the model.

MALLESONS STEPHEN JAQUES

The Commission's calculation of SSS specific costs

The Commission considers that Telstra's methodology is inappropriate and instead uses end of year SIOs to unitise costs. In that regard, we refer you to Appendix 3 of the Commission's Final Report, pages 19 and 20 of the SSS Discussion Paper and page 37 of the draft ULLS Report.

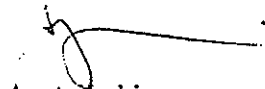
Expert Opinion

We request that you provide an expert report as to whether Telstra's approach to using average year SIOs in the calculation of monthly service specific costs per SIO is appropriate.

If there are any matters which you wish to discuss in relation to the expert report sought by Telstra, please do not hesitate to contact me, Chris Fox or Rebecca Nugent (9643 4410).

Thank you for your assistance.

Yours sincerely



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Christopher Fox
Partner
Direct line (61 3 9643 4116)

Annexure 2
to
Report on Appropriateness of Demand
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Michael Potter

15 April 2005

RESUME FOR MICHAEL POTTER

Qualifications / Memberships:

- Bachelor of Commerce, University of Western Australia.
- Associate member of the Institute of Chartered Accountants in Australia.
- Associate member of the Insolvency Practitioners Association of Australia
- Cert IV in Fraud Control (Investigations)
- Certified Fraud Examiner and former President of the NSW Chapter of the Association of Certified Fraud Examiners (United States).

Experience

Michael has been a chartered accountant since 1987 and has 13 years insolvency and litigation experience and for the past 7 years has specialised in the provision of forensic accounting services to his client's whilst a partner of Ferrier Hodgson in Sydney and has acted as independent expert in numerous litigation matters.

Prior to this Michael had significant experience in a large number of insolvency administrations involving all areas of insolvency including large number of litigation matters relating to recovery of preferences and creditor claims including the liquidation of Rothwells merchant bank.

2004 to present	Principal of Axiom Forensics
1998 to 2004	Six years specialist experience as director and partner in charge of the forensics division of Ferrier Hodgson
1985 to 1998	Thirteen years general insolvency at Ferrier Hodgson, Perth and Sydney

Particular Expertise - Forensic Accounting

- Expert testimony
- Litigation support including valuations, economic loss and damages assessments, contract disputes including costs, cost accounting, ACCC pricing disputes, copyright claims
- Fraud investigations and risk management
- Financial investigations including asset tracing, review of transactions, reconstruction of accounting records, franchisee revenue reporting, breaches of Corporations Act, insolvent trading.
- Insurance claims – fidelity, product liability

Recent Engagements

Matters in which Michael Potter has acted as expert include:

Industry	Type of Assignment	Special Issues
Telecommunications	Forensic-Litigation Support (expert accountants report)	Telecommunications Industry & ACCC regulatory accounting regime. Pricing principles for long distance telephony Costing methodologies
Telecommunications	Forensic - Financial Investigations	Testing of assumptions and pricing for broadband services used in an economic model for ACCC pricing dispute
Telecommunications and Pay TV	Forensic - Litigation Support (expert accountants report)	Assessment of damages claim Valuation methodologies Inter-relationships between various Telecommunications and Pay TV products
Telecommunications	Forensic-Litigation Support (expert accountants report)	Assessment of loss of profits damages claim Billing processes and related issues
Telecommunications	Forensic - Litigation Support (expert accountants report)	Assessment of damages claim concerning local and overseas operating and capital costs.
Telecommunications	Forensic - Litigation Support (expert accountants report)	Assessment of loss of profits and damages claim alleged to have occurred on termination of mobile dealers contract.
Telecommunications	Forensic - Financial Investigations	Consideration of pricing for isp carriage services between entities in a major international telecommunications group.
Telecommunications	Forensic - Financial Investigations	Report on prospects of loss being established for a retailer of broadband services against a wholesaler.
Insurance	Forensic - Financial Investigations	Leader of investigation team for the Australian Securities and Investments Commission. Examinations conducted. Issues of accounting, insolvency and breaches of director's duties.
Clothing and Textiles	Forensic - Financial Investigations	Investigation of insolvent trading and directors breach of duties for Australian Securities and Investments Commission. Included conduct of examinations.
Property	Forensic - Financial Investigations	Investigation of group transactions with related parties, insolvent trading and directors breach of duties for Australian Securities and Investments Commission. Included attendance at examinations.
Custodian and Funds Management.	Forensic - Financial Investigations	Investigation of internal controls and large number of derivatives transactions to identify whether any financial irregularities within a major international bank acting as superannuation fund custodian.

Industry	Type of Assignment	Special Issues
Funds Management	Forensic - Financial Investigations	Investigation of fund managers activities and breaches of directors duties.
Superannuation	Forensic - Financial Investigations	Investigation and expert report for Australian Securities and Investments Commission as to adequacy of disability payments.
Rail Transport	Forensic - Litigation Support (expert accountants report)	Investigation of manipulated costs claim in contract involving electronic systems for a number of projects for purposes of mediation.
Rail Transport	Forensic - Litigation Support (Report for mediator)	Independent investigation of costs claim pursuant to contract and report for parties in a mediation.
Gaming Technology	Forensic - Litigation Support (expert accountants report)	Independent investigation of costs claim pursuant to contract and report for parties in a mediation.
Resources / Mining	Forensic-Litigation Support (expert accountants report)	Assessment of damages claim for loss of royalties that led to settlement.
Maritime	Forensic-Litigation Support (expert accountants report)	Presentation of expert evidence in Court Assessment of damages claim concerning seized ship and cargo. Commercial and legal issues specific to Maritime Industry
Tobacco	Forensic - Litigation Support (expert accountants report)	Assessment of damages claims (three assignments) including expert testimony
Resources & Retail	Litigation Support Assessment of damages claim	Presentation of expert evidence in Court Accounting for contractual relationships Breaches of licensing agreements
Hotels	Litigation Support and fraud investigation	Investigation of claims of alleged fraudulent misrepresentation by large investment bank and management concerning accuracy of financial accounts relied upon by purchaser of a worldwide hotels marketing group.
Government	Fraud Investigation	Investigation for Australian Federal Police and Australian Taxation Office of alleged fraud by employee including overseas funds tracing and wealth analysis.
Retail - Jewellery	Fraud Investigation	Investigation and reporting for insurance recovery of stock misappropriation, false refunds and personal expenses obtained by state manager.
Wholesaling – Fruit and Vegetables	Litigation Support	Expert testimony and report on claimed loss of profits as a result of termination of supply agreement.
Computer Software	Litigation Support	Copyright issues - accounting for profits

Industry	Type of Assignment	Special Issues
		<p>Joint conference of experts and expert testimony</p> <p>Issues included costing and accounting methodologies</p>
Free to Air TV	Litigation Support	<p>Expert report on valuation issues</p> <p>Selection of valuation methodologies</p> <p>Assessment of economic conditions during late 80's early 90's</p> <p>Industry overview</p> <p>Investment issues</p>
Media Publishing	Litigation Support	<p>Report for use in litigation.</p> <p>Quantification of loss</p>
Retail – Ski and Leisure wear	Litigation Support	<p>Expert report on loss of profits due to closure of business arising from petrol site contamination</p>
Property	Litigation Support	<p>Expert testimony and reports on alleged frauds by shareholders and managers in real estate agency</p>
Fire Control Systems	Litigation Support	<p>Assessment of damages claim.</p> <p>Selection of valuation methodologies and discount rate, including calculation of loss on perpetuity</p>
Printing	Litigation Support	<p>Business valuation</p> <p>Review of financial accounts and accounting procedures</p>
Printing	Litigation Support	<p>Assessment of loss of profits arising from supply of equipment alleged to be defective</p>
Commercial property	Forensic- Fraud investigation	<p>Overseas investigation of frauds and recovery of real property in a joint venture.</p>
Education	Forensic- Fraud investigation	<p>Tracing of transactions</p> <p>Forensic IT techniques (discovery of duplicate accounting records)</p> <p>Asset recovery</p>
Insurance	Forensic- Fraud investigation	<p>Assessment of claims in a number of employee fraud matters for an insurer including debtors frauds, payroll and petty cash, kickbacks etc</p>
Pharmaceutical	Litigation Support	<p>Assessment of product liability claim and loss of profits for insurer</p>
Printing	Forensic- Fraud investigation	<p>Surprise "audit" of several franchisees to identify under reported revenues, unauthorised websites etc.</p>
Food Processing	Forensic- Fraud investigation	<p>Expert testimony on employee fraud</p> <p>Overseas transaction tracing</p>