

COMMERCE ACT 1986: BUSINESS ACQUISITION

SECTION 66: NOTICE SEEKING CLEARANCE

23 January 2004

The Registrar
Business Acquisitions and Authorisations
Commerce Commission
PO Box 2351
Wellington

Pursuant to s66(1) of the Commerce Act 1986 notice is hereby given seeking **clearance** of a proposed business acquisition.

PART I: TRANSACTION DETAILS

1 What is the business acquisition for which clearance is sought?
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- 1.1 Clearance is sought for Pacific Radiology Limited to acquire the radiology services business and assets of Wakefield Radiology Limited (Wakefield). Pacific Radiology Limited is part of the Pacific Radiology group of companies (Pacific), details of which are set out on page 5.
- 1.2 The assets to be acquired are all of the assets of Wakefield, including plant and equipment; inventory; leases of business premises; contractual arrangements relating to the business; and intellectual property rights but excluding:
 - (a) shares held by Wakefield in Wakefield Hospital Limited;
 - (b) receivables; and
 - (c) cash on hand or in bank accounts.
- 1.3 Pacific will also be making offers of employment to radiologists and other people employed by Wakefield.
- 1.4 A copy of the agreement for sale and purchase relating to the transaction is contained in Appendix 1. (Please note that this is confidential.)

2 Who is the person giving this notice?

2.1 This notice is given by:

Pacific Radiology Limited
291 Madras Street
Christchurch

Telephone: (03)374 9546

Facsimile: (03)374 9431

Attention: Tony Young

2.2 All correspondence and notices in respect of this application should be directed in the first instance to:

Chapman Tripp Sheffield Young
Level 35
ANZ Tower
23-29 Albert Street
Auckland

Telephone: (09) 357 9020

Facsimile: (09) 357 9099

Attention: Lindsey Jones

3 Confidentiality

3.1 Do you wish to request a confidentiality order for the fact of the proposed acquisition?

No, confidentiality is not sought for the fact of the proposed acquisition.

3.2 Do you wish to request a confidentiality order for specific information contained in or attached to the notice? If so, for how long? Why?

Confidentiality is sought in respect of the information deleted in the "Public Copy" of this Notice until Pacific confirms in writing to the Commission that the particular information is no longer confidential. Confidentiality is sought under section 100 of the Commerce Act 1986 and under section 9(2)(b) of the Official Information Act 1982 on the grounds that:

- (a) the information is commercially sensitive and contains valuable information which is confidential to the participants and their customers; and
- (b) disclosure of it is likely to give an unfair advantage to the participants' competitors and unreasonably prejudice the commercial positions of the participants and their customers.

4 Who are the participants (ie the parties involved)?

4.1 The Acquirer is:

Pacific Radiology Limited
291 Madras Street
Christchurch

Telephone: (03)374 9546
Facsimile: (03)374 9431

Attention: Tony Young / Irwin Horrocks

4.2 The Target is:

Wakefield Radiology Limited
99 Rintoul Street
Newtown
Wellington South

Telephone: (04) 801 0613
Facsimile: (04) 801 2636

Attention: Trevor Fitzjohn

4.3 All correspondence and notices to in respect of this application should be directed in first instance to:

Chapman Tripp
23-29 Albert Street
Auckland

Telephone: (09) 357 9020
Facsimile: (09) 357 9099

Attention: Lindsey Jones

5 Who is interconnected to or associated with each participant?

Acquirer group/associates:

- 5.1 Pacific Radiology Limited is 100% owned by Pacific Radiology Group Limited.
- 5.2 The shares in Pacific Radiology Group Limited are held, either individually or by the trustees of family trusts or holding companies set up by radiologists employed by companies in the Pacific Radiology group (Shareholder Radiologists). There are 20 such radiologists: 14 in Christchurch, 3 in Nelson and 3 in Wellington. None of those radiologists is beneficially, entitled to 10% or more of the shares in any other radiology company.
- 5.3 The shareholders of Pacific Radiology Group Limited, and their respective shareholdings, on completion of the acquisition of the business of Wakefield, are set out in Schedule 1.
- 5.4 Pacific Radiology Group Limited has four other subsidiaries being Christchurch Radiology Group Limited, Nelson Radiology Limited, Hutt Radiology Clinic Limited (now is a non-trading company) and Capital Radiology Limited (a non-trading shelf company). Christchurch Radiology Group Limited owns 68% of the shares in Canterbury Breast Care Limited which in turn owns 50% of the shares in Breast Screen South Limited.
- 5.5 Neither Pacific Radiology Group Limited nor any company in the group is beneficially entitled to 10% or more of the shares in any other company other than shares held on trust in companies established for name protection purposes.
- 5.6 The structure of the Pacific Radiology group is best illustrated by the diagram in Schedule 2.
- 5.7 The current structure of the Pacific Radiology group of companies resulted from a restructuring in March 2003 of Christchurch Radiology Group Limited (which had a number of clinics in Christchurch and a presence in Nelson through Nelson Radiology Limited) and the acquisition of Pacific Radiology Limited and Hutt Radiology Clinic Limited (which had clinics in the Hutt Valley area).

Target company group/associates

5.8 The shareholders of Wakefield are as follows:

Table 1
Shareholders of Wakefield Radiology Limited

Name	% shareholding
COTSILINIS, Sorato MARSHALL, John Livingston FITZJOHN, Trevor Paul as trustees of the Fitzjohn Family Trust	88
Braithwaite Holdings Limited	12

5.9 The shares in Braithwaite Holdings Limited are held by trustees of the family trust of Doug Braithwaite. Doug Braithwaite and Trevor Fitzjohn are both radiologists employed by Wakefield.

5.10 It is proposed that prior to settlement of the acquisition of Wakefield's business and assets by Pacific, the shares in Braithwaite Holdings will be sold to Trevor Fitzjohn.

5.11 In addition, on settlement of the transaction;

(a) Trevor Fitzjohn will acquire a 5.06% shareholding in Pacific Radiology Group Limited and will be employed by Pacific Radiology Limited as a radiologist, bringing him into the category of Shareholder Radiologist; and

(b) Doug Braithwaite will be employed by Pacific Radiology as a radiologist.

5.12 Following the sale of its business to Pacific, Wakefield will continue to hold 18,000 (less than 1%) shares in Wakefield Hospital Limited.

5.13 Wakefield does not own 10% or more of the shares in any other company and none of the shareholders of Wakefield is beneficially entitled to 10% or more of the shares in any other radiology company.

6 Does any participant, or any interconnected body corporate thereof, already have a beneficial interest in, or is it beneficially entitled to, any shares or other pecuniary interest in another participant?

No:

- (a) None of the companies in the Pacific Radiology group, nor any of the beneficial shareholders (ie the Shareholder Radiologists) in Pacific Radiology Group Limited, has a beneficial interest in, or is beneficially entitled to, any shares or other pecuniary interest in Wakefield;
- (b) none of the shareholders in Wakefield has a beneficial interest in, or is beneficially entitled to, any shares or other pecuniary interest in any company in the Pacific Radiology group.

7 Identify any links, formal or informal, between any participant/s including interconnected bodies corporate and other persons identified at paragraph 5 and its/their existing competitors in each market.

There are no links, formal or informal, between any participant/s including interconnected bodies corporate and other persons identified at paragraph 5 and its/their existing competitors in each market other than the following:

- (a) All of the Shareholder Radiologists are members of the Royal Australia and New Zealand College of Radiologists. Some are also members of the New Zealand Medical Association. One is also a member of the American College of Radiologists.
- (b) Each of Pacific's Shareholder Radiologists is subject to a restraint of trade which prevents him/her from setting up or being involved in any way with a competing practice (other than consulting work for District Health Boards) within a specified area of any of the clinics owned by the Pacific Radiology group of companies while employed by any of those companies. The restraint is for a period of 3 years following cessation of their employment or sale of their shares. Trevor Fitzjohn will be subject to a similar restraint on settlement of the transaction (see Schedule 2 of the Agreement for Sale and Purchase).
- (c) As noted at paragraph 5.11 above, it is intended that both Trevor Fitzjohn (who will also become a shareholder in Pacific Radiology Group Limited) and Doug Braithwaite will become employees of Pacific on settlement of the transaction.
- (d) Some of the Shareholder Radiologists also provide radiology services on a consulting basis to District Health Boards from time to time. For example:
 - ❑ The following shareholder radiologists are consultant radiologists for the Canterbury District Health Board: Andrew Lain; Andrew Slaven; Mark Coates; Richard Coates; Tony Goh;
 - ❑ The following shareholder radiologists are consultant radiologists for the Nelson Marlborough District Health Board: Luke Newnham; Stephen Busby; Chris Leaper;
 - ❑ The following shareholder radiologists are consultant radiologists for the Capital and District Health Board: Mark Leadbitter; Rodney Wu;
 - ❑ Trevor Fitzjohn is a consultant radiologist for Capital and Coast DHB and Wairarapa DHB (and following settlement of the transaction will continue to be);

- Doug Braithwaite also works for Capital and Coast Health (and following settlement of the transaction will continue to be).
- (e) Wakefield provides radiology services to Hutt Hospital (MRI inpatient services only), Masterton Hospital and BreastScreen Central.
- (f) Pacific radiologists provide consultant services to Capital and Coast Health and Breast Screen Central.
- (g) Private radiology practices may have arrangements with another competing private radiology practice where, if for any reason, services are unable to be provided for even a short period of time, the competing practice will provide those services so that patients can be accommodated with minimal fuss.

8 Do any directors of the 'acquirer' also hold directorships in any other companies which are involved in the markets in which the target company/business operates?

- 8.1 None of the directors of the companies in the Pacific Radiology group hold directorships in any other companies (other than companies in the Pacific Radiology group) which are involved in the provision of radiology services in the greater Wellington region.

9 What are the business activities of each participant?

Pacific

9.1 Pacific incorporates radiology practices in the following locations:

**Table 2
Locations of radiology clinics in the Pacific Radiology Group**

City	Company	Location
Christchurch	Christchurch Radiology Group Limited	<input type="checkbox"/> St Georges Radiology - 137 Leinster Road <input type="checkbox"/> Southern Cross Radiology - 129 Bealey Avenue <input type="checkbox"/> After Hours Radiology – Corner Bealey Avenue and Colombo Street <input type="checkbox"/> Cashmere Radiology – Princess Margaret Hospital, Cashmere Road <input type="checkbox"/> Canterbury Breastcare – St Georges Medical Centre, 249 Papanui Road
Nelson	Nelson Radiology Limited	<input type="checkbox"/> 211 Bridge Street
Hutt Valley	Pacific Radiology Limited	<input type="checkbox"/> 665 High St. Lower Hutt (opposite Hutt Hospital) <input type="checkbox"/> Queen Street, Upper Hutt
South Island	Breastscreen South Limited	<input type="checkbox"/> Mobile bus service

9.2 The table on the following page shows the particular radiology services provided by Pacific.

Wakefield

9.3 Wakefield has clinics in the Wellington region only, in the following locations:

**Table 3
Locations of Wakefield radiology clinics**

Area	Location
Newtown	<input type="checkbox"/> Wakefield Hospital (main clinic) <input type="checkbox"/> Southern Cross <input type="checkbox"/> A&E Clinic at Basin Reserve <input type="checkbox"/> Wellington Zoo (animals only)
Central	<input type="checkbox"/> Lambton Quay
Johnsonville	<input type="checkbox"/> Moorefield Rd
Wairarapa	<input type="checkbox"/> Masterton

9.4 The table on the following page shows the particular radiology services provided by Wakefield.

Table 4
Radiology Services provided by Pacific and Wakefield in the greater Wellington region

Procedure	Description of procedure	Pacific	Wakefield
Routine			
General radiology - plain x-ray film	Use of x-ray to penetrate the body and produce "shadows" of bones on photographic film.	Yes	Yes
Screening procedures	Demonstration of structures in the body using contrast agents with x-ray techniques. (These include barium enemas, venography, barium meals and diaphragm screenings.)	Yes	Yes
Mammography	A simple x-ray examination of the breast.	Yes	Yes
DEXA	A bone density test. A dual-energy beam of x-ray passes through the body and is measured. The technology is called Dual-Energy X-ray Absorptometry or DEXA.	Yes	Yes
Venography	Contrast agents are injected into a vein and used in conjunction with x-ray techniques.	Yes	Yes
Ultrasound	Ultrasound imaging is a method of producing images of the body through the use of high frequency soundwaves. Soundwaves are recorded and displayed as real time visual images.	Yes	Yes
Non-routine			
Computer assisted tomography (CAT) scans	A system which produces x-ray pictures as transverse (crosswise) slices of the body. This technology allows radiologists to see details of the brain, spine, liver or other internal organs not visible on regular x-ray films.	Yes	Yes
Magnetic Resonance Imaging (MRI scans)	Magnetic Resonance Imaging, or MRI, is the latest and most advanced method of diagnostic imaging. It combines a powerful magnet, radio waves and a sophisticated computer to create highly detailed anatomical images of the body.	No ¹	Yes
Nuclear medicine	Scintigraphy or 'nuclear medicine' provides the ability for the reliable, painless and efficient examination of the physiological functions in various parts of the body. It is most widely used for examinations of the bones, thyroid and kidneys. This is achieved by using medical radioisotopes to image various parts of the body. These images are collected by a device called a gamma camera and turned into scans.	No	Yes
Interventional radiology (includes musculoskeletal and breast biopsy services)	Using modern imaging techniques, radiologists are able to perform a range of procedures under local anaesthesia, without the need for surgical incisions or general anaesthesia. X-ray, Fluoroscopy, Ultrasound or CT Scanning may be utilised to guide interventional procedures such as needle biopsy and catheter placement.	Yes	Yes
Angiography	Angiography is a specialized area of x-ray usage where the images of blood vessels that take blood away from the heart (the arteries) or major veins in the abdomen are captured on to an x-ray camera.	No ²	Yes

¹ Pacific does provide these services at its Christchurch clinic.

² Pacific does provide these services at its Christchurch and Nelson clinics.

10 What are the reasons for the proposal and the intentions in respect of the acquired or merged business?

- 10.1 The key driver for Pacific's acquisition of Wakefield's radiology business is to address the shortage of skilled radiologists in the Wellington region. The acquisition will create an organisation similar to Pacific's Christchurch organisation which has been very successful in attracting highly skilled New Zealand radiologists back from overseas through an efficient co-operative type structure. This structure has resulted in larger combined purchasing power for expensive equipment which has further attracted the top radiology specialists.
- 10.2 Modern radiology is highly capital intensive. Pacific and Wakefield believe that, in New Zealand, the demands of modern radiology will only be met by large overseas radiology corporates (as in Australia) or by larger groupings of New Zealand radiologist shareholders.
- 10.3 New projects planned for the Wellington region (clinics, MRI's, PET scanners) require large amounts of capital. Following the acquisition of Wakefield's radiology practice, Pacific will have paid up capital and reserves on 1st April 2004 of in excess of [] with further shareholder or bank funding lines of []. Wakefield's latest balance sheet showed Capital and Reserves at []. Wakefield is not in a position to undertake further expansion without a new equity partner and cannot attract new young radiologists to the company as it would need them to put up large amounts of capital. It is Wakefield's preference to deal with its New Zealand radiologist colleagues rather than an Australian corporate.
- 10.4 Pacific adheres to the principle (similar to the Australian Radiology corporates) that a minimum of [] EBITDA is required for a modern radiology practice to sustain itself in terms of reinvestment in equipment. The present separate Hutt and Wakefield practices are not achieving this level. They require reorganisation with more efficient administrative practices and some initial capital funding. Stable future earnings gives security of employment to both the radiologists and their staff.
- 10.5 In addition, Pacific and Wakefield consider that Pacific's acquisition of Wakefield's radiology practice will result in a number of significant benefits not only for the shareholders and employees but for the wider Wellington community, in particular:
- improved on call access of radiologists for both the private and public sector;
 - pooled specialist knowledge for the benefit of the public and furthering radiologist education;
 - access to New Zealand's leading private sector radiologist training programme;

- ❑ better and more efficient management and administrative practices and access to leading quality assurance practices with highly established procedures, manuals and safety systems (Pacific is considered a leader in these aspects of radiology practice);
- ❑ access to greater purchasing power with suppliers to place the merged entity on a more competitive footing with the New Zealand operations of the very large Australian corporates; and
- ❑ []³

³ []

PART II: IDENTIFICATION OF MARKETS AFFECTED

11 **Are there any markets in which there would be an aggregation of business activities as a result of the proposed acquisition?**

Please identify for each market:

- **the product(s), functional level, geographical area and (where relevant) timeframe;**
- **the specific parties involved;**
- **the relationship of those parties to the acquirer or the target company as the case may be.**

Conclusion on market definition

11.1 Pacific considers that the appropriate market definitions against which to analyse the competitive impact of the proposal are:

- (a) the markets in the Wellington City & suburbs, Wellington North, Hutt Valley, Porirua, Kapiti Coast and Masterton areas for the provision of routine radiology services and facilities; and
- (b) the market in the greater Wellington region for the provision of non-routine radiology services and facilities; OR

a series of separate markets in the greater Wellington region for the provision of the following non-routine radiology services and facilities:

- Nuclear medicine
- Computer assisted tomography (CAT) scans
- Interventional Radiology
- Magnetic Resonance Imaging (MRI scans)
- Angiography

11.2 These market definitions are not entirely consistent with the Commission's conclusion in Decision 347 (the Fulford decision) where it granted clearance for Fulford Radiology Services Limited to acquire certain of the radiology assets of Taranaki Healthcare Limited and Fulford Radiology Limited.

11.3 In that decision, the Commission found the relevant markets to be markets for:

- (a) routine radiology services and facilities in the Taranaki region; and
- (b) a wider North Island market for non-routine radiology services.

- 11.4 The features of the Wellington geography and the wider range of non-routine radiology services provided in Wellington compared with Taranaki lead to the conclusion that the geographic boundaries of the markets are narrower in this instance. Further discussion of this aspect of market definition is set out below.

Background to the Health Sector

- 11.5 As the Commission recognised in the Fulford Radiology decision, an understanding of the structure of the health sector is important to the assessment of market definition. In that decision, the Commerce Commission provided a concise background and overview of the health sector context in which radiology services were provided in 1999 in the following terms:

Overview

24. Prior to the 1993 health reforms, most hospital-based secondary and tertiary healthcare services were administered by 14 Area Health Boards (AHBs). These had been formed gradually from the amalgamation of the Hospital Boards during the 1980s. The AHBs were responsible for purchasing and providing healthcare and disability services for the populations in their catchment areas.
25. In 1993, the Government introduced a programme of major healthcare reforms. The main feature of the reforms was the splitting of the funding of services and their provision. Four Regional Health Authorities (RHAs) were established to purchase personal health, disability support and public health services competitively, and 23 Crown Health Enterprises (CHEs) based around major hospitals were established to provide healthcare and disability services.
26. In 1996, the Coalition Government announced that it was "...committed to publicly funded health care that encourages cooperation and collaboration rather than competition between health and disability services."⁴ To this end, the four RHAs were replaced by the Transitional Health Authority (THA) in April 1997.⁵ The THA became the Health Funding Authority (HFA) in January 1998.
27. The HFA is required to contract with healthcare providers for the supply of a range of services with the objective of maximising the health status of the local populations within available funding.
28. From 1 July 1998, the CHEs were renamed Hospitals and Health Services (HHSs). The requirement that they earn a profit was removed.
29. The Minister of Health has overall responsibility for the public health system, including the determination of health priorities and funding levels. The Ministry of Health provides policy advice to the Minister of Health, monitors the HFA's performance, administers regulations, and provides the link between the Minister and the HFA. The National Health Committee (NHC) advises the Minister on the types and relative priorities of services that should be publicly funded...

⁴ The Coalition Agreement, 1996, p.34.

⁵ The Amalgamation of the RHA's into a single agency was effected by an Order in Council.

HFA Purchasing Strategy

30. The HFA has developed a framework for negotiating prices with HHSs, and for determining volumes and service requirements for publicly funded healthcare services.
 31. One of the objectives of the HFA is to achieve a standardised pricing policy for health and disability services throughout New Zealand. To this end the HFA has been comparing prices for services delivered by HHSs and developing a national price for each of those services. The 1998/99 year is the first year in which consistent prices have been paid by the HFA to all HHSs for a range of services they provide. The HFA has developed a national price for most of the services it purchases. The ability of HHSs to negotiate on price is substantially constrained by this national pricing policy.
 32. There are additional payments available to HHSs from the HFA in the form of rural and tertiary adjusters. These compensate HHSs for the higher costs associated with providing secondary healthcare services in rural areas, and with providing tertiary level services.
 33. In its contracts with HHSs, the HFA also specifies the sites at which services will be provided and service volumes. For example, in terms of its contract with THL, the HFA requires THL to provide services at Stratford and Hawera hospitals in addition to its main site at New Plymouth. The HFA also determines, in conjunction with HHSs, the volume of services to be delivered at each site.
- 11.6 Since the Fulford decision, there have been further changes in the health sector that impact on the manner in which health services, including radiology services, are purchased.
- 11.7 In 2000 the Government initiated changes that amalgamated the purchase and provision of services in the same organisations and decentralised decision-making to community-focused Crown Entities known as District Health Boards (DHBs).
- 11.8 A total of 21 DHBs now manage the provision of public health and disability services for their particular regions. These DHBs perform some of the purchasing functions that the Health Funding Authorities were previously responsible for, as well as providing health and disability services. The Minister of Health retains overall responsibility for the New Zealand public health and disability system and is able to monitor the functioning of DHBs by the reporting requirements imposed on them as Crown Entities.
- 11.9 To receive government funds, DHBs are required to enter into funding agreements with the Ministry of Health. These agreements allow the Ministry to specify reporting requirements and a minimum level of services required to be delivered within the funding provided.
- 11.10 DHBs are then required to decide on the mix, level and quality of public health and disability services to be provided in the region. In doing so they

are to be mindful of the specific needs and demographics of the community they serve.

- 11.11 DHBs directly provide some services but also enter into agreements with other providers for the delivery of some health and disability services. Generally DHBs directly provide secondary and tertiary levels of healthcare through the administration of public hospitals, while the majority of primary healthcare is delivered by other providers.
- 11.12 DHBs commonly enter into agreements with General Practitioners, Maori and Pacific Island groups, pharmacies, midwives, laboratories, dental services and mental health providers. These other providers usually have some freedom in how they deliver services within the constraints of any funding agreement with a DHB, statutory restrictions and other restrictions imposed by the Ministry of Health.
- 11.13 Traditionally the funding of other service providers by DHBs has been on a fee for service basis. However, there is an increasing move toward funding being provided on a population based funding basis. This is evidenced by the increasing number of Primary Health Organisations (PHOs) coming into existence which receive funding from a DHB based on the number of patients enrolled with the PHO and the demographics of those patients, rather than the number of patient visits to the PHO members.
- 11.14 A PHO is a not for profit entity that provides ongoing first-line health services to persons enrolled with that PHO. A PHO will generally be made up of a group of primary health providers such as general practitioners, nurses, community workers and health educators who are paid for their services by the PHO. Persons are enrolled with a PHO if they intend to use one of the PHO's providers as their usual provider of health services. A person is only able to be enrolled with one PHO at any one time.
- 11.15 PHOs are required to contract with their local DHB. In return for the PHO's contracted services the DHB provides the majority of the PHO's funding. PHOs are unique in that they receive a set level of DHB funding regardless of the number of times enrolled patients actually utilise the PHO's services. DHB funding is dictated by the number of persons enrolled in the PHO and the demographics of the population the PHO serves. A PHO may also receive funding from other sources including ACC, enrolled patients, private insurers and other PHOs. There is no requirement for all primary health providers to become members of a PHO and many such providers still receive DHB funding calculated on the more traditional basis of the number of patient treatments.
- 11.16 Currently other publicly funded services that are not considered first level are funded separately from the PHO. But there is no impediment to a DHB contracting with a PHO to manage services such as laboratory, pharmacy and radiology services in addition to the traditional PHO services of primary health consultations and health education.

11.17 DHBs and other health and disability service providers do not receive all their funding from one source. DHBs will receive ACC funding independent of the Ministry of Health. Other service providers such as General Practitioners receive funding from the Ministry of Health (via the DHB), ACC, private fee paying users, and private health insurers.

Radiology Services

11.18 In the Fulford Radiology decision, the Commission outlined radiology services in the following terms:

34. Radiology services incorporate a variety of procedures which can be provided in a specialist unit at a hospital, a medical clinic, or in some instances, a mobile clinic. The principal radiology services are as follows:

- plain film x-ray;
- ultrasound;
- screening procedures, including barium studies and arthrography;
- mammography;
- CAT scans;
- angiography and interventional radiology;
- MRI scans; and
- nuclear medicine.

35. Radiology services are carried out in New Zealand by both HHSs and private providers. In most major cities, there is usually a mixture of one public and one or more private radiology providers, while smaller towns are usually served by one operator (normally the local public hospital). The range of radiology services offered by each provider will vary depending on the scale and nature of the operation, the population base, and various other factors.

36. ...

37. With advances in technology, it is now possible for radiology service providers to establish a satellite clinic in a remote location, lease or own the appropriate facilities, hire a radiographer to take and develop the images, and then through either a modem or courier, transmit the images to a central facility where radiologists can analyse it and report back to the originating source. For example, Christchurch Radiology Group carries out various radiology services for Grey Hospital at Greymouth through these so-called teleradiology services.

38. The delivery of radiology services is characterised by a complex set of interrelationships involving consumers, referrers, providers and purchasers. ..

39. For acute admissions, a patient is normally admitted through an emergency department of a public hospital, and might receive radiology services as part of a wider episode of care (eg orthopaedic surgery). Similarly, elective inpatient admissions at a public hospital may have radiology procedures provided as part of a wider episode of care. In both cases, funding for radiology services is provided by the HFA normally as part of a specific output (eg hip replacement operation).

The funding also includes staff, accommodation, laboratory and other costs associated with providing the specific service.

40. The provision of ACC acute services is subject to a Ministerial directive which prevents ACC from purchasing acute care services directly itself. The ACC does however, provide bulk funding to the Crown for most of the acute services which it requires, which is then disbursed through the Ministry of Health to the HFA. The Crown funds ACC for acute services covered by the non-earners' account.
41. ACC elective surgery (including surgery incorporating a radiology component) is contracted for by the ACC. In addition, there is provision for a fee-for-service payment to be made by the ACC where the radiology services are provided as a discrete activity (eg as a follow-up to orthopaedic surgery).
42. Ambulatory or outpatients who require radiology services must visit a GP, specialist or some other primary provider (eg a midwife) before they can be referred to a radiology clinic. In the Taranaki district, it has been customary for a GP, or some other primary referral agent, to refer to Fulford those patients who have private insurance or are covered by ACC, or are prepared to pay themselves. The balance of patients are generally referred to one of THL's hospitals as an inpatient or outpatient. The HFA provides the funding for radiology for most inpatient services as part of its funding for procedures, while primary-referred radiology services are funded as part of an outpatient attendance, or are bulk funded.
43. Until recently, all primary-referred ACC work has been confined to private radiology providers. This has been provided under a fee-for-service payment in terms of the Accident Compensation (Radiologists) Costs Regulations 1990 (the Regulations). The Regulations incorporate a schedule which prescribes the fees by which ACC will reimburse private radiologist for ACC injury work as a contribution to their costs. In addition radiologists can charge a co-payment for such work. In practice, the decision on whether or not a co-payment is charged rests with the provider. The Commission's inquiries reveal that in some cases radiologists impose a co-payment, or apply a part-charge for certain radiology services, while in other cases they do not impose any co-payment.
44. The ACC advises that, until quite recently, the Regulations prevented HHSs from claiming reimbursement for radiology services covered by the Regulations. However, following recent changes to its policy, the ACC invited all HHSs to contract for services, and many have entered into such contracts.

11.19 The manner in which radiology providers are funded has not changed significantly since the Fulford decision in 1999. Public and private providers both compete for public and private funding.

Public

11.20 Public funding for radiology services comes from DHBs, Health Benefits Limited and, in the Wellington region, the PHOs, Wellington Independent Practice Association (WIPA) in central Wellington and Kowhai Health in the Hutt Valley.

- 11.21 Health Benefits Limited is a government agency set up to administer certain benefits. Benefits which are administered to radiology providers are the radiological services benefit and the maternity benefit.
- 11.22 WIPA and Kowhai Health contract with the DHBs (Capital & Coast and Hutt respectively) and with other health funders to provide a range of primary care services to the residents of its district. WIPA's and Kowhai's members are a wide range of health services providers but a majority are GPs. WIPA in turn contracts with radiology providers, both public hospitals and private providers, to provide services to patients.
- 11.23 Private providers also receive funding from public hospitals for patients that are referred on due to a lack of services at the hospital or capacity constraints.

Private

- 11.24 ACC provides the bulk of the private funding for radiology services. For services termed "high-tech" by the ACC (roughly equivalent to non-routine services), the decision as to which radiology provider the patient will attend is, at present, made by the patient's case manager. This provider will generally be the provider that the referrer (eg the GP or specialist) has recommended.
- 11.25 For "low-tech" procedures (roughly equivalent to non-routine services), patients tend to go to radiologists referred by their GP or specialist but are not obliged to do so.
- 11.26 Other funding for private radiology services comes directly from patients or their medical insurance companies.

Product and function market

- 11.27 In the Fulford Decision, the Commission made the following observations about product and function markets:
52. Radiology services comprise a range of procedures which, for the most part, are unlikely to be regarded by consumers or suppliers as substitutable for one another. They range from routine examinations, such as plain film x-rays, ultra sound and mammography, through to more complex and higher level services, such as nuclear medicine and MRI scans.
53. Generally speaking, routine work involves a relatively low level of technology, is carried out on relatively inexpensive equipment, and involves staffing with standard qualifications. In contrast, non-routine work is carried out on expensive equipment, requires more highly qualified staff, and is more technologically advanced. However, there is nothing to restrict a provider from supplying the full range of services subject to attracting a sufficient funding and customer base.
54. In the main, radiology services comprise an input into a wider episode of care. In relation to inpatient care, there are only a limited number of situations in which radiology services are purchased as a discrete output...

55. ...

56. From the demand perspective, it could be argued that there are separate markets for each specific service, because each is generally non-substitutable with the others. However, because of the interaction between the purchasing and provision patterns of healthcare services on the supply side, a wider definition is considered more appropriate. There appears to be strong complementarities between the provision of many radiology services, such that there are likely to be economies of scale and scope in providing them through a single organisation.

11.28 Pacific agrees with the above observations and that, at least with respect to routine radiology services, it remains appropriate to consider the impact of the acquisition of Wakefield by Pacific from the perspective of a market comprising a bundle of routine radiology services.

11.29 In relation to non-routine radiology services, the position is somewhat different. While Pacific and Wakefield offer some of the same non-routine radiology services, Wakefield provides a more extensive range – as indicated in the following table:

Table 5
Non-routine radiology services

	Pacific	Wakefield
Computer assisted tomography (CAT) scans	Yes	Yes
Magnetic Resonance Imaging (MRI scans)	No	Yes
Nuclear medicine	No	Yes
Interventional radiology	Yes	Yes
Angiography	No	Yes

11.30 The only non-routine services provided in the Wellington region by both Pacific and Wakefield are CAT scans and interventional radiology.

11.31 While some of the skills and business resources required to provide the above services are common to all the services, each requires quite different specialist skills and equipment. Indeed, each of the above categories can be further subdivided into specialist areas requiring different skills. For example MRI can be divided into several specialist areas: neuro axis, musculoskeletal and abdominal. Each radiologist may not have expertise in each area. For example, Trevor Fitzjohn has expertise in neuro axis, but not musculoskeletal.

11.32 Given these circumstances, and on the basis that relevant markets are those which shed light on the scope for the exercise of market power brought about by an acquisition, Pacific considers that the appropriate product/service markets against which to conduct the analysis are:

- (a) the market for the provision of routine radiology services;
- (b) a series of separate markets for the provision of the following non-routine radiology services:
 - ❑ Computer assisted tomography (CAT) scans
 - ❑ Magnetic Resonance Imaging (MRI scans)
 - ❑ Nuclear medicine
 - ❑ Interventional radiology
 - ❑ Angiography

Public/private

11.33 Consistent with the Commission's considerations in the Fulford Decision, consideration is given here to whether there have been any changes within the health sector, and to the basis on which radiology services are funded, that would alter the Commission's conclusion in the Fulford Decision that it is appropriate to include private and publicly funded radiology services in the same market.

11.34 The Commission reached that conclusion despite the fact that Taranaki Healthcare derived most of its revenue from public funding while Fulford Radiology Limited derived most of its revenue from private insurance and ACC fee-for-service work. The Commission's reasoning was essentially that:

- (a) there were no restrictions on either radiology company preventing it obtaining private or publicly funded radiology work; and
- (b) on the supply side, the same radiologists provide the services regardless of whether it is funded publicly or privately.

11.35 However, subsequently, in Decision 449 (where the Commission granted clearance for The Ascot Hospital and Clinics Limited to acquire Mercy Hospital Auckland Limited) the Commission considered it "appropriate to define separate markets for publicly and privately funded elective surgical work."

11.36 The Commission reached this view on the basis that while private hospitals are directly competing with public hospitals for publicly funded work, only a small amount of privately funded work is undertaken in public hospitals. The Commission concluded that for publicly funded operations, public and private institutions are in the same market, whereas, for privately funded operations this is not the case.

11.37 The Commerce Commission commented that the separation of the markets was appropriate because "...in the three years since Decision 331 (where the Commission gave clearance for the merger of two geographically separated public hospitals) health policy has shifted away from that blurring with the current policy discouraging the carrying out of private work in public hospitals." Despite finding it appropriate to define separate markets for publicly and privately funded elective surgical work, the Commerce Commission still noted that the public system will have some influence on private provision.

11.38 Pacific does not consider that the rationale for the distinction between publicly and privately funded elective surgical work applies in relation to the provision of radiology services and facilities for the following reasons:

- (a) patients are referred to private and public radiology clinics by the same set of referrers;
- (b) the radiology services provided at private radiology clinics are the same as those provided at public hospitals;
- (c) the same radiologists provide the services regardless of whether they are funded publicly or privately;
- (d) private and public providers compete for both private and public funding from the same sources.

11.39 Pacific estimates that the percentage of funding for routine radiology services in the Wellington area from these various sources is as follows:

Table 6
Funding of routine radiology services in the greater Wellington region

	Source of funding	% of routine services
Public	WIPA and Kowhai Health	14%
	Health Benefits Limited	6%
	DHBs (public hospital contracts & salaries)	7%
Private	ACC	33 %
	Private medical insurance	25 %
	Patients funding	15 %
	TOTAL	100%

Source of estimates: Pacific Radiology and Wakefield management.

Table 7
Funding of non-routine radiology services in the greater Wellington region

	Source of funding	% of non-routine services
Public	WIPA and Kowhai Health	3%
	Health Benefits Limited	2%
	DHBs (public hospital contract & salaries)	7%
Private	ACC	58%
	Private medical insurance	25%
	Patients funding	5%
	TOTAL	100%

Source of estimates: Pacific Radiology and Wakefield management.

11.40 Given all of the above, Pacific is of the view that it is appropriate to consider private and publicly funded radiology services within the same market when considering the implications of this acquisition on competition.

Acute/elective

11.41 In the Fulford decision, the Commission explored whether there was a need to distinguish between acute and elective procedures. The Commission recognised that there are aspects common to the provision of both services (eg clinical staff and facilities) but that there is a difference in the timeframes over which the services may be delivered. Acute services are required urgently and there is little or no control over their volume, whereas elective services can be delayed.

11.42 Both elective and acute services are undertaken by most public hospitals. Many private radiology clinics also provide both elective and acute services, although the latter is less common. Examples of private radiology clinics providing acute services, include the following:

- ❑ Wakefield has a 24 hour radiology clinic located at the Wellington Accident & Urgent Medical Centre. This clinic caters primarily for the acute routine x-ray work generated by the GPs who operate the Medical Centre facility. Christchurch Radiology Group also provides a 24 hour radiology facility in Christchurch.
- ❑ Many private radiology providers are required to provide acute services under their contracts with public hospitals. In Christchurch for example, Pacific provides radiologists under contract to the DHB to cover acute on-call for interventional, paediatric and neonatal radiology.
- ❑ Pacific provides an on-call service for its DHB contracts with Timaru, Greymouth and Wairau hospitals by reporting acute cases using teleradiology.

- ❑ Pacific provides acute procedures to GP and private specialist referred cases (for example, for fractures, abdominal pain, threatened miscarriages etc) and cases from private hospitals which may include acute post-operative complications. These acute procedures are covered both through the on call roster and the Independent Practitioners Associations 24 hour A & E Clinic.
- ❑ A number of providers in Auckland provide acute services through Accident & Emergency clinics.

11.43 Pacific considers that it remains appropriate that acute and elective procedures should be considered to be in the same market.

Services and facilities

11.44 It is recognised that the provision of radiology services and radiology facilities are two separate functions. There are a few instances where expensive radiology equipment with relatively low throughput (for example MRI or CAT scanners) are leased out on a time basis to other radiologists, allowing for the development of a service that would otherwise not be economic. For example:

- ❑ Wakefield leases operating time in the Wakefield Hospital angiographic laboratory;
- ❑ Pacific understands that the MRI scanner at Auckland Hospital is owned by Auckland Radiology Group but effectively leased to the hospital;
- ❑ the CT scanner owned by Nelson hospital is leased to Nelson Radiology Limited for private cases;
- ❑ Wakefield's Mobile Image Intensifier at Southern Cross Hospital is, in effect, leased by Wakefield to Southern Cross Hospital;
- ❑ flouroscopy rooms at Pacific's St Georges clinic in Christchurch and Wakefield's Southern Cross Radiology are both leased out to different groups of doctors, including Neurosurgeons, Urologists and Pain Management Specialists.

11.45 Although in principle, the provision of services and facilities are separate functions, in practice, for the most part, other than the relatively limited number of circumstances, services and facilities are provided by the same provider as part of the same service. Accordingly, for the purposes of this analysis, it is not considered necessary to distinguish between them.

Geographic

11.46 In the Fulford Decision, the Commerce Commission defined 2 separate geographic markets being:

- (a) the provision of routine radiology services and facilities in the Taranaki region; and
- (b) the provision of non-routine radiology services and facilities in the North Island.

11.47 Factors relevant to this conclusion were:

- (a) costs of travelling to obtain services and the convenience of travelling to a local facility;
- (b) availability of necessary services, facilities and specialists;
- (c) referral patterns of GPs and other primary healthcare providers have a major influence in determining what specialist and facility the patient is referred to; and
- (d) third party purchasers exercise a major role in influencing the geographic location and facility in which a patient will receive treatment.

11.48 The above factors remain the relevant considerations in determining the geographic boundaries of the markets for radiology services and facilities. Applying these factors to the Wellington region gives rise to different conclusions on the geographical boundaries of the market from those reached in the Fulford Decision in relation to Taranaki.

Routine

11.49 In the greater Wellington region, patients rarely travel outside their immediate urban area for routine treatment. The Wellington and Hutt urban areas are quite separate, divided by the harbour and only linked by the Hutt motorway.

11.50 The following table illustrates the catchment areas, for routine radiology services, of the various radiology clinics in the Wellington region:

Table 8
Catchment area for routine radiology services in Wellington region

Radiology facility	Catchment area
Wakefield Radiology <ul style="list-style-type: none"> ▪ Newtown & Lambton Quay clinics; ▪ Wellington A & E Clinic at Basin Reserve, Newtown ▪ Southern Cross Hospital – Hanson St, Newtown Wellington Radiology ⁶ - Kelvin Chambers, The Terrace Wellington Hospital (Capital & Coast DHB)	Wellington City and its suburbs
Wakefield Radiology – Johnsonville clinic Wellington Radiology – Bowen Hospital (Crofton Downs)	Wellington North (Johnsonville/Newlands, Tawa, Crofton Downs)
Kenepuru Hospital (Capital & Coast DHB) Wellington Radiology – Central Porirua Clinic	Porirua
Pacific Radiology – Upper Hutt and Lower Hutt Clinics Hutt Hospital (Hutt DHB)	Hutt Valley
Kapiti Radiology	Kapiti Coast
Wakefield Radiology – Masterton clinic Masterton Hospital (Wairarapa DHB)	Wairarapa Masterton

11.51 For routine radiology services, it is appropriate to segment the greater Wellington region into a series of quite separate geographic markets, namely

- (a) Wellington City & suburbs
- (b) Wellington North (Johnsonville/Newlands, Tawa, Crofton Downs)
- (c) Hutt Valley
- (d) Porirua
- (e) Kapiti Coast
- (f) Masterton

⁶ Also known as Bowen Radiology.

11.52 Pacific's clinics in the Wellington region are located in the Hutt Valley and Wakefield's clinics are located in Wellington City, Johnsonville and Wairarapa. Accordingly, there is no aggregation of activity between Pacific and Wakefield in relation to routine radiology services.

Non-routine

11.53 Patients are more likely to travel outside their urban area for non-routine procedures.

11.54 Specialists tend to refer patients to radiology providers if they have a close clinical relationship as often there is further knowledge to be gained, in addition to the written report and films, through oral discussion between the referrer and radiologist. These relationships tend to be geographically based. There is little movement between the Wellington and Hutt Valley areas but more significant movement in the Kapiti/Porirua/Wellington corridor.

11.55 However, if a particular procedure is available within the patient's particular geographic area, the patient is less likely to travel outside the area, unless the services are required urgently and the local provider cannot meet the requisite timeframe. For example, MRI and nuclear medicine is not available locally in the Hutt Valley so patients have to travel into Wellington City.

11.56 The geographic boundaries of a "non-routine" market will therefore vary depending on the nature of the procedure.

11.57 However, as a full range of non-routine radiology services is available in the greater Wellington region, patients tend not to travel outside this area for non-routine treatment.

11.58 Patients residing outside of Wellington may be referred to Wellington radiologists for some non-routine radiology services. These patients may come from the central and lower North Island and the Nelson/Marlborough region, depending on the nature of the procedure. Patients from Taranaki and the Waikato north are more likely to travel to Auckland⁷. Patients from the Nelson Marlborough region also have the option of travelling to Christchurch.

11.59 Taking all this into account, Pacific is therefore of the view that the appropriate geographic market for non-routine radiology services is, in this instance, the greater Wellington region. The applicant recognises that this is a narrower market definition than that adopted by the Commission in Decision 347.

⁷ Pacific and Wakefield estimate that less than 1% of patients who receive radiology services in Wellington come from the Palmerston North area.

Summary

11.60 In summary, Pacific considers that the appropriate market definitions against which to consider the competition implications of its acquisition of the business of Wakefield are:

- (a) **Product and functional markets:** separate product markets (in each instance including private and publicly funded services and acute and elective procedures) for:
 - ❑ routine radiology services and facilities;
 - ❑ non-routine radiology services and facilities – OR separate markets for the specific procedures;

- (b) **Geographic markets:** separate geographic markets in:
 - ❑ Wellington City & suburbs, Wellington North, Hutt Valley, Porirua, Kapiti Coast and Masterton areas; and
 - ❑ the greater Wellington region for non-routine radiology services and facilities.

Differentiated Product Markets

12 **Please indicate whether the products in each market identified in question 11 are standardised (buyers make their purchases largely on the basis of price) or differentiated (buyers make their purchases largely on the basis of product characteristics as well as price).**

12.1 Radiology services are, within each individual procedure largely homogeneous. Some radiology practices will endeavour to differentiate themselves by means of such things as IANZ accreditation, higher staffing levels to give patients more individual attention, equipment quality, office systems etc. These factors are integral to the actual radiology procedure and do not give rise to "product differentiation".

13 **For differentiated product markets:**

13.1 **Please indicate the principle characteristics of products that cause them to be differentiated one from another.**

13.2 **To what extent does product differentiation lead firms to tailor and market their products to particular buyer groups or market niches?**

13.3 **Of the various products in the market, which are close substitutes for the products of the proposed combined entity? - which are more distant substitutes?**

13.4 **Given the level of product differentiation, to what extent do you consider that the merged entity would be constrained in its actions by the presence of other suppliers in the market(s) affected?**

Not applicable

Vertical Integration

14 Will the proposal result in vertical integration between firms involved at different functional levels

- 14.1 No, the proposal will not result in vertical integration between firms involved at different functional levels.
- 14.2 Neither Pacific nor Wakefield (or any interconnected or associated persons) are engaged at different functional levels of the radiology services markets.

- 15 **In respect of each market identified in questions 11 and/or 14 identify briefly:**
- **all proposed acquisitions of assets of a business or shares involving either participant (or any interconnected body corporate thereof) notified to the Commission in the last three years and, in each case,**
 - **the outcome of the notification (eg cleared, authorised, declined, withdrawn)**
 - **whether the proposed acquisition has occurred.**
 - **any other acquisition of assets of a business or shares which either participant (or any interconnected body corporate) has undertaken in the last three years.**

- 15.1 Neither Pacific nor Wakefield has notified any proposed acquisition of assets of a radiology business or shares in a radiology services company to the Commission in the last three years.
- 15.2 In March/April 2002 Pacific Radiology Group Limited acquired Pacific Radiology Limited and Hutt Radiology Clinic Limited which between them had 3 clinics in the Hutt Valley area. Pacific Group has closed 1 of these clinics (as a result of two partners retiring) and kept the clinic at 665 High St Lower Hutt (opposite Hutt Hospital) and the smaller clinic in Upper Hutt. Up until this point, Pacific Group had no involvement in the provision of radiology services and facilities in the Wellington region.
- 15.3 Wakefield has not undertaken any acquisition of assets of a radiology business or shares in a radiology services in the last three years.

PART III: CONSTRAINTS ON MARKET POWER BY EXISTING COMPETITION

16 Existing Competitors: In the market or markets, who are the suppliers of competing products, including imports?

Routine Radiology Services

- 16.1 Table 9 on the following page lists the various providers of routine radiology services and facilities in the greater Wellington region together with their estimated shares of the greater Wellington market for routine radiology.
- 16.2 This table does, however, give a misleading picture of the impact of the acquisition of Wakefield by Pacific because in practice, by virtue of their geographical locations, there is virtually no competition between Pacific and Wakefield in routine radiology services. There is virtually no movement of patients across the Hutt motorway separating the two different urban areas.
- 16.3 Wellington Radiology and Kapiti Radiology have increased the number of patients serviced in recent times due to the increased funding from WIPA over the last three years. Neither has increased its range of facilities into the non-routine area but there is room for further development of non-routine services and facilities in their two areas. Wellington Hospital and Hutt Hospital have also been increasing their market share through WIPA funding.

Non-routine Radiology Services

- 16.4 Table 10, following, lists the various providers of non-routine radiology services and facilities in the greater Wellington region with estimates of their market shares for each individual procedure. Estimated shares of the total spend on non-routine radiology in the greater Wellington region is set out in Table 11.

Table 9
Suppliers of routine radiology services in the greater Wellington region

Location	Provider	Owner	Estimated share total Wellington market	
			\$m	%
Wellington City & suburbs	Wellington Public Hospital	Capital & Coast DHB	[]	[]
	Wakefield Radiology	Privately owned	[]	[]
	Wellington Radiology	Drs Rodney Allen and John Matthews	[]	[]
Hutt Valley	Breastscreen Central ⁸	Hutt DHB	[]	[]
	Hutt Hospital	Hutt DHB	[]	[]
	Pacific Radiology	Privately owned by Shareholder Radiologists	[]	[]
Wellington North	Wellington Radiology ⁹	Drs Rodney Allen and John Matthews	[]	[]
	Wakefield Radiology	Privately owned	[]	[]
Porirua	Kenepuru Hospital	Capital & Coast DHB (includes Paraparaumu Clinic)	[]	[]
	Wellington Radiology	Privately owned	[]	[]
Kapiti	Kapiti Radiology	James Wellwood	[]	[]
Masterton	Wakefield Radiology	Privately owned	[]	[]
	Masterton Hospital	Wairarapa DHB	[]	[]
TOTAL			[]	100%

Source of estimates: Pacific Radiology and Wakefield management

⁸ Breastscreen Central covers all areas on this table

⁹ Bowen Radiology has a long term lease as an independent contractor on the Bowen Hospital site. Bowen Hospital is owned by Wakefield Hospital.

Table 10
Suppliers of non - routine radiology services in the greater Wellington region

Service	Service Provider	Estimated % share of procedure
MRI scans	Wellington Hospital	[]
	Wakefield Radiology	[]
CAT scans	Hutt Hospital,	[]
	Wellington Hospital	[]
	Pacific Radiology Group,	[]
	Wakefield Radiology	[]
Nuclear medicine	Wakefield Radiology	[]
	Wellington Hospital	[]
Interventional radiology	Wakefield Radiology	[]
	Pacific Radiology	[]
	Wellington Hospital	[]
Angiography	Wakefield Radiology	[]
	Wellington Hospital	[]

Table 11
Market shares of total non-routine radiology services market in the greater Wellington region

Supplier	Owner(s) of supplier	Estimated share total market (all procedures)	
		\$m	%
Wellington Hospital	Capital and Coast DHB	[]	[]
Wakefield Radiology	Privately owned	[]	[]
Breastscreen Central	Hutt DHB	[]	[]
Hutt Hospital	Hutt DHB	[]	[]
Pacific Radiology	Privately owned by Shareholder Radiologists	[]	[]
Wellington Radiology	Drs Rodney Allen and John Matthews	[]	[]
Kapiti Radiology	James Wellwood	[]	[]
Kenepuru Hospital	Capital and Coast DHB	[]	[]
Masterton Hospital	Wairarapa DHB	[]	[]
TOTAL			100%

Source of estimates: Pacific Radiology and Wakefield management

Other Considerations

- ❑ **Please identify any firms that are not currently producing the product in the market, but could enter the market quickly (using essentially their existing productive capacity) in response to an attempt by suppliers to raise prices or reduce output or quality ('near entrants').**
- ❑ **Estimate the productive capacity that such near entrants potentially could bring to the market.**

16.5 Pacific believes there are a number of radiology companies operating in other parts of New Zealand that are near and likely entrants to the Wellington radiology services markets. They include the following.

Sonic Healthcare

16.6 Sonic Healthcare New Zealand is an Australian-owned company that has been aggressively expanding in New Zealand over the past 5 years. Its parent company, Sonic Healthcare is one of the world's largest medical diagnostics companies. Sonic is an aggressive acquirer in the Australian market through its charismatic leader, Dr Colin Goldschmidt. Its present market capitalisation is \$1.9billion Australian (to be compared with Pacific's estimated market capitalisation on 1 April 2004 of approximately AU\$40m). Sonic has previously made approaches to acquire both Pacific and Wakefield and other New Zealand practices.

16.7 Sonic runs 5 different medical businesses in New Zealand being: Diagnostic Medlab Limited; Medlab Central (Palmerston North); Medlab South (Christchurch); Valley Diagnostic Laboratories (Lower Hutt) and New Zealand Radiology Group.

16.8 New Zealand Radiology Group comprises:

- ❑ Mercy Radiology (Auckland);
- ❑ Palmerston North X-Ray, also known as Broadway Radiology (Palmerston North); and
- ❑ Canterbury Medical Imaging (Christchurch).

16.9 These practices all have extensive facilities and offer a wide range of services. Canterbury Medical Imaging has just taken delivery of a new high level mammography machine (which will represent head on competition to Pacific's Canterbury Breast Care) and a DEXA machine to compete for the DHB – funded bone density contract.

16.10 Pacific understands that Sonic has been viewing Wellington as a possible market to enter. Information about Sonic Healthcare is contained in Appendix 3.

Aus-Care

16.11 In July 2003 Auckland X-Ray Services opened in Auckland. It is owned by Aus-Care Holdings Pty Limited, an Australian diagnostic and healthcare provision company that owns radiology practices in Australia. Aus-care has a reputation for price cutting and expansion. Auckland X-Ray Services offers a full range of routine and non-routine radiology services with the addition of an MRI scanner expected this year. It has been making significant gains in the Auckland area based on price competition. Pacific anticipates its expansion into the Wellington region in the next few years. Information about Auckland X-Ray Services is contained in Appendix 4.

Other

16.12 There are several other large Australian companies that Pacific also considers to be potential entrants to the New Zealand market, including MIA Group Limited, Australia's largest diagnostic imaging company, The Mayne Group Limited and I-Med Limited. Some of these companies are presently active in the New Zealand market pursuing either acquisitions or new operations. Information about these companies is contained in Appendices 5, 6 & 7.

16.13 Other New Zealand groups which Pacific considers may be possible entrants to the Wellington radiology market(s) are:

- ❑ Eldercare (information about Eldercare is contained in Appendix 8);
- ❑ Otago Trust, the investment vehicle of the family interests of the recently deceased Dunedin millionaire, Howard Paterson;
- ❑ Medical Imaging Group Limited, a grouping of eight shareholder/radiologist owned practices in Whangarei, Auckland, Hamilton, Tauranga, Gisborne and Rotorua. Information about Medical Imaging Group Limited is contained in Appendix 2; and
- ❑ Auckland Radiology Group, the leading radiology practice in Auckland (information about Auckland Radiology Group is contained in Appendix 9).

Please indicate whether the 'target company' could be described as a vigorous and effective competitor, taking into account its pricing behaviour, its record of innovation, its growth rate relative to the market, and its history of independent behaviour

16.14 Wakefield would be unhappy to be described as anything other than a vigorous and effective competitor. It has a record of innovation and development into new areas of technology but has not competed on price.

16.15 However, the businesses of Pacific and Wakefield have not been significantly competitive in terms of routine radiology, simply because their clinics are located in different geographical areas and, in terms of non-

routine procedures, the range of services offered by Wakefield is significantly broader than those offered by Pacific.

- 16.16 For the most part, the businesses of Pacific and Wakefield are complementary rather than competitive. Pacific does not consider that Wakefield is a vigorous and effective competitor to its own business.

Conditions of Expansion

17 **The following listing gives different types of market conditions that may effect the ability of existing firms to expand: frontier entry conditions, legislative/regulatory conditions, industrial/business, other.**

Which, if any, of the conditions identified above do you consider would be likely to act as a barrier to the expansion of existing competitors, where they have the incentive to do so in response to a sustained effort by the combined entity to raise price, or to lower service or product quality?

- 17.1 There are few barriers to expansion of existing competitors or suppliers of radiology services in other parts of New Zealand. The capital required to expand existing business operations through opening of new premises or the addition of new equipment to enable the business to add additional procedures is readily available. Sites and equipment are also readily available.
- 17.2 While there is a general shortage of radiologists in New Zealand, there is no significant barrier to Australian radiologists working in New Zealand. Larger companies such as Sonic can move radiologists between Australia and New Zealand operating both countries as a common market.

Please provide evidence, where available, of expansion by existing competitors in the relevant markets during the past five years.

- 17.3 As noted above, Wellington Radiology and Kapiti Radiology have increased the number of patients serviced in recent times due to the increased funding from WIPA over the last three years. Neither has increased its range of facilities into the non-routine area but there is room for further development of non-routine services and facilities in their two areas. Wellington Hospital and Hutt Hospital have also been increasing their market share through WIPA funding.
- 17.4 Kenepuru Hospital is expanding its radiology services with the acquisition of a CT scanner.
- 17.5 In addition, there are significant examples of expansion of competitors in other regions in New Zealand over the last five years. It is expected that those competitors will shortly be entering the Wellington market(s).
Examples are:
- Sonic**
- (a) Sonic entered the New Zealand market in 2000 initially through its acquisition of the interests of SGS Group in the practices known as New Zealand Radiology Group (refer para 16.8).

The newest of those practices is Canterbury Medical Imaging Limited which commenced 5 years ago specifically to compete head on with Pacific (then Christchurch Radiology Group) in the Christchurch market.

Aus-Care

- (b) Aus-care entered the New Zealand market in July 2003 with the establishment of a new practice under the name Auckland X-Ray Services.

18 **Please name any business which already supplies the market - including overseas firms - which you consider could increase supply of the product concerned in the geographic market by any of the following means:**

- **diverting production into the market (eg from exports)**
- **increasing utilisation of existing capacity**
- **expansion of existing capacity.**

18.1 Each of the radiology practices currently servicing the Wellington region has the ability to expand its business by increasing utilisation of its existing equipment or purchasing additional equipment. They are likely to have to take on additional radiologists to do so.

18.2 Each of the companies referred to at paragraph 16.6-16.12, which already supply radiology services in other parts of New Zealand could readily purchase additional equipment or divert equipment from their present operations and enter the Wellington market in a short space of time. This is particularly so of Sonic and Aus-Care, with their significant financial resources and history of entering new markets.

19 **Of the conditions of expansion listed above, which do you consider would influence the business decision in each case to increase supply?**

19.1 Pacific and Wakefield consider that current conditions in the Wellington market(s) are such that new entry by radiology practice groups operating in other areas of New Zealand is likely by expansion of existing capacity. Additional drivers of new entry, and expansion of existing Wellington practices, include:

- population increases;
- increased outsourcing by DHBS;
- increased demand from ACC; and
- increase demand for the 'hi-tech' (non-routine) specialist procedures.

20 How long would you expect it to take for supply to increase in each case?

- 20.1 A new entrant could enter the market within four to five months of making the decision to do so. Expansion of existing practices can be immediate, or where additional specialist equipment is required, only as long as it takes for purchase and delivery of the equipment – two to four months.

21 In your opinion, to what extent would the possible competitive response of existing suppliers constrain the merged entity

- 21.1 The greater profile of the merged entity in the Wellington area is likely to result in existing private radiology practices increasing the promotion of their practices. The efficiencies that will be driven from the merger will enable the merged entity to make more efficient and competitive tenders for contracts, particularly DHB contracts. The other practices will need to respond accordingly.

22 Looked at overall, and bearing in mind the increase in market concentration that would be brought about by the acquisition, to what extent do you consider that the merged entity would be constrained in its actions by the conduct of existing competitors in the markets

22.1 In relation to routine radiology services:

- (a) Pacific and Wakefield are not truly competitors. Although both provide routine radiology services and facilities in the Wellington region, their clinics are geographically separated and there is little movement of patients between those areas.
- (b) In Wellington City and suburbs, the merged entity will continue to be constrained by Wellington Radiology and Wellington Hospital. Both compete for public and private funding.
- (c) In the Hutt Valley area, the merged entity will continue to be constrained by Hutt DHB at Hutt Hospital and through Breastscreen Central. Again, both compete with Pacific for public and private funding.

22.2 In relation to non-routine radiology services, the only services provided by both Pacific and Wakefield are CAT scans and interventional radiology. Wellington Hospital is a competing provider of each of these services and in addition, Hutt Hospital provides CAT scans.

22.3 In relation to both routine and non-routine radiology services and facilities, the merged entity will be constrained by the threat of entry from a number of existing radiology practices presently operating elsewhere in New Zealand, in particular:

- (a) Sonic Healthcare – through The New Zealand Radiology Group (already with practices in Auckland, Palmerston North and Christchurch);
- (b) Auckland Radiology Group Services Limited;
- (c) Auckland X-Ray Services Limited (owned by Aus-Care Holdings Pty Limited); and
- (d) Medical Imaging Group Limited.

(Further detail as set out at paragraphs 16.6 – 16.13 and in Appendices 2 – 4 and 9).

22.4 In addition, the threat of new entry from MIA Group Limited, Australia's largest diagnostic imaging company, the Mayne Group and I-Med presents

a constraint on the current practices of Pacific and Wakefield and will continue to do so following the merger.

- 22.5 Also relevant is the development of teleradiology which enables radiologists located in any town or city in or out of New Zealand to compete for the film or examination reading aspects of the radiology function in respect of patients located within the market(s) relevant to this application. Pacific expects this development to impact most significantly on DHB contracts and see the division of at least some of those contracts into two parts (the procedure itself and the reading of the film/examination). Competition for the first part is likely to be confined to the providers within the relevant geographic area. However, the number of potential competitors for the second part of the contract is, by virtue of these technological development, substantially increased.

Market power lies with funders and referrers

- 22.6 Perhaps the most significant constraint on the price/quality/service delivery package of Pacific and Wakefield and of the merged entity is the role of funders and referrers, in particular:
- (a) a series of significant funders: the DHBs, ACC and private insurers; and
 - (b) groups of referrers, such as GPs, specialists, DHBs and ACC, some of which are also significant funders.
- 22.7 It is relevant to note here that, apart from mammography and DEXA, patients cannot directly access radiology services due to Government restrictions promulgated by the National Radiation Laboratory in the Codes of Practice restricting the use of radiation to situations where the benefit outweighs the risk (practically interpreted as meaning that the radiologist cannot accept a patient without a referral from a recognised healthcare professional).
- 22.8 Significantly the DHBs, one of the major funders of radiology services, are also major suppliers of radiology services through public hospitals. DHB's have the ability to control the purse strings to the advantage of their own organisation.
- 22.9 It is significant that both ACC and Southern Cross Healthcare (the major insurer) now only appoint approved providers who accept their approved fee scales. This means that, with the Ministry of Health also as the price maker for its contracts, the great majority of pricing decisions are now made by the funders.
- 22.10 In the Fulford decision, the Commission considered that the critical issue in determining the competition implications of that merger proposal was the potential countervailing power of the purchasers of healthcare services. That remains the case in the current healthcare funding environment.

DHBs

22.11 The Wellington region DHBs¹⁰ are charged with determining the healthcare needs of their constituents and purchasing healthcare services within the budget provided to it by the Ministry of Health. The DHBs are large buyers of radiology services, and as such private providers are keen to contract with them (in spite of the DHBs' budgetary pressures) due to the economies of scale that can be achieved.

22.12 Wakefield has arrangements with three of the Wellington region DHBs:

- (a) Capital & Coast Health procures CT, MRI and nuclear medicine services for Wellington Hospital from Wakefield on an ad hoc basis. Wellington Hospital has its own CT, MRI and nuclear medicine facilities but in periods of peak overload contracts to Wakefield. Wakefield also provides emergency cover if Wellington Hospital's equipment fails;
- (b) Hutt Valley DHB refers patients requiring MRI services to Wakefield;
- (c) Wairarapa Health has a three year contract with Wakefield for routine, MRI and other non-routine services not provided by Wairarapa Health, including plain films. Wairarapa Health also directs patients to Mid Central Health, Hutt Valley Health or Capital Coast Health where specific clinicians are required, e.g. cancer services aligned with Palmerston North, neurosurgery with Wellington. Funding for tertiary service outreach at Wairarapa Health (e.g. for neurosurgery) rests with Capital Coast Health, not Wairarapa Health. Therefore scanning is at a site decided by Capital Coast Health.

22.13 Pacific itself does not have any formal arrangements with any of the Wellington area DHBs (but does have a contract directly with the Ministry of Health for the TB chest x-ray programme).

22.14 The extent to which DHBs can, and do, contract out services to private providers is well illustrated by the range of services contracted out by South Island DHBs. For example, Christchurch Radiology has contracts with:

- (a) Canterbury DHB for the provision of:
 - ❑ radiological services to patients at The Princess Margaret Hospital;
 - ❑ ultrasound services to Community Referred Patients;
 - ❑ bone density scans;

¹⁰ A list of the DHBs in the Wellington region is contained in Schedule 3.

- ❑ CAT and MRI scans where needed (non-exclusive); and
 - ❑ cardiothoracic services in private hospitals.
- (b) South Canterbury DHB for the provision of sonographer and MRI services;
- (c) Southern DHB for the provision of radiologist and the provision of MRI services; and
- (d) West Coast DHB for the provision of radiologists and sonographer services.

22.15 Contractual arrangements for the provision of routine and non-routine radiology services to DHBs are either for unspecified or relatively short periods of time (maximum of three years). Some are exclusive but many are not. DHB's are required to set up contingencies and facilities so that their accepted level of services can be provided. It is not unusual for any DHB to have formal or even informal agreements with any or all providers in the greater catchment area for non exclusive services. This means that this segment of the market is freely available to competition from other existing providers and new entrants.

ACC

22.16 Like the DHBs, the ACC has a major role in the purchase of healthcare services as part of its statutory obligations. ACC is a significant funder of routine and non-routine radiology services, purchased either as separate items, as part of a wider episode of care, and in some instances by a combination of those methods.

Routine

22.17 ACC does not have exclusive contracts for the provision of routine radiology services in any region. Clinicians simply fill in an ACC M45 form and the patient can attend any radiology facility. Funding will be provided as long as the radiologist meets the contract requirements.

22.18 Prices for routine procedures are set, on a national basis, at a price that ACC considers provides satisfactory regional coverage after considering tender submissions from both public and private radiology providers. Part charging of patients is allowed.

Non- routine

22.19 The provision of non-routine radiology services is dominated by ACC. ACC has contracts with many providers of non-routine radiology services. The patient is directed to a particular provider, largely on the basis of geographic location but the ACC Case Manager has some discretion. It is expected that this system will change so that the choice of service provider will be the discretion of the referring practitioner on the basis of quality and

clinical relationship. For non-routine radiology services, ACC requires that the patient is referred by a specialist.

- 22.20 For ACC non-routine contracts, ACC sets the contract terms. The contracts provide ACC with a volume discount which is the same for all providers in the scheme. Other aspects of the contract, such as waiting times, reporting times and quality procedures are set by ACC (after consultation with the industry).
- 22.21 ACC does not have any criteria for the number of service providers. Accordingly, once a radiology practice is up and running, then providing it meets the contract criteria, it can enter a contract with ACC.
- 22.22 Wakefield has a, non-exclusive, two year contract with ACC for the provision of non-routine services (MRI, CT, nuclear medicine).
- 22.23 Most providers, both public and private, provide ACC non-routine services. There is significant competition for this work in the greater Wellington region. As noted earlier, Capital Coast Health has indicated the placement of a CT at Kenepuru Hospital. This will increase Capital Coast Health's ability to compete for the ACC non-routine work.

Summary

- 22.24 Contractual arrangements for the provision of routine and non-routine radiology services to ACC are either for unspecified or relatively short periods of time (maximum of three years). They are not exclusive. This means that, like the DHBs, this segment of the market is freely available to competition from other existing providers and new entrants.
- 22.25 In summary, ACC through its purchasing behaviour, exercises a strong constraint over Pacific and Wakefield. The acquisition of Wakefield by Pacific is unlikely to change that.

Community Funded Radiology Scheme

- 22.26 The Community Funded Radiology Scheme is administered by WIPA in central Wellington and Kowhai Health in the Hutt Valley. WIPA and Kowhai each issue price schedules listing what they will pay for each procedure listed. These are largely based on the prices for the same procedures paid by ACC and the relevant DHBs. Private providers are entitled to add a surcharge for procedures where the patient is not a Community Card Holder. The size of the surcharge is monitored by WIPA. Where a WIPA/Kowhai Health funded procedure is carried out at a public (DHB) facility, surcharging is not permitted.

Insurers

- 22.27 Private insurers have no fixed term contract with radiology providers. Patients are handled on an individual case basis.

22.28 However, Southern Cross are in the process of establishing an affiliated provider category which would make a non exclusive but preferred status provider, renewable on a fixed term basis (under discussion).

22.29 In Decision 347 the Commerce Commission said, in relation to private medical insurance companies, that:

“the larger providers have knowledge of the cost of various healthcare services, including radiology, and through the use of a national price list are in a position to negotiate strongly with providers, which they have an incentive to do in order to keep premiums down...”

“the significant national purchasing power of private insurance companies, and particularly the major companies, will ensure that the combined entity would be prevented from exercising any undue market power.”

22.30 Pacific believes that this national purchasing power still exists and will provide the same restraint in the current situation.

Other relationships

22.31 Wakefield provides most radiology services to Wakefield Hospital¹¹ and Southern Cross Hospital.¹²

Summary of constraint by funders

22.32 The markets for the provision of routine and non-routine radiology services are open and contestable. There is generally no exclusivity between service providers and any particular funder or referrer, although in some cases, there may be preferred providers due to locality and quality of service.

22.33 Furthermore, many referrers and patients will access multiple providers through the course of an illness, depending largely on availability of access for a particular procedure.

22.34 In the Fulford Radiology Decision, the Commerce Commission said:

“the countervailing power of the major purchasers of radiology services is very strong, and that they will continue to exercise an effective restraint on the conduct of the combined entity in the post acquisition market.”

22.35 Pacific believes that the same countervailing power exists in the markets in question for this application and that they will also continue to exist post acquisition.

¹¹ Wakefield’s lease at Wakefield Hospital is tied to the provision of a set of core radiological needs of the hospital. (A hospital site provides a source of work for a radiology practice but with obligations.)

¹² Some services, especially ultrasound, the use of which is not restricted to radiology, are provided by other clinicians e.g. Wakefield Vascular Laboratory (Richard Evans, Vascular Surgeon), Southern Cross Urology (Grant Russell, Urologist), heart studies by cardiologists in the Wakefield Hospital Catheter Laboratory, owned by Wakefield Hospital.

Coordinated Market Power

23 Identify the various characteristics of the market that, post-acquisition, you consider would either facilitate or impede coordination effects.

- 23.1 Coordination effects will be significantly impeded in the market(s) affected by this application by the overriding market power of acquirers and funders (refer paragraphs 22.6 onwards).
- 23.2 Coordination effects will not, in any event, be enhanced by Pacific's acquisition of Wakefield's radiology practice as there is very little overlap between the two businesses.

24 Identify the various characteristics of the market that, post-acquisition, you consider would facilitate or impede the monitoring and enforcement of coordinated behaviour by market participants

- 24.1 Not applicable.

25 Indicate whether the markets identified in paragraph 9 above show any evidence of price coordination, price matching or price following by market participants.

- 25.1 There is no evidence of price coordination, price matching or price following by market participants. Pacific and Wakefield are unaware of the prices charged by other radiology practices in the Wellington region. With the ACC, DHB and insurer contracts, it is likely that all the radiology service providers are paid the same rates for the various services. As noted, it is the funders and acquirers who drive those prices.

26 Please state the reasons why, in your opinion, the transaction will not increase the risk of coordinated behaviour in the relevant market(s).

- 26.1 Coordination effects are impeded by the market power of acquirers and funders. This will remain unaffected by the transaction. Refer paragraphs 22.6 onwards.

Pacific considers that:

- **the constraint imposed by the conduct of existing competitors, including near entrants; and**
- **the countervailing power of the major funders of radiology services;**

would be sufficient to ensure that competition would not be substantially lessened in any market. Accordingly, it has elected not to answer any of the questions in Part IV.

However, Pacific is happy to answer any further questions the Commission may wish to ask .

THIS NOTICE is given by Pacific Radiology Limited

The company hereby confirm/s that:

- All information specified by the Commission has been supplied;
- All information known to the applicant/s which is relevant to the consideration of this application/notice has been supplied;
- All information supplied is correct as at the date of this application/notice.
- The company undertake/s to advise the Commission immediately of any material change in circumstances relating to the application/notice.

Dated this day of 2004

Signed by Pacific Radiology Limited:

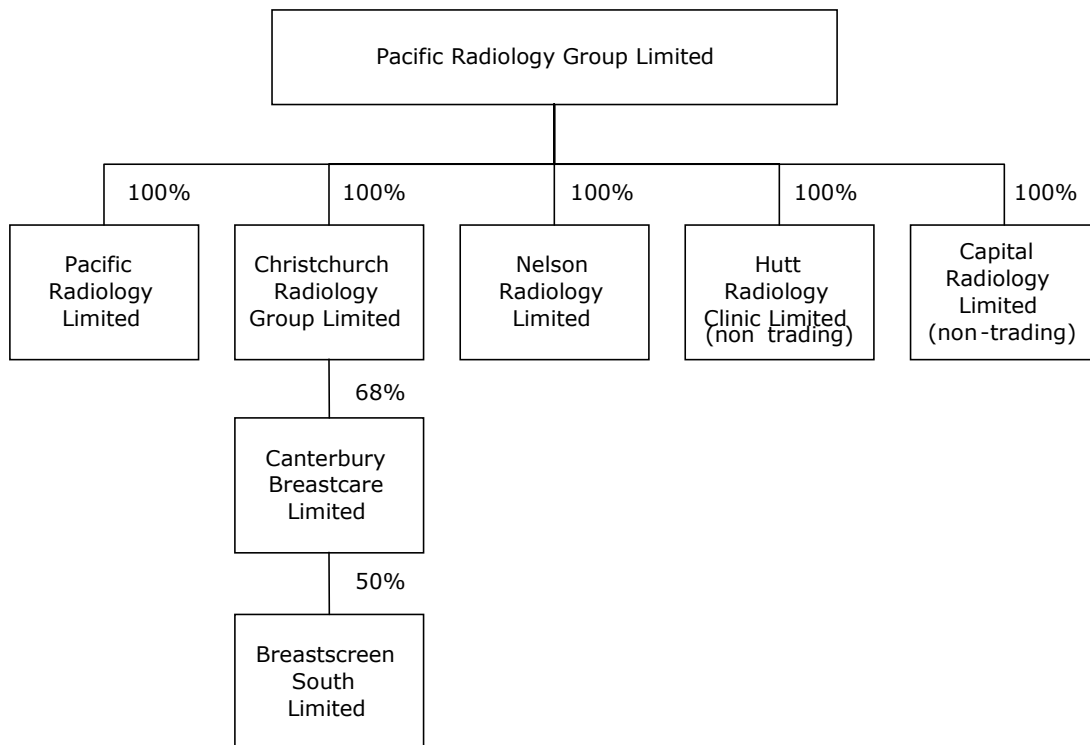
Director

I am a director of the company and am duly authorised to make this notice.

Schedule 1
Shareholders of Pacific Radiology Group Limited
(after the acquisition of Wakefield)

Name	% shareholding
COATES, Richard Harding COATES, Jana Mary Ormond LEGGAT, James Ewan	5.06
ROSS, David Graeme ROSS, Judith Christine LINDO, Hugh Simon	5.06
CHISHOLM, Richard James SHIACH, Helen Elizabeth WILSON, Mark Stanley	5.06
YOUNG, Antony Todd YOUNG, Judith Diane BLACK, Bruce Robert	5.06
BREW, Marcel Dennis DWYER, Gerald Peter	5.06
WELLS, Scott William WELLS, Karen Marie Keenan Trustee Service Ltd	5.06
Halkett Radiology Limited	5.06
Selkirk Radiology Limited	5.06
LAING, Andrew David Phillip LAING, Nicola Francis LAING, Gillian Catherine	5.06
SLAVEN, Andrew Samuelson Limited	5.06
COATES, Mark Harding COATES, Sarah J LEGGAT, James	5.06
LAWLER, Lance James LAWLER, Emma Margaret Olphert LAWLER, Albert James	5.06
LEADBITTER, Mark Robert LEADBITTER, Bernadette McKONE, Gabrielle	5.06
Taat Radiology Ltd	5.06
WU, Rodney Ewen HODSON, Paul Grant	5.06
FITZJOHN, Trevor Paul	5.06
KEENAN, Ross	5.06
WELSH, Susan Jane WELSH, Lloyd Rex WELSH, Geoffrey James	2.53
WELSH, Lloyd Rex WELSH, Susan Jane WELSH, Geoffrey James	2.53
BOYD, David Mark LONG, Andrew	2.53
BOYD, David Mark LONG, Laurel Deborah	2.53
LEAPER, Christopher John SHARMA, Angela JOHNSTONE, Christine	1.27
NEWNHAM, Luke Langston	1.27
BUSBY, Stephen John	1.27

Schedule 2
Structure of Pacific Radiology Group of Companies



**Schedule 3
DHBs in greater Wellington region**

DHB	Catchment area	Hospitals	Has radiology services
Capital and Coast DHB	Wellington City and its suburbs	Wellington Hospital	Yes
	Porirua Basin	Kenepuru Hospital	Yes
	Kapiti Coast including Waikanae	Paparaumu Clinic	No
Hutt DHB	Hutt Valley	Hutt Hospital	Yes
Wairarapa DHB	Wairarapa	Masterton Hospital	Yes