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## **Commerce Commission**

### **Decision No. 347**

Determination pursuant to the Commerce Act 1986 in the matter of an application involving:

**FULFORD RADIOLOGY SERVICES LIMITED**

**and**

**TARANAKI HEALTHCARE LIMITED**

**and**

**FULFORD RADIOLOGY LIMITED**

**The Commission:** E C A Harrison (Chair)  
E M Coutts  
P Rebstock

**Commission Staff:** J Lyon  
J F Hamilton

**Summary of Application:** The acquisition by Fulford Radiology Services Limited, a company yet to be formed, of certain of the radiology assets of Taranaki Healthcare Limited and Fulford Radiology Limited.

**Determination:** Pursuant to s 66(3) the Commission determines to give a clearance for the proposed acquisition.

**Date of Determination:** 19 March 1999

<p><b>CONFIDENTIAL MATERIAL IN THIS REPORT IS CONTAINED IN SQUARE BRACKETS</b></p>
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## **THE PROPOSED ACQUISITION**

- 1 On 24 February 1999, the Commission registered a notice pursuant to s 66(1) of the Commerce Act 1986 (the Act) seeking clearance for the formation of a new company, Fulford Radiology Services Limited (FRSL), to acquire certain radiology assets of Taranaki Healthcare Limited (THL) and Fulford Radiology Limited (Fulford). THL and Fulford will each own 50% of the shares in the new company.
- 2 In terms of the joint venture agreement, it is proposed that:
  - THL will transfer certain radiology assets to FRSL;
  - Fulford will sell all of its radiology services business to FRSL, including its ongoing radiology services contracts and the benefit of any contract with Accident Rehabilitation Compensation and Insurance Corporation, all the operating assets, and the interest in all leases for equipment and premises; and
  - THL will enter into an agreement with FRSL for the provision by FRSL of all public health radiology services for the Taranaki population for a five-year period.
- 3 This report concludes that the Commission is satisfied that implementation of the proposed acquisition would not result, or would not be likely to result, in any person acquiring or strengthening a dominant position in a market.

## **THE PROCEDURES**

- 4 Section 66(3) of the Act requires the Commission either to clear, or to decline to clear, a notice given under s 66(1) within 10 working days, unless the Commission and the person who gave the notice agree to a longer period. By agreement between the Commission and the applicant, the date for the Commission's determination on the application was extended to Friday 19 March 1999.
- 5 The applicant has not requested confidentiality for either the fact of the proposed acquisition, or for any information contained in the notice.
- 6 The Commission's determination is based on an investigation conducted by Commission staff and their subsequent advice given to the Commission.

## **THE INVESTIGATION**

- 7 Staff contacted the following parties during the investigation of the proposed acquisition:
  - Accident Rehabilitation Compensation and Insurance Corporation;
  - the Health Funding Authority;
  - Good Health Wanganui Limited;
  - MidCentral Health Limited;
  - First Health Limited;
  - Southern Cross Healthcare;
  - several General Practitioners (GPs) in the Taranaki region;

- private radiology groups, including Auckland Radiology Group, Castlereagh Radiology and Christchurch Radiology Group; and
- the Royal Australian and New Zealand College of Radiologists.

8 The parties to the proposed acquisition also provided additional information and comment.

## **THE PARTICIPANTS**

### **Fulford Radiology Services Limited (FRSL)**

9 As noted in paragraph 1, FRSL will be established as a new company by THL and Fulford, and will serve as the vehicle to effect the acquisition. The new company will provide public and private radiology services predominantly for Taranaki residents. THL and Fulford will each own 50% of the shares in FRSL.

### **Taranaki Healthcare Limited (THL)**

10 THL provides a range of clinical healthcare services for residents domiciled mainly in the Taranaki region. These include:

- medical and surgical services, including acute and elective general, orthopaedic, and ENT services;
- general paediatric services;
- mental health services;
- maternity services;
- urology;
- ophthalmology; and
- clinical support services (including radiology, laboratory and pharmacy services).

11 Of relevance to this proposal is THL's interest in the provision of a range of publicly funded radiology services. These include:

- ultra sound - conventional, Doppler and cardiac;
- general radiology - plain x-ray film;
- Computer Assisted Tomography (CAT) scans;
- nuclear medicine;
- angiography and interventional radiology;
- screening procedures, such as barium studies;
- 24 hour on-call services by radiologists and radiographers; and
- referrals for Magnetic Resonance Imaging (MRI) scans.

12 The main facility operated by THL is the Taranaki Base Hospital, which has 231 beds, and is located in New Plymouth. THL also operates hospitals in Stratford and Hawera.

13 THL is one of the group of New Zealand Hospital and Health Services (HHSs) providers. Each HHS is wholly owned by the Crown, but operates independently from the others. The Ministers of Health and Finance hold the shares in each HHS on behalf of the Crown.

### **Fulford Radiology Limited (Fulford)**

- 14 Fulford provides radiology services predominantly for private patients in the Taranaki region, including ACC work together with mammography services under contract to MidCentral Health, which in turn holds the contract to undertake the National Breast Screening programme. The company operates from three facilities in New Plymouth -Fulford Street, Vivian Street and White Cross. The Vivian and White Cross clinics provide plain film x-rays only for the adjoining medical practices.
- 15 Fulford provides the following radiology services:
- ultra sound - conventional and Doppler;
  - plain x-ray film;
  - mammography; and
  - screening procedures, such as barium studies and arthrography.
- 16 Fulford is owned in equal proportions by three radiologists – Dr Raj Fernando, Dr Warwick Harding and Dr Mark McCullough. The shareholders of Fulford are also employees of THL, and have a 3/22 shareholding in Midland MRI, which operates the MRI scanner at Hamilton.

### **OTHER RELEVANT PARTIES**

#### **The Health Funding Authority (HFA)**

- 17 The HFA is a Crown entity which is responsible for purchasing and funding nearly all publicly funded health services, disability support and public health services throughout the country. The HFA's activities include:
- investigating the health and disability support needs of the population;
  - consulting with communities and other interest groups on needs and priorities for service;
  - deciding the range and mix of services it will purchase in order to meet the needs of the population within the budget it has available;
  - purchasing services from appropriate providers through contracts and other arrangements; and
  - monitoring to ensure that service providers perform the services and meet the standards in their contracts.
- 18 The HFA is a national organisation with five locality offices. This includes an office in Hamilton, which is responsible for managing the purchase of publicly funded healthcare and disability services in the Midland region, including Taranaki.<sup>1</sup> On the basis of 1996 Census data, the total population of the Midland region is around 724,000, of which approximately 107,000 reside in the Taranaki district.

#### **Accident Rehabilitation and Compensation Insurance Corporation (ACC)**

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<sup>1</sup> The Midland region also includes King Country, Waikato, Coromandel, the Lakes District and Bay of Plenty.

19 ACC is the Crown agency responsible for the administration of the statutory insurance scheme for accident-related injuries and disabilities. The scheme was originally created by legislation in 1974. ACC's objective is to reduce the social, economic and physical impact of personal injury by:

- implementing effective injury prevention programmes;
- ensuring effective intervention when injury occurs; and
- working with claimants to help them, where practical, return to independent living and employment as soon as possible.

#### **Southern Cross Healthcare (Southern Cross)**

20 Southern Cross is the title used to describe a group of related entities which provide medical and surgical insurance for policy holders throughout New Zealand. The group also operates a number of private hospitals in various locations in New Zealand, including one at New Plymouth. The New Plymouth hospital provides a very limited radiology service for inpatients (plain film x-ray and image intensifier).

#### **Good Health Wanganui Limited (Good Health Wanganui)**

21 Good Health Wanganui is an HHS, providing a range of primary and secondary healthcare services for residents mainly in the Wanganui district. The company provides various inpatient and outpatient clinical services from a hospital at Wanganui, including radiology services for residents in South Taranaki.

#### **MidCentral Health Ltd (MidCentral)**

22 MidCentral is an HHS which provides clinical services mainly for people in the Manawatu district. The company runs a hospital at Palmerston North and holds the contract from the Ministry of Health to conduct the National Breast Screening programme. As noted in paragraph 14, MidCentral sub-contracts Fulford to undertake mammography services as part of that programme.

#### **Other Radiology Service Providers**

23 Apart from the parties outlined above, there is a number of public and private providers which carry out radiology services in the North and South Islands. Most cater for people living in their immediate locality, but some providers are now capable of providing services over a much wider area (see paragraph 37 for further details).

## **BACKGROUND TO THE HEALTH SECTOR**

### **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".<sup>2</sup> To this end, the four RHAs were replaced by the Transitional Health Authority (THA) in April 1997.<sup>3</sup> 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. (See Appendix 1 for details of the structure of the New Zealand health sector.)

### **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

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<sup>2</sup> The Coalition Agreement, 1996, p.34.

<sup>3</sup> The amalgamation of the RHA's into a single agency was effected by an Order in Council.

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.

### **Radiology Services**

- 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 In the Taranaki region, THL provides a range of publicly funded radiology services. It currently has a three year contract with the HFA to provide these services. Fulford is a private provider of radiology services, catering mainly for private patients and ACC primary-referred patients.
- 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 inter-relationships involving consumers, referrers, providers and purchasers. A diagram showing these inter-relationships is provided in Appendix 2.
- 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 a 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.<sup>4</sup>
- 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 radiologists 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 a 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. THL advises,

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<sup>4</sup> The non-earners' account is one of the five ACC accounts.

however, that it has yet to sign a contract, although there do not appear to be any major obstacles which prevent it from doing so.

## **THE RELEVANT MARKETS**

### **Introduction**

- 45 The purpose of defining markets is to provide a framework within which the competition implications of a business acquisition can be analysed. The relevant markets are those in which competition may be affected by the acquisition under consideration. Identification of the relevant markets enables the Commission to examine whether the acquisition would result, or would be likely to result, in the acquisition or strengthening of a dominant position in terms of s 47(1) of the Act in any of those markets.
- 46 Section 3(1A) of the Act provides that:
- “... the term ‘market’ is a reference to a market in New Zealand for goods and services as well as other goods and services that, as a matter of fact and commercial common sense, are substitutable for them.”
- 47 The Commission’s *Business Acquisition Guidelines* outline the Commission’s approach to market definition.<sup>5</sup> A brief discussion of this approach follows.
- 48 Markets are defined in relation to product type, geographical extent, and functional level. With the first two dimensions, market boundaries are determined by testing for substitutability in terms of the response to a change in relative prices of the good or service in question, and possible substitute goods or services. A properly defined market will include products which are regarded by buyers as being not too different (‘product’ dimension), and not too far away (‘geographical’ dimension), and are thus products to which they could switch if a small yet significant and *non-transitory* increase in price (“*ssnip*”) of the product in question was to occur. It will also include those suppliers currently in production who are likely, in the event of such a *ssnip*, to shift promptly to offer a suitable alternative product, even though they do not do so currently.
- 49 In practice, the process of defining markets is unlikely to be as precise and as scientific as suggested by the *ssnip* test. However, in the Commission’s view, the *ssnip* approach provides a useful framework for assessing the question of what other products, or products from other areas, are substitutable for the product in question as a matter of fact and commercial common sense.
- 50 Markets are also defined in relation to functional level. Typically, the production, distribution, and sale of products proceeds through a series of vertical functional levels, so the functional levels affected by the application have to be determined as part of the market definition. For example, that between manufacturers and wholesalers might be called the “manufacturing market”, while that between wholesalers and retailers is usually known as the “wholesaling market”.

### **Market Definition and the Healthcare Sector**

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<sup>5</sup> Commerce Commission, *Business Acquisition Guidelines 1996*, pp 11-16.

51 As is the case with other healthcare services, there are difficulties in applying the *ssnip* test to the provision of radiology services. This arises because of the characteristics of such services, which include the following demand and supply side factors:

- radiology services provide a complex and diverse array of services, with services often being bundled to provide a particular output;
- consumers sometimes lack the necessary information on which to base their ‘purchasing’ decisions, and in some instances, they may not be in a position to make rational choices (eg major road accidents or mental health);
- there is often no ‘price’ for healthcare services apparent to the consumer, and therefore they cannot experience the likely impact of price variations on demand and service substitutability;
- consumers do not pay the full cost of healthcare services in New Zealand. Rather, they are subsidised in whole, or in part, by the Government, or by private insurers. As a consequence, third party payments have a major influence on a consumer’s demand for healthcare services; and
- in some circumstances, consumers are unlikely to be in a position to reach an independent decision in respect of the cost of medical intervention, or on the likely quality, or effectiveness of any intervention. This in turn results in consumers delegating to GPs and other clinicians their healthcare purchasing decisions, with those health professionals assuming a major influence as gate-keepers on the supply and demand sides.

### **Product and Function Markets Affected By The Proposal**

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. Indeed, the HFA purchases most inpatient radiology services from health providers as part of a wider clinical service.

55 As noted previously, THL and Fulford are currently involved to a varying extent in the provision of radiology services in Taranaki. THL provides a range of publicly funded radiology services for patients in the Taranaki district (see paragraph 11 for further details). Fulford carries out a more limited range of radiology services, predominantly private insurance and ACC fee-for-service work (see paragraphs 14 and 15 for further details).

- 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. Moreover, the relevant markets are those which shed light on the scope for the exercise of market power brought about by the acquisition, and both of the parties to the proposed acquisition provide bundles of services. It is also likely that the conclusions on the competitive impact of the proposal would be similar if the analysis were to be conducted in respect of each of the respective radiology services.
- 57 Given all of these considerations, the Commission considers that it is appropriate to group radiology services into two broad categories:
- routine radiology services, which include plain film x-ray, ultra sound, and non-complex screening procedures, such as barium studies and arthrograms; and
  - non-routine radiology services, including CAT scans, interventional radiography and MRI scans.
- 58 The differentiation between routine and non-routine radiology services is somewhat blurred at the margins. For example, it could be argued that CAT scans qualify as a routine procedure in some cases. However, it has to be recognised that market boundaries often cannot be drawn exactly. Accordingly, for the purpose of analysing the competition implications of the proposal the markets described above seem appropriate, particularly given the nature of the services provided by the respective parties. Both parties are involved in the provision of routine services, but only THL provides some non-routine services.
- 59 The Commission has also considered whether or not the above two markets might be broken down into additional categories. This is discussed below in respect of public/private, acute/elective and services/facilities.

*Public/Private*

- 60 THL derives most of the revenue for the provision of its radiology services from government funding. In contrast, Fulford earns most of its revenue for providing radiology services from private insurance and ACC fee-for-service work. The only publicly funded radiology work which Fulford undertakes is mammography, and most of that revenue is generated from the publicly funded breast screening programme. This might suggest that separate public and private markets could be distinguished.
- 61 For example, there appear to be no restrictions in principle on THL's ability to perform private healthcare work, subject to capacity constraints, and to compete for ACC work. The HFA requires only that publicly funded procedures receive first priority.
- 62 Moreover, the ability of Fulford to compete for funding from the HFA is also theoretically possible, but the current method of delivery for primary referred radiology services are such that Fulford does not provide them at this time. However, due to the evolving nature of health service funding and delivery there is the potential for the further blurring of the boundaries between public and private services in the future.
- 63 The overlap between private and public is more marked on the supply side. This is because the same radiologists are providing the services regardless of whether it is funded publicly or privately.
- 64 Taking both demand- and supply-side factors into account, the Commission considers that it is appropriate to include private and publicly funded radiology services in the same market when examining the competition issues raised by this proposal.

*Acute/Elective*

- 65 It is possible to make a distinction between acute (ie urgent cases which require immediate treatment) and elective (ie non-urgent conditions which do not require immediate attention) procedures. Although there are aspects common to the provision of both services (eg clinical staff and facilities), 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. Both elective and acute services are undertaken by most HHSs, including THL. THL is the only healthcare provider in the Taranaki region which is capable of providing 24-hour on-call radiology services.
- 66 The conclusion would not be altered if separate markets were defined. Therefore, for the purpose of examining the competition issues raised by the proposal the Commission considers that it is sufficient to consider elective and acute radiology services as falling in the same market.

### *Services/Facilities*

- 67 When examining the competitive impact of the proposed acquisition, it might be possible to distinguish between the provision of healthcare services, and the provision of the facilities at which those services can be delivered. This was an important distinction in the Commission's *Health Waikato* decision.<sup>6</sup>
- 68 For example, HHSs enter into contracts with the HFA and/or ACC to provide specific services, and then carry out those services at their own facilities. However, it is possible for other public or private radiology providers to contract for the provision of services, and then to sub-contract with a third party for the use of facilities.
- 69 For the purposes of this report the Commission has not considered it necessary to distinguish between services and facilities in the provision of radiology services. However, even if separate markets were defined, the conclusions would remain unchanged, because both parties to the proposed acquisition are combined service and facilities providers.

### *Conclusion on Product/Functional Markets*

- 70 Having regard to the factors outlined above, and for the purposes of analysing the competition issues in this report, it is proposed to define the relevant product and function markets as:
- the provision of routine radiology services and facilities; and
  - the provision of non-routine radiology services and facilities.

### **Geographic Markets Affected by the Proposal**

- 71 As with other healthcare services, the geographic dimensions of the radiology services and facilities markets are, to a large extent, determined by the willingness of, and the need for, patients to travel. This is influenced by the following factors:
- the costs incurred by patients in travelling to a healthcare facility, and the convenience of travelling to a local facility to receive treatment. The costs may include travelling costs, the costs associated with time off work, and also in many cases, the visiting costs incurred by the families and relatives of patients;
  - the availability of the necessary services, facilities and specialists. For example, a patient who requires routine radiology services (eg a plain x-ray film), may be able to have the procedure undertaken at the nearest hospital. For some non-routine procedures, the patient may be required to travel to a hospital outside his or her immediate locality. As an example, a patient in Taranaki may travel to Hamilton or Auckland to receive an MRI scan because such facilities, being very expensive and hence requiring a large population base, are not available at any of the hospitals in the Taranaki district;
  - the 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 this extends to the geographic locality in which the treatment is carried out.

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<sup>6</sup> Commerce Commission, *Decision 275: Health Waikato/Midland Health*, 1995.

In most instances, a GP or specialist is likely to refer the patient to the nearest facility, but in some instances a GP might refer a patient to a facility outside of the immediate locality; and

- third party purchasers, and particularly the HFA, exercise a major role in influencing the geographic location and facility in which a patient will receive treatment. This is a consequence of the HFA's responsibility for purchasing the specific healthcare requirements for the population of a specific region, and for contracting with the HHSs and/or other parties to fulfil those requirements. Similarly, the ACC or private insurance companies appear to have some influence on where a patient receives radiology services.

72 On the basis of the available information, people in the Taranaki district rarely travel outside of the district for most routine radiology services. However, those living in the southern part of the district (eg Waverley or Patea) generally travel to Wanganui for radiology services, rather than THL's hospital at Hawera. Those Taranaki residents requiring non-routine radiology services, which are not already provided in the district, must travel outside the district, usually to Auckland or Hamilton.

73 Having regard to the above factors, the Commission concludes that for routine radiology services, the geographic scope of the market is limited to a relatively confined area, generally the Taranaki district. The geographic market for non-routine radiology services is considered to be North Island wide.

#### *Conclusion on Geographic Markets*

74 For the purpose of assessing the competitive impact of the acquisition, the relevant geographic market for routine radiology services has been defined as the Taranaki region, while the geographic market for non-routine radiology services has been defined as the North Island. (See paragraph 57 for a discussion of routine and non-routine radiology services).

#### **Conclusion on Market Definition**

75 For the purpose of examining the competition implications of this proposal, the Commission proposes to define the relevant markets as those for:

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

#### **COMPETITION ANALYSIS**

##### **Competition Analysis Overview**

76 Section 66(3) of the Act, when read in conjunction with s 47(1) of the Act, requires the Commission to give clearance for a proposed acquisition if it is satisfied that the proposed acquisition would not result, and would not be likely to result, in a person acquiring or strengthening a dominant position in a market. If the Commission is not so satisfied, clearance must be declined.

77 Section 3(9) of the Act states that a person is in a “dominant position” if:

“... a person as a supplier or an acquirer of goods or services either alone or together with an interconnected or associated person is in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in that market ...”

78 That section also states that a determination of dominance shall have regard to:

- market share, technical knowledge and access to materials or capital;
- the constraint exercised by competitors or potential competitors; and
- the constraint exercised by suppliers or acquirers.

79 In reaching a conclusion on whether a person is in a position to exercise a dominant influence in a market, the Commission considers the foregoing non-exhaustive factors and any other relevant matters that may be found in a particular case. Important factors to consider in this case are the constraints exercised by potential competitors and customers.

80 In *Port Nelson Ltd v Commerce Commission* [ ] 3 NZLR 554, the Court of Appeal approved the following dominance standard, adopted by McGechan J in the High Court:

“... dominance involves more than “high” market power; more than mere ability to behave “largely” independently of competitors; and more than power to effect “appreciable” changes in terms of trading. It involves a high degree of market control.”

### **Application of the Commerce Act to the Health Sector**

81 The health reforms of 1993 were intended to create a quasi-competitive environment for healthcare services, where previously it was not competitive. Subsequently, however, the Government has made policy changes which have altered the focus of publicly funded healthcare services towards a more collaborative and co-operative approach. Public hospitals are no longer required to earn a profit. The HFA is required to purchase healthcare services to meet the health needs as well as to improve the health status of the population.

82 Current policies toward the provision of healthcare, particularly relating to funding, have to be incorporated into the dominance assessment for each relevant market. Each of the relevant markets is considered below to assess whether the proposed acquisition might lead to the acquisition or strengthening of a dominant position.



## **The Market for the Provision of Routine Radiology Services and Facilities in the Taranaki Region**

83 In assessing whether implementation of the proposed acquisition would result, or would be likely to result, in any person acquiring or strengthening a dominant position in this market, the following factors have been analysed:

- market shares;
- the constraint provided by existing market competitors;
- the constraints provided by market entrants; and
- the constraints provided by purchasers of healthcare services.

### *Market Shares*

84 THL and Fulford are by far the largest providers of routine radiology services in the Taranaki district. THL supplies most of the publicly funded services in Taranaki, while Fulford undertakes virtually all of the private and ACC fee-for-service work in the region. In addition, Fulford carries out some publicly funded radiology services (eg mammography). Revenue and volume figures for the radiology services provided by the parties to the acquisition are provided in Appendix 3.

85 Southern Cross is the only other provider of routine radiology work which operates in the Taranaki district. However, Southern Cross's involvement in this market is confined to plain x-ray film and image intensifier services for inpatients at its hospital in New Plymouth. The company employs a radiographer to take the images, but relies on Fulford to undertake the processing and storage of those images. Southern Cross is currently handling about [ ] examinations on an annual basis.

86 Aside from Southern Cross, the Commission notes that Good Health Wanganui provides routine radiology services from its hospital at Wanganui for people residing in South Taranaki, particularly those living in close proximity to Wanganui. This includes inpatient and outpatient services which have a radiology component as well as primary-referred radiology work.

87 Implementation of the acquisition will result in FRSL acquiring close to 100% of the market for the provision of routine radiology services in the Taranaki district. While that may appear to be a very high market share, the Commission considers that the extent of the aggregation may tend to exaggerate the apparent loss of competition between THL and Fulford. Historical patterns and funding arrangements (in particular, the public/private split), as well as the referral patterns of GPs and other primary providers have influenced the respective radiology services provided by each party.

### *Conclusion on Market Shares*

88 The acquisition would result in FRSL accounting for a very high market share in respect of the provision of routine radiology services and facilities in Taranaki.

### **Constraint Provided by Existing Competitors**

- 89 Given the limited involvement of Southern Cross in the affected market, the Commission's view is that that company does not currently provide an effective constraint on the parties to the acquisition. The Commission also considers that, to the extent that it provides services for residents in South Taranaki, Good Health Wanganui will continue to provide some fringe competition in relation to the provision of routine radiology services in the Taranaki region. However, the Commission considers that there might be scope for Southern Cross and Good Health Wanganui to expand their presence in this market in future, given the appropriate incentives.

*Conclusion on the Constraint Provided by Existing Competitors*

- 90 In view of the limited competition provided by Southern Cross and Good Health Wanganui, the Commission concludes that those parties provide only a limited constraint in the markets for the provision of routine radiology services and facilities in the Taranaki district.

**Constraint Provided by Potential Competitors**

*Introduction*

- 91 The Commission has acknowledged in its *Business Acquisition Guidelines* that potential competition can act as a constraint on the exercise of market power. An assessment of the nature and extent of that constraint represents an important element in the Commission's evaluation of competition and market dominance.<sup>7</sup> In order for the threat of market entry to be a sufficient constraint on the exercise of market power, however, four conditions must be satisfied: entry must be likely, sufficient in extent, timely and sustainable (ie, the "lets" test).<sup>8</sup>

*Likelihood and Sustainability of Entry*

- 92 In order for potential competition to have an effective constraint on incumbents, entry must be likely in commercial terms. In addition, entry is likely only if there is likely to be a lasting economic incentive.<sup>9</sup>
- 93 With regard to routine radiology services, the Commission considers that the height of entry barriers might not be such as to impede a prospective entrant from commencing operations. In particular, the Commission has been advised by several parties that it would be possible to establish routine radiology services, either alone or as part of a wider radiology service. This could be achieved by establishing a satellite facility in Taranaki, leasing facilities and equipment, and then employing a radiographer. The images could then be transmitted by courier or by a modem to a central facility, which could be located anywhere in the country, for analysis and then be reported back to the originating source. In this manner, it would be possible to avoid having a radiologist present on a continual basis, although one would be necessary occasionally to perform certain radiology services (eg arthrograms or barium studies).

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<sup>7</sup> *Business Acquisition Guidelines 1996*, pp 19-20.

<sup>8</sup> *Ibid.* p. 19

<sup>9</sup> *Ibid.*, pp.19 and 20.

- 94 Access to appropriate facilities in the Taranaki district does not appear to raise difficulties since there are a variety of alternatives potentially available. These include existing medical clinics, commercial office space, or possibly the Southern Cross hospital facility in New Plymouth. Similarly, access to equipment, radiographers and other inputs would not appear to raise difficulties.
- 95 Examples of recent entry into the provision of routine radiology services (either alone or as part of a wider service) into various regional markets include the following:
- Christchurch Radiology Group (CRG) is currently providing various radiology services for the Grey Hospital at Greymouth by means of a teleradiology service, with the images being transmitted to one of CRT's clinics in Christchurch for analysis;
  - Castlereagh Radiology, an Australian-owned entity, has recently established a clinic in Christchurch. The company employs two radiographers, and arranges for the images to be couriered to its central site in Palmerston North for analysis;
  - a group of Hawkes Bay GPs has established a plain film x-ray service from commercial premises in Palmerston North; and
  - a radiographer has established a mobile x-ray clinic on Auckland's North Shore and Hibiscus Coast area. The images are analysed by a group of Auckland radiologists.
- 96 [
- ]
- 97 In establishing a radiology service along the lines described above, it is important to note the significant role performed by the GP, and other primary referrers, in terms of influencing the referral patterns of patients. The Commission has been told that, for radiology services which are provided under a fee-for-service arrangement, it is likely that a GP would have few reservations in referring a patient to a new provider, as long as that provider could deliver services in accordance with the appropriate standards.
- 98 The Commission's view is that there might be some scope for entry to occur in respect of routine radiology services in Taranaki, given the appropriate incentives. For example, if the combined entity were to raise the co-payment for ACC primary-referred radiology services, it is possible that a new entrant might be attracted to commence services. Such entry could be made either by an HHS, or by a private radiology provider located outside the region, or by some other group such as a private insurance company or a group of GPs.

### *Extent of Entry*

- 99 As indicated in the *Business Acquisition Guidelines*, the Commission concludes that for the threat of entry effectively to constrain existing market participants, it must be at a level and spread of sales such as to be likely to cause market participants to react in a significant manner.<sup>10</sup>
- 100 While some parties considered that entry into the provision of a wider range of radiology services might be feasible, comments received from others suggest that entry is likely to be more difficult. For example, some parties have advised that it would not be feasible to enter a market of the size of Taranaki, even for routine radiology services, because of the relatively small population. Those parties consider that the number of patients is unlikely to be sufficient to generate the volume of work necessary to develop a viable operation. Also, they consider that entry by way of a plain film x-ray service would on its own be insufficient and that provision of a wider range of services (eg an MRI scan) would be necessary for entry to be viable.
- 101 Although entry on a relatively modest scale might be sufficient to provide an effective constraint on FRSL in this market, the Commission considers that there is insufficient information at this time to determine the volume of business which would be necessary to constrain FRSL.

### *Timeliness of Entry*

- 102 The *Business Acquisition Guidelines* specify that for entry to be timely, it must be possible for it to be achieved within two years.<sup>11</sup>
- 103 It is considered that, subject to other criteria of the “lets” test being met, market entry could be achieved in a timely manner.

### *Conclusion on the Constraints Provided from Potential Competitors*

- 104 The Commission concludes that, while entry into the provision of routine radiology services in the Taranaki region might be possible, there is insufficient information at this time to determine the extent to which it would be likely, sufficient in extent, and sustainable.

### **Countervailing Power by Purchasers**

- 105 The Commission considers that the critical issue in determining the competition implications of the proposal is the potential countervailing power of the purchasers of healthcare services, particularly the HFA, ACC and the major insurance companies. This is discussed below.

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<sup>10</sup> *Ibid*, p.19.

<sup>11</sup> *Ibid*, p. 20.

*Constraint Provided by the HFA*

- 106 Currently, the HFA has a major influence on the behaviour of THL (as indeed it has on all other health providers) through its role as the monopsony purchaser of publicly funded healthcare services, including radiology services.
- 107 Through its Funding Agreement with the Ministry of Health, the HFA is required to purchase public healthcare services to meet the Government's health objectives within allocated funding. To this end, the HFA, in consultation with a range of other parties, determines the healthcare needs of the national population, and then purchases healthcare services within its budget constraints with a view to optimising the health outcomes of all New Zealanders.
- 108 Having established the services which it is prepared to fund, the HFA contracts with healthcare providers, such as THL, to provide various healthcare services. This is conducted within the framework of a national pricing strategy and service specifications. National pricing has been developed by a series of project teams involving the HFA and HHSs which have identified the costs of providing various publicly funded healthcare services. A standard price is calculated for each procedure, which then forms the basis for the HFA's negotiations with HHSs.
- 109 In the Commission's view, the national pricing framework provides limited scope for HHSs, such as THL, to exercise any discretionary power in terms of the pricing and output of the relevant healthcare services that are to be provided. The HFA uses its national pricing as a benchmark and is not prepared to pay above those levels unless the HHSs volumes and/or costs have escalated. The HFA has stated that it is unlikely to pay a different price in a region, as distinct from the rest of New Zealand, unless there is a volume or cost justification for doing so. It is through this process that the HFA has controlled the pricing and output of healthcare services.
- 110 The applicant, and certain other parties, have told the Commission that the HFA has been concerned in particular about the cost of support services throughout the entire country, including radiology at THL and other HHSs. As a consequence, the HFA has been working vigorously to drive down those costs. In regard to the HFA's contract with THL, the HFA has been successful in reducing the budget for primary-referred radiology services by 38% from [ ] to the current level of [ ] over a two-year period (1995-97).
- 111 The Commission considers that the conduct described above demonstrates that the HFA has very strong countervailing power, and that it is not reluctant to exercise that power. Further, that it does not appear that FRSL would have any more bargaining power in the post-acquisition market than is currently held by THL. The HFA has advised the Commission that the HFA does not consider that the acquisition will have any impact on its ability to exercise countervailing power.
- 112 Having regard to the above factors, the Commission concludes that the HFA currently exercises a very strong countervailing power on the parties to the acquisition, and that this power is unlikely to diminish to any significant extent should the proposed acquisition proceed.

*Constraint Provided by the ACC*

- 113 Like the HFA, the ACC has a major role in the purchase of healthcare services as part of its statutory obligations. In the context of the acquisition, the ACC currently acquires or purchases radiology services in three ways: as a separate item; as part of a wider episode of care; and in some instances, by a combination of those methods.
- 114 For primary-referred radiology work, the ACC reimburses private providers on a fee-for-service basis in accordance with a schedule prescribed in the relevant regulations (see paragraph 43). Until recently, HHSs have been prevented from carrying out radiology services in terms of those regulations. However, the ACC has now entered into contracts with most HHSs which enables those HHSs to carry out such work. Under the relevant contracts the ACC stipulates that a national price applies to the conduct of such work. So far, THL has not entered into a contract with the ACC, but there are no obstacles which prevent it from doing so.
- 115 Since 1 July 1997, the ACC has been contracting for the purchase of elective secondary healthcare service directly from providers. This includes services which have a radiology component. Fulford does not provide the radiology component of any ACC elective surgical procedures.
- 116 To date, THL has not competed for ACC fee-for- service work, but the changes described in paragraph 116 mean that it now could compete. As a consequence, implementation of the acquisition would lead to the removal of a potential competitor for ACC fee-for-service work. However, the ACC considers that the acquisition will not affect its ability to acquire services at competitive prices.
- 117 Despite the loss of potential competition, the Commission considers that the proposed acquisition would not impact on the likelihood of entry into the provision of ACC fee-for-service radiology services.
- 118 The Commission notes that, following the proposed changes to the legislation governing ACC's employers' account, ACC's current monopoly will be removed, and private parties will be permitted to compete for certain ACC- related work. However, the ACC will continue purchasing for its other accounts. The ACC advises that it is likely to remain the major purchaser for radiology services in the immediate future. Even if the ACC's market share were to decline, it is unlikely that the purchasing power of any of the purchasers would be diluted, or diminished materially. In fact, the insurers are likely to continue to provide a strong countervailing power as purchasers of healthcare services, including radiology.
- 119 In light of the above factors, the Commission concludes that the ACC, through its purchasing behaviour, exercises a strong constraint over the parties to the acquisition, and that the acquisition is unlikely to change the existing market situation significantly.

*Constraint Provided by Private Insurance Companies*

- 120 Private medical insurance is provided in New Zealand by about ten market participants, of which Southern Cross is by far the major player. 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.
- 121 While the acquisition would lead to a reduction in the number of players available to carry out routine radiology in Taranaki the Commission considers that 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.

*Conclusion on Countervailing Power of Purchasers*

- 122 The Commission concludes that the countervailing power of the major purchasers of radiology services is very strong, and that they will continue to exercise an effective constraint on the conduct of the combined entity in the post-acquisition market.

*Conclusion on Dominance in the Market for the Provision of Routine Radiology Services and Facilities in the Taranaki Region*

- 123 Given the countervailing power of the major purchaser of radiology services, the lack of any significant change in the level of actual or potential constraint provided by the parties, and some scope for entry, it is concluded that the proposal would not result in any person acquiring or strengthening a dominant position in this market.

**The Market for the Provision of Non-Routine Radiology Services and Facilities in the North Island**

- 124 The acquisition, if implemented, would not result in any aggregation of market share in relation to the provision of non-routine radiology services and facilities in the North Island. Nor is the acquisition likely to alter the market circumstances to any significant extent.
- 125 It is concluded, therefore, that the proposed acquisition would not result in any person acquiring or strengthening a dominant position in the market for the provision of non-routine radiology services and facilities in the North Island.

## OVERALL CONCLUSION

126 The Commission has considered the likely impact of the proposal in the markets for:

- the provision of routine radiology services and facilities in the Taranaki region; and
- the provision of non-routine complex radiology services and facilities in the North Island.

127 Having regard to the factors set out in s 3(9) of the Act, and all the other relevant factors, the Commission is satisfied that the proposal would not result, or would not be likely to result, in the applicant or any other person acquiring or strengthening a dominant position in a market.



## **DETERMINATION ON NOTICE OF CLEARANCE**

128 Accordingly, pursuant to s 66 (3) of the Act, the Commission gives clearance for the proposed acquisition.

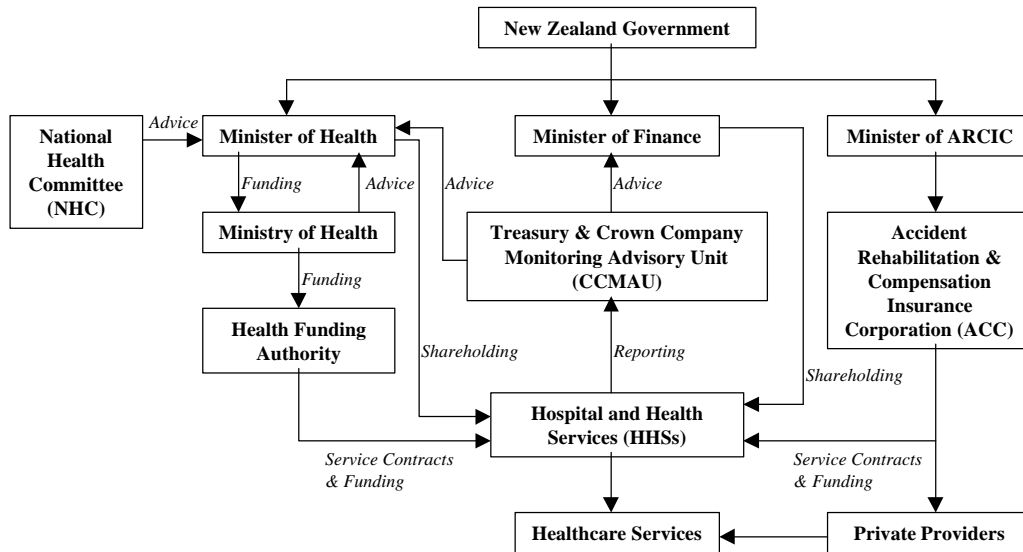
Dated this                      day of March 1999

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E C A Harrison  
The Commission

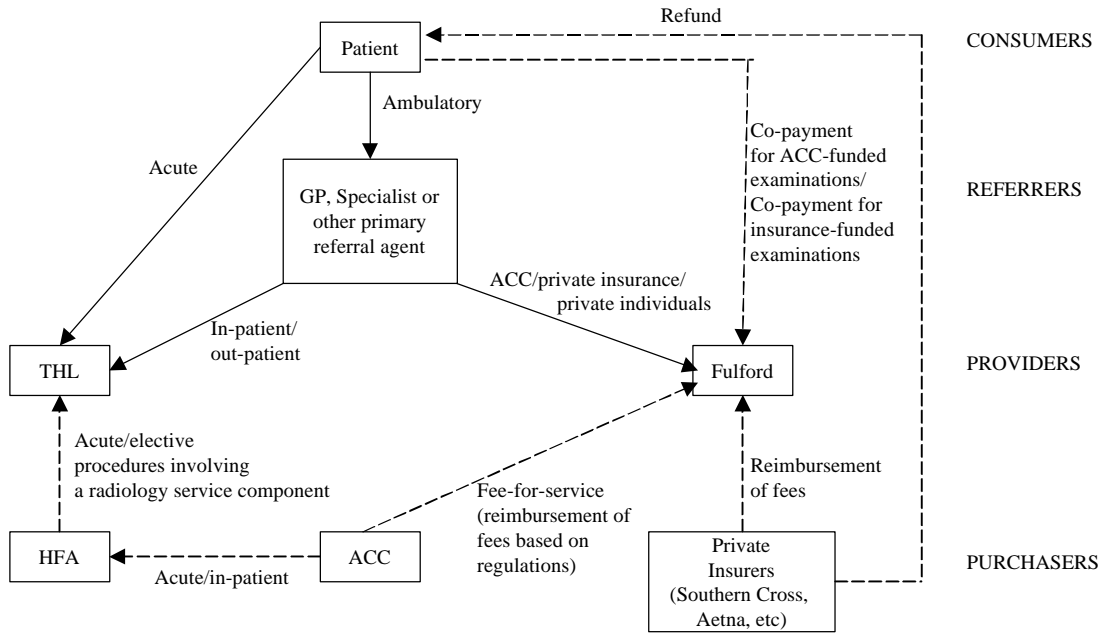
## APPENDIX 1

### STRUCTURE OF NEW ZEALAND HEALTH SECTOR



**APPENDIX 2**

**DIAGRAM SHOWING PATIENT AND REVENUE FLOWS  
IN RESPECT OF RADIOLOGY SERVICES IN THE  
TARANAKI REGION**



**Key**

- Patient flows
- Revenue flows

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### **APPENDIX 3**

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