# Additional comments by Senator Richard Di Natale

The following chapters are to be read in addition to the first three chapters of this report. Greens Senator, Dr Richard Di Natale, strongly agrees with the three recommendations in Chapter 3. These recommend that the government develop a statement of sports ethics, and that sports ethics be taught to students at tertiary level and athletes within sporting organisations.

Senator Di Natale notes the committee's recommendation 4 in chapter 4 that introducing new regulations for sports scientists in Australia should be delayed until after the Australian Crime Commission's and the Australian Sports Anti-Doping Authority's findings have been released. However, Senator Di Natale argues that there are a number of practical measures—that do not require new regulations—that must be considered now in order to protect athlete health and welfare.

Further, Senator Di Natale does not believe that accreditation and other measures must wait until the ACC and ASADA have released their findings. A 'wait and see' position is not appropriate, for the following reasons.

- First, an accreditation system and other practical measures to enhance the accountability of sports scientists are in the interests of athletes and the public, regardless of the scale of the problems that the ACC and ASADA may uncover.
- Second, the ACC and ASADA investigations will not be a comprehensive examination of the extent of issues across Australian sport. Rather, Senator Di Natale understands that the ACC and ASADA investigations are limited to two major sporting codes, and certain clubs and individuals within these codes.
- Third, proposals to improve the current regulatory framework will not impinge or interfere with the ACC or ASADA's investigations. It is unlikely that these investigations will have anything to say on the accreditation and regulation of sports science.

The following chapters on the accreditation and regulation of sports scientists, and the corporate governance arrangements of sporting organisations, make a number of recommendations. The current frameworks, and the cultures underpinning them, are inadequate and should be addressed as a matter of urgency. As chapter 1 of this report noted, the ACC's February 2013 report identified that sports scientists have 'gained increasing influence over decision-making' within Australian football codes. This was also reflected in the findings of the Switkowski report. Protecting the welfare of athletes and the interests of the Australian sporting public should not wait for further findings to be released. Failings in governance and best practice are already known and steps should be taken immediately.

## Structure of the additional comments

The additional comments are structured into the following five chapters:

- Chapter 5 examines the issue of accrediting sports scientists. It makes a strong case for a framework to be put in place to accredit sports scientists and to ensure that the profession is properly identified and held accountable.
- Chapter 6 discusses regulatory options to enhance the oversight of sports scientists in Australia, including a system of registration, a 'negative licencing system' supported by a code of conduct, an external oversight body and legislated protection of athlete health and welfare.
- Chapter 7 notes that the boards and management of sporting organisations and clubs have an important role in establishing a governance framework within which sports scientists operate responsibly and ethically.
- Chapter 8 discusses matters related to the inquiry, including the use of supplements.

# Recommendations by Senator Richard Di Natale

**Recommendation 1**

3.31 The committee recommends that the federal government consider developing a statement of ethics that would apply to all Australian participants in sports.

**Recommendation 2**

3.38 The committee recommends that tertiary institutions offering sports science courses include topics on ethics, which should refer to the duty of care of sports scientists to athletes and the importance of protecting athlete health and welfare.

**Recommendation 3**

3.40 The committee recommends that sporting organisations and/or clubs provide all athletes entering professional and/or high-performance sports programs with specific training on sports ethics, integrity issues and their rights and responsibilities in relation to their long-term health and welfare.

**Recommendation 4**

5.86 Senator Di Natale recommends that the Department of Regional Australia, Local Government, Arts and Sport (DRALGAS) conduct a feasibility study into Exercise & Sports Science Australia's (ESSA) ability to administer a national system of sports science accreditation. In conducting this study, DRALGAS should consider the findings of both the Australian Crime Commission's report on organised crime and drugs in sport and the Australian Sports Anti-Doping Authority's ongoing investigation into drugs in sport. ESSA must be capable of developing and implementing a tiered system that:

- requires minimum qualifications or relevant demonstrated experience;
- offers specialisation in relevant disciplines;
- is relevant and of value to the profession and employers; and
- is capable of achieving widespread uptake.

**Recommendation 5**

5.91 Senator Di Natale recommends that, subject to the Department of Regional Australia, Local Government, Arts and Sport's feasibility study and its consideration of the Australian Crime Commission's and Australian Sports Anti-Doping Authority's findings:

- Exercise & Sports Science Australia (ESSA) should be recognised and promoted as the single national accrediting body by all sporting employers in Australia; and
- where an individual is hired by an employer in a sports science role, they must be able to demonstrate that they hold current ESSA accreditation as a sports scientist. This must be demanded by employers to prevent rogue individuals from 'code-hopping'.

**Recommendation 6**

5.94 Senator Di Natale recommends that accreditation as a sports scientist should be a condition of ongoing employment. If an individual's accreditation is rescinded by the accrediting body following a breach of its code of conduct or an individual does not satisfy the re-accreditation requirements, the individual's employment with the sporting organisation should be terminated. Employers should actively confirm the accreditation status and level of the personnel they employ in sports science roles on an annual basis, by formally requesting confirmation from the accrediting body. The accrediting body should ensure that it has the resources and processes in place to respond to these requests in a timely way.

**Recommendation 7**

6.38 Senator Di Natale recommends that, following the establishment of a widespread, tiered system of accreditation for sports scientists in Australia, the government should consider including relevant sports science disciplines in the National Registration and Accreditation Scheme.

**Recommendation 8**

6.57 Senator Di Natale recognises the need for publicly accessible information about substances and practices impacting on athlete health and wellbeing. The Senator recommends that the Department of Regional Australia, Local Government, Arts and Sport consider forming and promoting an independent advisory group. The utility of an independent source of advice would be to provide up-to-date, independent information for athletes, parents, sporting organisations, peak bodies and coaching staff.

**Recommendation 9**

7.51 Senator Di Natale recommends that the Australian Sports Commission's *Sports Governance Principles* and *AIS Sports Science / Sports Medicine Best Practice Principles* be:

- recognised as promoting best practice principles;
- adopted and adhered to by Australian sporting organisations; and

- periodically reviewed to ensure that they strike the right balance between strengthening integrity measures and respecting the rights and best interests of athletes.

**Recommendation 10**

7.54 Senator Di Natale recommends that the Minister for Sport makes publicly available information about the role, composition and progress of the Australian Sports Integrity Network.

**Recommendation 11**

7.93 Senator Di Natale recommends that where a qualified medical practitioner is employed by a sporting organisation or team, the medical practitioner be required to approve any decision relating to athlete health and welfare including the use of supplements. Further, a sport scientist should be required to consult with an organisation or team's medical officer regarding supplements as appropriate.

**Recommendation 12**

8.11 Senator Di Natale recommends that where supplements are used within national sporting organisations, those organisations consider encouraging only the use of supplements classified as Group A in the Australian Institute of Sport Sports Supplement Program.

**Recommendation 13**

8.14 Senator Di Natale recommends that national sporting organisations consider:

- implementing central registers of supplements in use by teams/clubs; and
- making this information publicly available.

# Chapter 5

# Developing a system of accreditation for sports scientists

## Introduction

5.1 This chapter examines the important issue of accrediting sports scientists. Currently, Exercise & Sport Science Australia (ESSA) offers accreditation for sports scientists, but it is not compulsory. Further, of those that decide to be accredited, there is no regulatory framework that governs their conduct as a sports scientist.

5.2 This chapter put the case for a framework that accredits sports scientists to ensure that they are trained, identified and held accountable for their actions. It is divided into the following sections:

- current accreditation arrangements and levels of sports scientists in Australia;
- accreditation in the United Kingdom (UK);
- support for a national, compulsory accreditation scheme in Australia;
- the key elements of an Australian accreditation scheme;
- considerations in designing a tiered accreditation scheme;

## Current accreditation arrangements for sports scientists

5.3 In her submission to this inquiry, Assistant Professor Annette Greenhow described the concept of accreditation as follows:

> Accreditation is a form of authorisational and informational regulation and has been described as establishing a 'token of trust' providing the assurance of a minimum level of competency. It provides a system where individuals voluntarily seek to meet certain minimum entry requirements and on-going compliance with standards and codes of conduct. One reason for establishing an accreditation system is to uphold standards and maintain public confidence in particular activities. However, central to the value and success of an accreditation system is the credibility of the accrediting authority. The ultimate decision rests with those who use the services and acceptance of the intrinsic value of the token of trust.[1]

5.4 Table 5.1, below, was prepared by the Department of Regional Australia, Local Government, Arts and Sport (DRALGAS) in a response to a question (on notice) from the committee's public hearing. The table shows current accreditation and registration arrangements for a range of professionals who may be involved in a

1 Assistant Professor Annette Greenhow, *Submission 8*, p. 4.

'sports science' department. It shows that sports scientists are neither accredited nor regulated.

5.5 However, ESSA noted that it offers general 'sports science' accreditation to professionals on a voluntary basis. The Coalition of Major Professional and Participation Sports (COMPPS) noted in its submission that while accreditation 'is a requirement of all doctors, physicians, physiotherapists and podiatrists who work alongside athletes, accreditation is not a current requirement to practice as a sports scientist'.[2]

### *ESSA's accreditation*

5.6 ESSA described its role in accrediting qualified specialists as 'to ensure that appropriate standards of technical and ethical conduct are met and maintained by all those in practice'.[3] It has administered a sports science accreditation program since 1996.[4] ESSA-accredited sports scientists are:

> … 3 or 4 year university trained exercise and sports science/ human movement studies graduates. They specialise in helping an individual athlete or team to improve their sporting performance through the uses of scientific knowledge, methods and applications in the area of physiology, biomechanics, psychology, motor control and motor development. They evaluate research, assess and advise on the technical and practical aspects of training, injury prevention, technique analysis, and nutrition, optimisation of performance, and recovery practices in all areas and levels of sport.[5]

5.7 By way of comparison, ESSA also accredits 'exercise scientists' and 'exercise physiologists'. It explains the accreditation requirements for these professions as follows:

> Exercise scientists are 3 or 4 year (or equivalent) university trained exercise and sports science/ human movement studies graduates. They specialise in the design, implementation and evaluation of exercise and physical activity. They provide intervention for improving general health, prevention of chronic diseases, and sports performance enhancement.

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2 Coalition of Major Professional and Participation Sports, *Submission 9*, p. 5.

3 Exercise & Sports Science Australia, *2013 Sports Science Accreditation Application Form*, http://www.essa.org.au/wp/wp-content/uploads/2013-Sports-Science-Accreditation-Application-Form-2.pdf (accessed 21 May 2013).

4 Exercise & Sports Science Australia, *Submission 7*, p. 7.

5 Exercise & Sports Science Australia, *Our professional members*, http://www.essa.org.au/about-us/profession/ (accessed 6 June 2013).

## Table 5.1: Professionals who may be involved in a 'sports science' department

| *Profession* | *Professional body* | *Accreditation of University or Tertiary Courses / Overseas Practitioner assessment* | *Registration* |
|---|---|---|---|
| Sports physician (doctor) | Australian College of Sports Physicians | Yes, by Australian Medical Council. Undergrad/post grad medical course. Specialist training | Yes, AHPRA<br>Both at graduate medical practitioner level and at specialist level – training conducted by College. Protection of title: 'Specialist Sports Physician' |
| Physiotherapist | Australian Physiotherapy Association | Australian Physiotherapy Council | Yes, AHPRA<br>At graduate level |
| Psychologist – Sport and Exercise | Australian Psychology Society (assesses overseas practitioners)<br>Also runs 'colleges' including sport and exercise | Australian Psychology Accreditation Council (Universities only) | Yes, AHPRA<br>At graduate practitioner level. Area of endorsement 'sports and exercise' – requires masters of PhD |
| Sports Dietician | Sports Dietitians Australia | Dietetics Association of Australia. Undergrad/post grad courses. No recognition of specialities | No<br>Must be a member of DAA to join Sports Dietitians Australia plus extra course completion required (run by SDA) |
| Chiropractor | | Council on Chiropractic Education Australasia | Yes, AHPRA<br>Graduate level |
| Sports Scientist | Exercise and Sports Science Australia. Full membership as 'sports scientist' requires undergrad degree in exercise/sport science plus 500 hours supervised practice | No. Although ESSA says will commence from 2014 | No |
| Performance Analyst/Biomechanics | None in Australia.<br>International Society for Performance Analysis in Sport (UK based) | No. Although ESSA may cover relevant undergrad degrees from 2014 | No |
| Strength and Conditioning Coach | Australian Strength and Conditioning Association (No membership qualifications apparent) | No | No |
| Coach (senior coach, assistant coach, senior assistant coach, development coach, development welfare coach etc.) | No specific professional body apparent in Australia aside from Australian Strength and Conditioning Association | No<br>ASC provides an online education system (called 'accreditation') providing three tiers of education. Service Skills Australia (Training and Skills Council) provides a VET training package in Sport, Fitness and Recreation | No |

*Source: Department of Regional Australia, Local Government, Arts and Sport, answer to question on notice, 12 June 2013 (received 25 June 2013).*

> Exercise physiologists are 4-year university qualified allied health professionals who specialise in the delivery of exercise, lifestyle and behavioural modification programs for the prevention and management of chronic diseases and injuries. [Exercise physiologists] provide physical activity and behaviour change support for clients with conditions such as cardiovascular disease, diabetes, osteoporosis, depressions, cancer, arthritis, [chronic obstructive pulmonary disease] and many more.[6]

### *Low levels of accreditation*

5.8 In its 2012 Annual Report, ESSA listed 2509 accredited exercise physiologists and only 19 accredited sports scientists among its membership.[7] ESSA has accredited a total of 52 sports scientists since 1996.[8] Despite the low number of accredited sports scientists, as mentioned in chapter 2 ESSA estimates that there are 400 to 500 professional sports scientists in Australia.[9] ESSA has commissioned a sports science workforce audit in order to obtain more information about the scope of the profession.[10]

**Table 5.2: ESSA Membership**

| *Membership Category* | *2012* | *2011* | *Movement in numbers* |
|---|---|---|---|
| Student | 516 | 692 | - 25.5% |
| Exercise Science (Full) | 3092 | 2724 | + 13.5% |
| Associate | 29 | 26 | + 11.54% |
| Accredited Exercise Physiologist (AEP) | 2509 | 2016 | + 24.45 % |
| Accredited Sports Scientist (ASp) | 19 | 17 | + 11.07% |
| Academic | 34 | 34 | + 0% |

*Source: Exercise & Sports Science Australia, Annual Report 2012, p. 8, http://www.essa.org.au/wp/wp-content/uploads/Annual-Report-2012-low-res.pdf (accessed 21 May 2013).*

5.9 ESSA attributed the success of its exercise physiology accreditation program to the recognition of exercise physiologists as allied health professionals in 2005 and the subsequent allocation of Medicare provider numbers to them.[11]

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6 Exercise & Sports Science Australia, *Our professional members*, http://www.essa.org.au/about-us/profession/ (accessed 6 June 2013).

7 Exercise & Sports Science Australia, *Annual Report 2012*, p. 8, *http://www.essa.org.au/wp/wp-content/uploads/Annual-Report-2012-low-res.pdf* (accessed 21 May 2013).

8 Exercise and Sports Science Australia, *Submission 7*, p. 7.

9 Elise Scott, 'Sports scientists can avoid ASADA penalty', *Brisbane Times*, 13 March 2013.

10 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 39.

11 Mrs Anita Hobson-Powell, Executive Officer, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 38.

Exercise physiologists were also added to the Department of Veterans' Affairs provider list and recognised by WorkCover and health funds. ESSA suggested these events led to employers specifying the accreditation in job descriptions.[12]

5.10 ESSA attributes the low numbers of individuals seeking sports science accreditation to lack of demand from employers.[13] Associate Professor Christopher Askew, President of ESSA, suggested that some professionals had also misunderstood what ESSA was trying to achieve:

> Some sports scientists have looked at ESSA and said, 'You do not give me what I need to do my job. You do not give me a journal in biomechanics. You do not give me continuing education in biomechanics.' But that is not what we set out to do. We set out to establish a benchmark that is gauged from industry standards and from evidence-based practice so that everyone reaches that minimum set of standards as an accrediting role.[14]

5.11 In essence, the ESSA sports science accreditation that has been taken up in limited numbers by the industry is for the general or meta-title of 'sports scientist'. While ESSA has in the past developed a tiered system—which offered a base level of accreditation together with a higher level of specialisation—due to the low levels of accreditation it has not promoted this more advanced system.[15] Professor David Bishop indicated to the committee that the tiered system 'is all in place currently. It just needs to be reactivated'.[16]

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'Medicare Australia provider/registration numbers are allocated to allied health professionals to enable them to participate in the Medicare allied health and dental care initiative and to provide a method of identifying the place from which a service is provided. Medicare Australia provider/registration numbers are also allocated to physiotherapists, osteopaths, chiropractors or podiatrists for the purposes of enabling these health professionals to request certain diagnostic imaging services as set out in the Medicare Benefits Schedule Book … An allied health professional applying for registration under the allied health and dental initiative must be in private practice, and services claimed under this initiative must be performed while working in a private capacity'. Medicare Australia, *Application for an initial Medicare provider/registration number for an Allied Health Professional*, p. 1of 4 http://www.medicareaustralia.gov.au/provider/pubs/medicare-forms/files/1449-Application-for-an-initial-Medicare-provider-registration-number-for-an-Allied-Health-Professional.pdf (accessed 28 June 2013).

12 Mrs Anita Hobson-Powell, Executive Officer, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 38.

13 Associate Professor Christopher Askew, President, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 40.

14 Associate Professor Christopher Askew, President, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 41.

15 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 40.

16 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 40.

5.12 The National Institute Network (NIN) submitted that as ESSA's accreditation system currently stands, it is:

> … relevant predominately to exercise physiologists working in clinical settings and has not been considered highly relevant by other sports scientists who work with athletes.[17]

5.13 In its submission, NIN referred to accrediting bodies associated with the most common disciplines of sport science. Table 5.3, reproduced from NIN's submission, shows the accrediting bodies for various sports science disciplines.

**Table 5.3: Accrediting bodies associated with sport science disciplines**

| *Discipline* | *Accrediting body* |
|---|---|
| Biomechanics | Australian & NZ Society of Biomechanics |
| Biochemistry | Australasian Association of Clinical Biochemists |
| Nutrition/Dietetics | Nutrition Australia / Dietitians Association of Australia |
| Strength & Conditioning | Australian Strength & Conditioning Association |
| Performance Analysis | International Society of Performance Analysis in Sport |
| Physiology | Exercise & Sports Science Australia |
| Podiatry | Australian Podiatry Association |
| Psychology | Australian Psychology Board |
| Skill Acquisition | No accrediting body |
| Technology/Engineering | International Sports Engineering Association |

*Source: National Institute Network,* Submission 14*, p. 3.*

5.14 While several accrediting bodies exist for sport science disciplines, DRALGAS informed the committee at the public hearing that it is 'inevitable that there will be people who are going to be working with athletes who may not be covered' by one of these bodies.[18]

## Accreditation in the United Kingdom

5.15 The UK has an accreditation system for sports scientists that may offer a model for broad-based accreditation in Australia. As chapter 1 noted, the British Association of Sport and Exercise Sciences (BASES) is the professional body for sport and exercise sciences in the UK. BASES was founded in 1984 and is 'concerned with setting, maintaining and enhancing the professional and ethical standards of its

17 National Institute Network, *Submission 14*, p. 3.

18 Mr Richard Eccles, Deputy Secretary, Department of Regional Australia, Local Government, Arts and Sport, *Proof Committee Hansard*, 12 June 2013, p. 9.

members who are actively involved in sport and exercise science'.[19] Like ESSA, BASES promotes standards through the adoption of a code of conduct and an accreditation scheme. Practitioners who are deemed by BASES to 'have the minimum knowledge, skills and understanding necessary to be safe and fit to practice as a sport and exercise scientist' are entitled to use the term 'BASES Accredited Sport and Exercise Scientist'.[20]

5.16 In 2012, BASES had 339 accredited members, 23 Certified Exercise Practitioners and 20 members holding High Performance Sport Accreditation.[21] In addition, 191 BASES members were undertaking supervised experience with 100 registered supervisors.

5.17 The English Institute of Sport (EIS) stipulates BASES accreditation in job descriptions. Professor Kevin Thompson is a former senior manager and national director of science at the EIS and chaired sports science committees at BASES over a seven-year period. In evidence to the committee, he outlined BASES' accreditation process:

> There is a supervised experience team. That is usually undertaken by graduates, so they have their undergraduate degree. They often start this when they are undertaking a masters degree—that is, a postgraduate qualification. It involves 500 hours of supervised practice. ESSA have a very similar process. At the moment there are approximately 200 individuals undertaking supervised experience. It takes usually a couple of years to build up that amount of practice. There are approximately 100 sports scientists already accredited who act as mentors through that process on an annual basis. Having gained that accreditation, they then practice and every five years they reaccredit. There is one level beyond that which is for very experienced sports scientists who have worked for usually six to 10 years in the industry. There is the potential to take an additional level of accreditation.[22]

This higher level of accreditation—High Performance Sport Accreditation—is based on competencies in areas such as 'ethical considerations, working within a team, being able to provide feedback et cetera'.[23]

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19 British Association of Sport and Exercise Sciences, Accreditation, http://www.bases.org.uk/Accreditation/Accreditation (accessed 22 May 2013).

20 British Association of Sport and Exercise Sciences, Accreditation, http://www.bases.org.uk/Accreditation/Accreditation (accessed 22 May 2013).

21 British Association of Sport and Exercise Sciences, Annual Report 2011–2012, p. 4 http://www.bases.org.uk/write/BASES%20ANN%20REP18pgc_180712.pdf (accessed 22 May 2013).

22 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, p. 34.

23 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, p. 34.

5.18 Professor Thompson credits EIS' employment pre-condition with an increase in professional sports in the UK stipulating accreditation in advertised positions.[24] As he told the committee:

> … accreditation only really gained force within the UK when the major employers within sport in the UK asked for accreditation in people's resumes.[25]

5.19 Elsewhere, Professor Thompson has argued:

> Critically, as BASES-accredited practitioners have progressed within the sport industry and gained influential positions, accreditation has unsurprisingly become more widely accepted as the 'norm'.[26]

He has described a rigorous accreditation system as having:

> … great worth to employers who can trust the person interviewing for the role has relevant and worthwhile qualifications and most importantly will work using evidence-based practise and within a code of conduct.[27]

5.20 Professor Thompson told the committee that BASES accreditation had started out as 'very discipline-specific' but had developed into a more 'broad based competency'.[28] He suggested that this reflects the 'interdisciplinary and multidisciplinary' nature of the profession.

5.21 Professor Thompson referred to BASES' code of conduct as being 'well established'.[29] He also noted that the BASES system involved a grandfathering scheme to recognise the skills and experience of individuals.[30] In his view, the BASES system provides a good system for Australia to follow. He suggested that in the UK:

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24 Professor Kevin Thompson, 'Sports science: time for proper accreditation', *The Conversation*, 13 February 2013.

25 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, p. 29.

26 Professor Kevin Thompson, 'Sports science: time for proper accreditation', *The Conversation*, 13 February 2013.

27 Professor Kevin Thompson, 'Sports science: time for proper accreditation', *The Conversation*, 13 February 2013.

28 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, p. 34.

29 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, pp 34–5.

30 A grandfather clause is a provision in a new law, regulation, or anything else that exempts certain persons or business from abiding by it. This can involve an exemption for a set period of time. In the context of accreditation, this could allow individuals working in a profession time to obtain the necessary qualifications or, alternatively, could allow for the recognition of existing skills and experience in place of formal qualifications.

> … we now have practitioners who believe in accreditation, a career pathway and recognition, based in both the professional and the Olympics sports setting, which I think is a very strong basis.[31]

5.22 Mr Daniel Greenwood, Senior Sport Scientist at the Queensland Academy of Sport (QAS), referred to the accreditation system in the UK as 'advanced from where we are at the moment'.[32] However, he argued that it is not necessarily the 'gold standard' and could be improved.[33]

## Support for an accreditation regime in Australia

5.23 The former federal Minister for Sport, Senator the Hon. Kate Lundy, has referred to a formal accreditation program for sports scientists as 'a very worthy idea worth exploring'.[34] At the Australian Olympic Committee annual general meeting in 2013, Minister Lundy was quoted as saying:

> I've received a lot of feedback from sports scientists and they are concerned about the reputation of the profession … Some of them are highly qualified. Some of them are not. And I think sports bodies and athletes have a right to know which is which.[35]

5.24 Several submitters to this inquiry have also voiced their support for a national system that accredits sports scientists in Australia. ESSA, notably, has called for a mandatory accreditation regime for sports scientists in Australia, describing current levels of accreditation as 'alarming'.[36] Professor David Bishop, ESSA's Director of Sports Science, has conducted more than 70 television, radio and press interviews promoting the work of sports scientists and calling for national accreditation of sports scientists.[37] In its submission to this inquiry, ESSA argued that 'regulation of the sports science industry can only be achieved through ensuring that appropriately accredited and/or registered sports scientists be employed or contracted to work with athletes'.[38]

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31 Professor Kevin Thompson, Director, National Institute of Sport Studies, University of Canberra, *Proof Committee Hansard*, 12 June 2103, p. 36.

32 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 29.

33 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 29.

34 David Sygall, 'We're getting out a big stick, says Coates', *Sydney Morning Herald*, 6 May 2013.

35 David Sygall, 'We're getting out a big stick, says Coates', *Sydney Morning Herald*, 6 May 2013.

36 Rick Morton, '"Dodgy" scientists outside the rules', *The Australian*, 8 February 2013.

37 Exercise & Sports Science Australia, *Annual Report 2012*, p. 15, http://www.essa.org.au/wp/wp-content/uploads/Annual-Report-2012-low-res.pdf (accessed 21 May 2013).

38 Exercise & Sports Science Australia, *Submission 7*, p. 13.

5.25 Mr Richard Eccles, Deputy Secretary at DRALGAS, referred to the 'fundamental position' of the Australian Sports Commission (ASC) as being 'that action should be taken to ensure that any individuals working in high-performance sports science meet acceptable professional standards of accreditation'.[39] The ASC strongly recommended that:

> … action is taken to ensure that any individual working in high performance sports science in a sport/club/sports institute meets acceptable professional standards of accreditation.[40]

5.26 COMPPS described as 'incongruous' the situation where 'sports scientists, with such significant responsibility for the health and well-being of professional sports people, can operate in an environment that does not demand professional accreditation'.[41] One of its members, the National Rugby League (NRL), supported 'a national, standardised accreditation system for sports scientists'.[42]

5.27 Athletics Australia (AA) called for clarity so it can be assured 'which scientists are properly qualified and up to date with the latest ethical standards'.[43] This, AA suggested, would allow it to only use 'validated' sports scientists and to provide clear advice to those athletes who establish personal arrangements.

## The key elements of an Australian accreditation scheme

5.28 Senator Di Natale foresees that an effective scheme of accreditation of sports scientists in Australia would need the following five elements:

- strong support and adoption of the scheme among employers;
- the setting and acceptance of base-level standards of accreditation;
- a national system, as opposed to an employer-based system; and
- broad-based agreement on the appropriate accrediting organisation; and
- appropriate grandfathering arrangements.

The following section considers the committee's evidence on each of these issues.

### *Support from employers*

5.29 DRALGAS identified two key planks that should form a robust scheme of accreditation for sports scientists. They are:

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39 Mr Richard Eccles, Deputy Secretary, Department of Regional Australia, Local Government, Arts and Sport, *Proof Committee Hansard*, 12 June 2013, pp 2–3.

40 Australian Sports Commission, *Submission 17*, p. 5.

41 Coalition of Major Professional & Participation Sports, *Submission 9*, p. 11.

42 National Rugby League, *Submission 15*, p. 4.

43 Athletics Australia, *Submission 4*, p. 2.

> … [first] a commitment by employers (whether institutes or academies of sport or sporting organisations) to only employ sports scientists of appropriate qualifications with accreditation by an appropriate professional organisation, and secondly, a commitment that employers will not continue to employ an individual who has been found by an appropriate professional organisation to have breached the professional body's code of conduct requirements and/or has failed to maintain appropriate accreditation. These commitments can also be applied to individuals and/or organisations engaged on a contract basis to provide sports science services.[44]

5.30 DRALGAS referred to the Dietitians Association of Australia as an example of a strong professional organisation that provides an accreditation regime that is frequently a pre-requisite for entry into that discipline.[45]

5.31 DRALGAS noted in its submission that, in conjunction with the ASC, it has begun discussions with state and territory sport and recreation departments and the major professional sports on stipulating accreditation in the employment or contracting of sports scientists.[46] However:

> … before such as system can be put into place … agreement needs to be reached with all relevant parties as to the appropriate professional organisation and level of accreditation both of individual practitioners and the relevant tertiary institutions.[47]

5.32 Professor Thompson recommended that:

> … Australian sport should work more closely with Exercise and Sports Science Australia to deliver an industry-standard accreditation system which insures that sport scientists require accreditation to gain employment. Such an accreditation system should value competency and evidence-based practise and allow existing practitioners with years of experience, but who might not possess a PhD, to gain accreditation.[48]

5.33 Senator Di Natale notes that the UK example of industry-led efforts to enforce accreditation requirements shows how widespread accreditation can be achieved in Australia without regulation. ESSA, for instance, recommended to boards and administrators that oversight of sports science should include:

- development of an employment policy requiring all high performance, sports science and medical staff be accredited/registered with their appropriate professional bodies/boards; and

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44 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 3.

45 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 3.

46 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

47 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

48 Professor Kevin Thompson, 'Sports science: time for proper accreditation', *The Conversation*, 13 February 2013.

- formation of a sports medicine and sports science committee that will allow the board to ensure a focus is given to this particular area of the organisations' activities.[49]

5.34 The importance of sporting clubs' corporate governance in promoting a responsible and ethical working environment for sports scientists is considered in chapter 7.

### *The importance of setting a base-level standards*

5.35 Senator di Natale views the setting and acceptance of base-level standards as fundamental to an effective accreditation system for sports scientists. At the public hearing, Mr Richard Eccles, Deputy Secretary at DRALGAS, argued that:

> … we need to create an environment where we can be confident that those closest to our athletes are qualified to do the work they do, that they meet minimum standards, including ethical standards, and that they are held accountable for their activities.[50]

5.36 Mr Eccles noted that the profession currently comprises 'a range of people from various colleges and various affiliations with various regulatory standards'.[51] He argued that 'there is a need for some form of consistency across all the professional bodies'.[52]

5.37 Mr Greenwood expressed the view that:

> In my opinion, if you want an applied scientist to be properly accredited, you need not only minimum qualification standards—and I think undergraduate degrees are insufficient to call yourself a sport scientist—but also postgraduate qualifications are important. Supervised training should also incorporate a large part of that. You then have to have people who are willing to take on the more junior scientists to lead them into the field properly.[53]

5.38 In referring to the criticism of ESSA's procedures and current system of accreditation, Professor Bishop argued in summary that:

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49 Exercise & Sports Science Australia, *Submission 7*, p. 9.

50 Mr Richard Eccles, Deputy Secretary, Department of Regional Australia, Local Government, Arts and Sport, *Proof Committee Hansard*, 12 June 2013, p. 2.

51 Mr Richard Eccles, Deputy Secretary, Department of Regional Australia, Local Government, Arts and Sport, *Proof Committee Hansard*, 12 June 2013, p. 9.

52 Mr Richard Eccles, Deputy Secretary, Department of Regional Australia, Local Government, Arts and Sport, *Proof Committee Hansard*, 12 June 2013, p. 9.

53 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 21.

> … broadly speaking, there is broad agreement that there needs to be accreditation. I will use an analogy. There is broad agreement that we want to build this accreditation house; what we are arguing over are the curtains and the carpet. There needs to be accreditation. If it is three or four years, if it is 500 or 600 hours, if it is six tiers or four tiers—they are all the details that we would like to sit around with all of the stakeholders and nut out. To answer your question, we are very pleased that there is support for accreditation.[54]

### *A national accreditation scheme*

5.39 Several contributors to the inquiry underlined the importance of a national approach to accrediting sports scientists. Mr Matthew Finnis, Director of Australian Athletes' Alliance (AAA), told the committee:

> I would prefer a national model which operates across sports because the fact is that, whilst Australia is a big country geographically, in this sense we are quite small and it is inevitable that people who operate in this industry will work for different codes. I think by compiling some expertise in one place we are going to get better expertise for the benefit of all and then perhaps be able to link in with international bodies with similar interests. So I would advocate a national approach.[55]

5.40 Similarly, COMPPS submitted that it is important that accreditation be administered by a national, independent body:

> This would help to avoid a 'piece-meal' approach, different standards for different sports, and, most importantly, code hopping (i.e., sports scientists not adhering to appropriate standards moving to another sport).[56]

5.41 Further, COMPPS argued that it is important that any national body:

> … [be] linked to other international professional accreditation systems, such as the British Association of Sport and Exercise Sciences, and Sport and Exercise Science New Zealand, to ensure that sports scientists who lose their accreditation in one country are not simply able to move to another country. Equally, that consistency allows for working easily across jurisdictions.[57]

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54 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 42.

55 Mr Matthew Finnis, Director, Australian Athletes' Alliance, *Proof Committee Hansard*, 12 June 2013, p. 66.

56 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

57 Coalition of Major Professional & Participation Sports, *Submission 9*, p. 12.

5.42 Mr Greenwood submitted that 'the absence of an overarching accreditation system allows anyone to label themselves a sports scientist and practice sport science in any manner they see fit'.[58]

*The problem with employer accreditation schemes*

5.43 It was indicated to the committee that sporting codes in Australia may be considering establishing their own accreditation schemes for sports scientists. ESSA expressed concern at this approach:

> Our accreditation system and standards systems costs over $800,000 to run, and there is no change left over. So if the sports are willing to spend that kind of money, then, as someone said, it is not cost-effective. We have a similar opinion from talking to some of the sports of: 'We will register them and we will decide what qualifications they are going to have.' They could not tell us what qualifications or minimums they were going to have, so we were concerned about that, given they do not have the experience in an accreditation system.
>
> Our second concern was the possibility of code-hopping. You could be with the NRL and you get struck off and then you move onto AFL or cricket, so it is not a national system to ensure that we are going to protect the athletes.[59]

5.44 Associate Professor Christopher Askew, President of ESSA, argued that:

> I do not think that any one of those groups should have oversight of any single profession. We would not be here discussing the possibility of any one employer representing and regulating physiotherapy or medicine or any of the other professions that are involved.[60]

5.45 COMPPS submitted that an advantage of a national, independent body is:

> … that it provides better protection to sporting organisations from future allegations of misconduct than individual self-regulation does, and may also help alleviate concerns of cover-ups and inconsistent standards. This has recently been highlighted by longstanding allegations that the International Cycling Union was more interested in protecting Lance Armstrong and the image of cycling than cracking down on performance-enhancing drugs.[61]

5.46 The Australian Football League (AFL) recently established an internal Sports Science Association made up of practitioners working within its elite clubs.

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58 Mr Daniel Greenwood, *Submission 19*, p. 2.

59 Mrs Anita Hobson-Powell, Executive Officer, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 41.

60 Associate Professor Christopher Askew, President, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 41.

61 Coalition of Major Professional & Participation Sports, *Submission 9*, p. 12.

Only weeks before the Australian Crime Commission report was released and the Australian Sports Anti-Doping Authority's investigation was announced, however, the AFL Sports Science Association said that 'isolated problems between fitness and conditioning personnel and club doctors had been resolved'.[62]

5.47 Senator Di Natale is not supportive of employer bodies developing and implementing their own accreditation schemes. In the Senator's view, a national, independent body should administer sports science accreditation in Australia for all sports and codes.

5.48 Mr Nello Marino, Chief Executive of Sports Medicine Australia (SMA), suggested that:

> … whilst accreditation is part of the equation, there are a whole lot of other issues of ethics and integrity that also need to be ingrained in athletes. In addition to that, certainly the idea of maintaining professional standards—not just for sports scientists but for all professions from Sports Medicine Australia's perspective is critical. It at least provides a foundation to the sorts of skills, expertise and the ethical framework within which practitioners such as sports scientists operate.[63]

5.49 Dr Ian Ford, Director of the Northern Territory Institute of Sport (NTIS), similarly cautioned that accreditation should not be seen as 'fool-proof'. Rather, in his view:

> … it gives credibility to the profession, to the discipline; it gives recognition to the work, the experience and the skills that are required to call yourself a certain type of sports scientist—which I think is important; and hopefully provides insurance to employers that they have got the right sort of people there.[64]

### *The accrediting body*

5.50 There is widespread support for ESSA to act as the accrediting body for sports scientists. In its 2012 Annual Report, ESSA itself asked for:

> … greater regulation of the sports science industry by calling for the appointment of only ESSA-accredited sports scientists across all sporting codes.[65]

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62 Jon Pierik, 'Teamwork bridges AFL fitness, health divide', *The Age*, 22 January 2013.

63 Mr Nello Marino, Chief Executive Officer, Sports Medicine Australia, *Proof Committee Hansard*, 12 June 2013, pp 70–71.

64 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 27.

65 Exercise & Sports Science Australia, *Annual Report 2012*, p. 15, http://www.essa.org.au/wp/wp-content/uploads/Annual-Report-2012-low-res.pdf (accessed 21 May 2013).

5.51 To this end, ESSA has established a 'high-performance sport collaborative project' in collaboration with SMA, Sports Dietitians Australia, Australian Strength and Conditioning Associations, Sports Doctors Australia, Australasian College of Sports Physicians and the Australian Physiotherapy Association:

> Key goals of this group are to develop (a) a factsheet on recommended employment criteria for sports science and professional staff, and their qualifications/accreditation, (b) a flowchart on who should be responsible for the development, administration and signoff for athlete supplementation programs, and (c) a position paper on 'Nutritional supplements and sports performance'.[66]

5.52 Associate Professor Askew described ESSA's view of the way forward:

> I think the very first barrier remains, and that is that it needs to be mandated that employers of sports scientists employ accredited sports scientists. That is step No. 1. In the development of how that accreditation system will look, this is what we are experts in: we seek the evidence, we liaise with the industry stakeholders and we ensure that the accreditation process represents and meets the needs of the industry. That process lies ahead of us. We have a system in place now, but, as you have just said, there is an opportunity for a much larger buy-in now and we recognise the need to adapt the accreditation process. We see that that can happen over a six- to eight-month period—a revised accreditation system can be in place within that time.[67]

5.53 While several bodies exist offering accreditation and/or membership for disciplines of sports science, ESSA argued that 'having more than one regulatory body is not in the best interests of Australian sport and sport scientists'.[68] Moreover, ESSA submitted that it is 'the only professional body in exercise and sports science that can provide the quality control required to regulate the standards of the profession through evidence based practice'.[69]

5.54 ESSA described itself as a 'credible, external arbiter' and submitted that it is 'uniquely positioned to provide this accreditation'.[70] Professor David Bishop, Director of Sports Science at ESSA, told the committee:

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66 Exercise & Sports Science Australia, *Annual Report 2012*, p. 15, http://www.essa.org.au/wp/wp-content/uploads/Annual-Report-2012-low-res.pdf (accessed 21 May 2013).

67 Associate Professor Christopher Askew, President, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 42.

68 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 37.

69 Exercise and Sports Science Australia, *Submission 7*, p. 8.

70 Exercise and Sports Science Australia, *Submission 7*, p. 13.

> We believe that, having been doing this for nearly 20 years and having accredited over 3½ thousand people—and obviously most of those are exercise physiologists—we have got the processes, the procedures. We have made mistakes and refined the systems so that we are well placed, following the input from all the stakeholders, to take this forward.[71]

5.55 The SMA and SDA offered letters of support to ESSA's submission and endorsed its recommendations.[72] Mr Nello Marino, Chief Executive of SMA, told the committee that he was 'very confident' in ESSA's ability to set the necessary standards.[73]

5.56 The Council of Heads of Exercise, Sport and Movement Sciences supported the role of ESSA in accrediting sports scientists.[74] It described ESSA's accreditation regime as 'robust and reliable'.[75]

5.57 The AAA submitted that the ESSA accreditation process, if made mandatory, would address many of the issues it identified in its submission.[76]

5.58 Dr Hugh Seward, Chief Executive of the AFL Medical Officers' Association, referred to ESSA as an 'accreditation trendsetter' and said that ESSA 'can provide a great source of expertise'.[77]

5.59 Dr Ian Ford, Director of the NTIS argued for 'supporting further development and progression' of the work done by ESSA in relation to accreditation.[78] He spoke of the need to 'clearly identify what disciplines fall under sports science' and then to provide support for 'tightening' the accreditation process.[79] Dr Ford said that ESSA:

> … is certainly a body that has done a lot of work. I do not think it is about reinventing the wheel; it is about looking at what they are doing, and the capacity, and providing the support. If, as a result of discussion with the key

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71 Professor David Bishop, Director, Sports Science, Exercise & Sports Science Australia, *Proof Committee Hansard*, 12 June 2013, p. 42.

72 See: Exercise and Sports Science Australia, *Submission 7*, Appendices.

73 Mr Nello Marino, Chief Executive Officer, Sports Medicine Australia, *Proof Committee Hansard*, 12 June 2013, p. 72.

74 Council of Heads of Exercise, Sport and Movement Sciences, *Submission 13*, p. 3.

75 Council of Heads of Exercise, Sport and Movement Sciences, *Submission 13*, p. 3.

76 Australian Athletes' Alliance, *Submission 18*, p. 1.

77 Dr Hugh Seward, Chief Executive Officer, Australian Football League Medical Officers Association, *Proof Committee Hansard*, 12 June 2013, p. 53.

78 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 23.

79 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 23.

> stakeholders, ESSA is the best body to progress that, then we would look to support it I would think.[80]

5.60 DRALGAS also submitted that ESSA is 'perhaps the most immediately relevant professional organisation currently in existence in Australia'.[81] However, it submitted that ESSA 'does not currently restrict its membership to graduates of university courses which have been accredited by ESSA as providing a minimum level of competency to its students'.[82] DRALGAS indicated that ESSA will introduce a restriction from the beginning of 2014.

5.61 The NIN submitted that 'the current framework and requirements of a sport scientist by ESSA is inadequate for the high performance sport system'.[83] The NIN noted that:

> The process of accreditation has been happening within sports science, but quite slowly, for some time. The issue with accreditation of sports scientists is that, as was previously alluded to, the definition of sports science is still so broad and the amount of qualifications that come under that bracket is so broad that the reason no current body exists is that it needs to recognise all the disciplines that are involved. To gain any traction you cannot group some sports scientists and not others, or you have to change the definition of the term 'sports scientist' to accurately represent the people that are associated with the National Institute Network or within the professional bodies themselves.[84]

5.62 However, the NIN did acknowledge that ESSA is in a 'very good position' to establish a 'broad network'.[85] It told the committee that ESSA's current limitations—resulting from ESSA's historically clinical focus—can be overcome through 'input from the other disciplines of sport science and also from the more applied sport science'.[86]

5.63 Applied Scientists of Queensland similarly submitted that ESSA currently fails to:

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80 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 23.

81 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

82 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

83 National Institute Network, *Submission 14*, p. 6.

84 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 21.

85 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 21.

86 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 21.

> … adequately represent the needs and requirements of applied sport scientists or acknowledge the variety of disciplines which contribute to the sport science collective. The focus on clinical, rather than applied, sport science presents limitations to the understanding of the role of a sport scientist in athlete focussed sport environments and restricts their relevance to the industry as a whole.[87]

5.64 Applied Scientists of Queensland further submitted:

> From a knowledge and experience perspective we believe the university qualifications and the amount of practical experience are both insufficient. Instead, as alluded to above, an undergraduate and honours degree should be considered a minimum for university qualifications and a minimum of 1 years full time experience under a senior practitioner should be required for experience.[88]

### *Grandfathering arrangements*

5.65 The NRL submitted that any accreditation and regulation arrangements would need to include 'grandfathering' processes to:

> … allow the up-skilling for current sports scientists working in sporting clubs and organisations to ensure experienced practitioners have the opportunity to gain accreditation.[89]

5.66 Mr Malcolm Speed, Executive Director of COMPPS, also advocated for grandfathering arrangements to 'enable current practitioners to be accredited'.[90] He argued that:

> There are a lot of very professional and competent sports scientists working in professional sport in Australia at the moment who do not have [ESSA] accreditation. Our concern is, subject to being able to regulate the activities of the sports scientists, that we do not want to lose good practitioners from the current batch of sports scientists, because the accreditation system is too high a barrier for them.[91]

5.67 Dr Ian Ford, Director of the NTIS, suggested that grandfathering arrangements would be 'sensible' because 'people have been involved in certain disciplines for a very long period of time but may not have some of the formal

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87 Applied Scientists of Queensland, *Submission 16*, p. 4.

88 Applied Scientists of Queensland, *Submission 16*, p. 11.

89 National Rugby League, *Submission 15*, p. 4.

90 Mr Malcolm Speed, Executive Director, Coalition of Major Professional and Participation Sports, *Proof Committee Hansard*, 12 June 2013, p. 14.

91 Mr Malcolm Speed, Executive Director, Coalition of Major Professional and Participation Sports, *Proof Committee Hansard*, 12 June 2013, p. 17.

qualifications that are required'.[92] However, he argued that discipline-specific experts should determine whether such arrangements are necessary.[93]

## A tiered system of accreditation

5.68 DRALGAS submitted that if ESSA were to become the peak professional body for sports scientists, it would need to introduce a tiered system of accreditation to accommodate the needs of employers.[94]

5.69 Similarly, COMPPS—which represents seven major employers in Australian sport—submitted that the ESSA requirements for accreditation are high and difficult to achieve, which in its view may be one reason why there are so few accredited sports scientists.[95] COMPPS submitted that it may be preferable for an accreditation model to be established similar to the current ESSA model, but more applicable for sport scientists in professional sporting clubs. For example, COMPPS asked, 'should all sport scientists require post graduate qualifications?'[96]

5.70 Mr Malcolm Speed, Executive Director at COMPPS, referred to postgraduate qualifications as 'a very high barrier to entry' and suggested that:

> In the short term there may be another qualification that enables sports scientists to be accredited that is less than that. That is an issue that needs further debate between the sporting bodies and the sports science community.[97]

5.71 The NRL also supports an accreditation system that 'is able to differentiate between levels of expertise'.[98]

5.72 At the public hearing, Mr Daniel Greenwood, Senior Sport Scientist at the QAS, referred to the need for different levels within an accreditation system. He argued that:

> … a tiered system which has an understanding of the discipline-specific nature of sports science, and making sure that there are consequences for

92 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 25.

93 Dr Ian Ford, Director, Northern Territory Institute of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 25.

94 Department of Regional Australia, Local Government, Arts and Sport, *Submission 11*, p. 4.

95 Coalition of Major Professional & Participation Sports, *Submission 9*, p. 7.

96 Coalition of Major Professional & Participation Sports, *Submission 9*, p. 7.

97 Mr Malcolm Speed, Executive Director, Coalition of Major Professional and Participation Sports, *Proof Committee Hansard*, 12 June 2013, p. 16.

98 National Rugby League, *Submission 15*, p. 4.

> failing to adhere to moral and ethical standards, are the pillars of any accreditation system.[99]

5.73 Mr Greenwood also said that an undergraduate sports science degree should not entitle an individual to call themselves a sports scientist.[100] Instead, he suggested that this level of qualification should entitle the individual to provisional membership with an accrediting body.[101]

5.74 In its detailed submission, Applied Scientists of Queensland outlined two models for a tiered accreditation system. It noted that:

> To classify a sport scientist recognition of education, knowledge and experiential history are important. When considering accreditation, a tiered system which denotes this understanding would provide industry standards and aid definition. Importantly this offers potential employers with confirmation of individuals skills and discrimination of credentials between individuals for quality control in the appointment of scientific staff.[102]

5.75 The first model proposed by Applied Scientists of Queensland:

> … assembles sport science disciplines together and discriminates between levels of accreditation based on years of experience and university qualifications. This simplicity standardises expectations and potentially reduces the workload required for accreditation processes. While the definition and amount of categories can be specified following rigorous debate, a provisional 6 tier set-up (Student, Associate, Provisionally Accredited, Accredited, Senior Accredited, Fellow) is proposed.[103]

5.76 It describes the tiers of accreditation in these terms:

> Student membership is open to students in the process of completing a three or four year degree or equivalent in the field of sports science.
>
> Associate is available to persons in other professional fields whose qualifications would not meet the criteria for Sport Science Accreditation, but whose degree may contribute to the field of sports science in Australia. For example, a member of another accreditation body such as an engineer or strength and conditioning professional. This would also encompass academic professionals, who while not directly interacting with athletes, use their research to provide important contributions to the area.

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99 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 25.

100 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 24.

101 Mr Daniel Greenwood, Senior Sport Scientist, Queensland Academy of Sport, National Institute Network, *Proof Committee Hansard*, 12 June 2013, p. 24.

102 Applied Scientists of Queensland, *Submission 16*, p. 7.

103 Applied Scientists of Queensland, *Submission 16*, p. 7.

> Provisionally Accredited Sport Scientist is available to new graduates of an undergraduate program in sport science or related discipline who have less than one year's experience in full-time employment. Provisional accreditation is also available for those who have completed an undergraduate degree in a relevant field and are currently completing post-graduate qualifications in sport science or related discipline.
>
> Accredited Sport Scientist is available to graduates who have completed an undergraduate degree and honours degree in the field of sports science plus a minimum of 1 year full time experience.
>
> Accredited Senior Sport Scientist is available to graduates who have completed a post-graduate degree (Masters or PhD) in the field of sports science plus a minimum 2 years full time practical experience, OR a minimum of 8 years practical experience. Senior practitioners may choose to specify their discipline specific interests in their post-nominal details (i.e. Physiology, Biomechanics, or Skill Acquisition).
>
> Fellow is available to members of the governing body. It recognises those who have achieved a high level of professional accomplishment, responsibility and service to the association.[104]

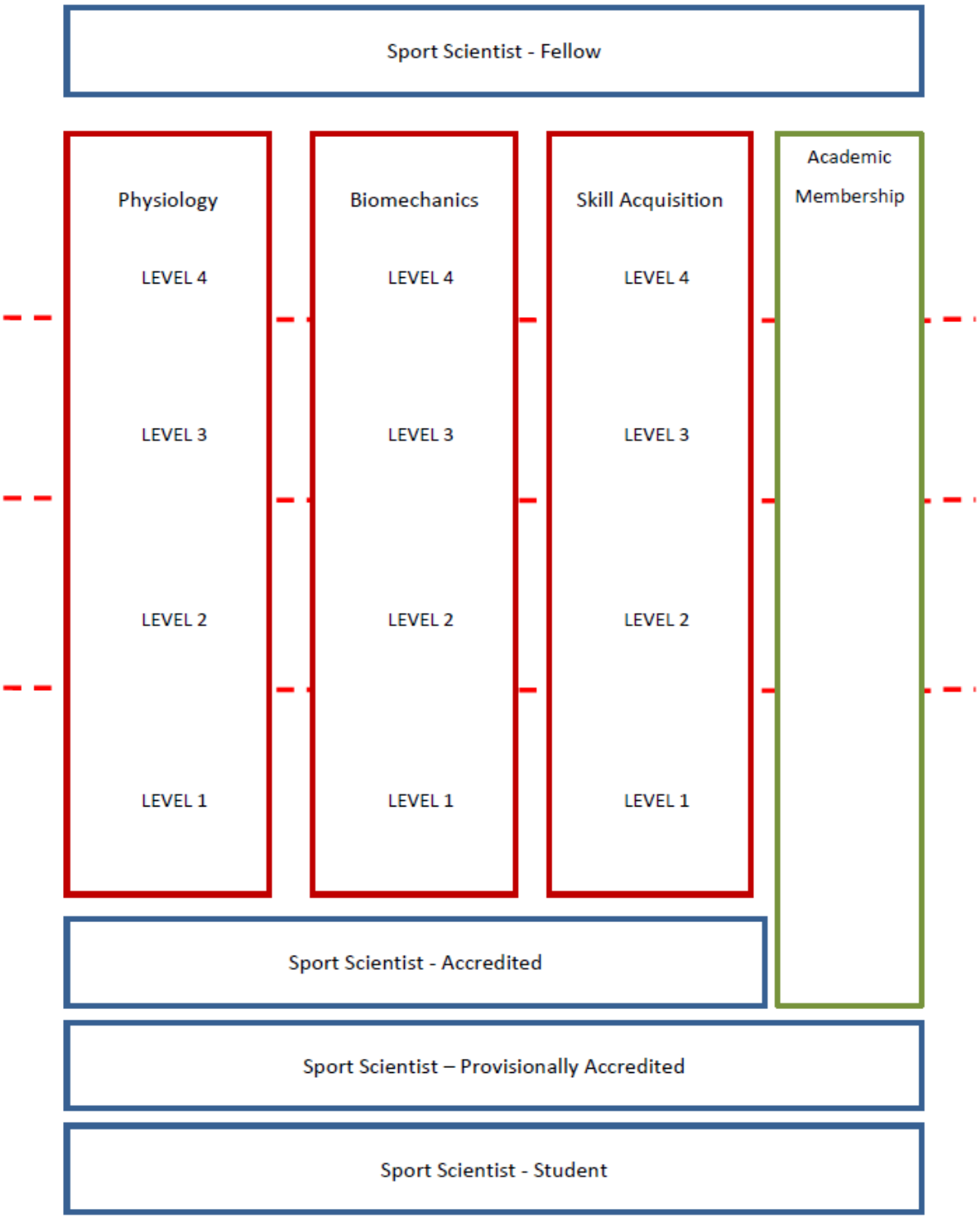
5.77 The second model, preferred by Applied Scientists of Queensland, would provide discipline-specific accreditation:

> Under this proposed model 'sport science' accreditation can be organised by a larger organisation which encompasses general skills and minimum standards. This could be based purely on qualifications and documented experience. This provides minimum standards for everyone wanting to call themselves a sport scientist in clubs, schools, and the private sector and importantly encompasses a code of conduct and ethical accountability.
>
> Once a member of the overseeing body, scientists could achieve discipline specific accreditation which highlights their specialisation. Within the discipline specific recognition a tiered system should exist which could be similar to the previously alluded to tiered set-up. Competency and accreditation of the individual could be recognised by discipline specific national groups which already exist, for example:
>
> - Physiology – [National Science Quality Assurance] and the State and Academy applied physiology network
> - Biomechanics – Australian and New Zealand Society of Biomechanics
> - Skill Acquisition – Australasian Skill Acquisition Research Group.[105]

104 Applied Scientists of Queensland, *Submission 16*, pp 7–8.

105 Applied Scientists of Queensland, *Submission 16*, pp 8–9.

**Figure 5.1: Example development chart for sport science accreditation which encompasses discipline specific knowledge**




*Source: Applied Scientists of Queensland,* Submission 16, *p. 10.*

### *National Science Quality Assurance program*

5.78 The NIN—which comprises the state and territory institutes and academies of sport—has a National Science Quality Assurance (NSSQA) program which provides for a laboratory accreditation process. It covers physiology and strength and conditioning staff. However, the program is not available to sports scientists employed outside the NIN.[106]

5.79 The NSSQA program has recently begun to implement processes for other fields of sports science, including biomechanics, performance analysis and sports medicine.[107] Applied Scientists of Queensland submitted:

> While the NSSQA mechanisms are not currently sufficient to regulate across all sport science disciplines, it is appropriate to consider the contribution of NSSQA in any plan that looks to establish accreditation and regulation systems within the sport science industry.[108]

5.80 The NIN, responsible for administrating the program nationally, similarly submitted that regulatory bodies should:

> … work with the NSSQA program to accurately reflect what is required in an elite sport setting and encourage NSSQA in its expansion of regulation for all sport science disciplines for high performance sport (eg NIN, [national sporting organisations] and professional sports).[109]

5.81 ESSA submitted that:

> … the public interest is best served by the Commonwealth Government enforcing mandatory accreditation of all sports science professionals working within sporting organisations.[110]

## Senator Di Natale's view

5.82 Senator Di Natale is of the strong view that an accreditation system for the sports science profession is necessary. This should be a national scheme overseen by an independent body. Accreditation should be widespread and for this to happen, the system needs to be relevant to the industry and hold value for professionals and employers. Immediate action is required in order to establish an accreditation scheme.

5.83 Senator Di Natale understands that while some of the major sporting codes may be considering implementing their own accreditation schemes, the Senator believes that a single, national system should be introduced that applies across all

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106 National Institute Network, *Submission 14*, p. 4.

107 Applied Scientists of Queensland, *Submission 16*, p. 1.

108 Applied Scientists of Queensland, *Submission 16*, p. 1.

109 National Institute Network, *Submission 14*, p. 2.

110 Exercise and Sports Science Australia, *Submission 7*, p. 13.

sports and codes. Sports science accreditation should be offered on a tiered basis, with different levels of qualifications, experience and specialisation recognised through distinct categories of accreditation.

5.84 Senator Di Natale believes that, on the evidence before the committee, ESSA appears best placed to administer the necessary scheme. However, the Senator notes that the accreditation options currently offered by ESSA do not meet the needs of the industry and have not received widespread buy-in. Additionally, while ESSA noted that it had formulated a tiered system of accreditation, it appears that this has not been promoted or adopted within the profession.

5.85 Senator Di Natale recommends that DRALGAS conduct a feasibility study on ESSA's potential to develop and administer a national, tiered system of sports science accreditation that meets the needs of the profession and employers, and that can achieve widespread uptake.

**Recommendation 4**

**5.86 Senator Di Natale recommends that the Department of Regional Australia, Local Government, Arts and Sport (DRALGAS) conduct a feasibility study into Exercise & Sports Science Australia's (ESSA) ability to administer a national system of sports science accreditation. In conducting this study, DRALGAS should consider the findings of both the Australian Crime Commission's report on organised crime and drugs in sport and the Australian Sports Anti-Doping Authority's ongoing investigation into drugs in sport. ESSA must be capable of developing and implementing a tiered system that:**

- **requires minimum qualifications or relevant demonstrated experience;**
- **offers specialisation in relevant disciplines;**
- **is relevant and of value to the profession and employers; and**
- **is capable of achieving widespread uptake.**

5.87 To do so, Senator Di Natale suggests that DRALGAS engage with a broad range of stakeholders, including professionals, employers and administrators at both the elite and sub-elite levels, to develop (i) definitions of 'sports science' and 'sports scientist' which have broad application; and (ii) a tiered system of accreditation that meets the needs of the profession and employers. In conducting this study, DRALGAS should be mindful of the costs of establishing a new accrediting body as opposed to developing and enhancing the existing functions of ESSA.

5.88 The tiered system should offer a base level of accreditation and/or provisional membership for students or undergraduate degree holders, as well as one or more advanced levels that offer specialisation in sports science disciplines. Senator Di Natale notes the tiered model proposed by Applied Scientists of Queensland[111]—

111 Applied Scientists of Queensland, *Submission 16*, p. 4.

which provides for specialised accreditation in physiology, biomechanics and skills acquisition—is worth exploring. The Senator also recognises the example provided by BASES and its success in implementing a widespread accreditation regime in the UK. Periodic re-accreditation within an appropriate timeframe should also be a feature of the accreditation system.

*Accreditation as employment/engagement pre-condition*

5.89 Senator Di Natale views accreditation of sports scientists as an employment/engagement pre-condition to be crucial to (i) ensuring widespread buy-in to a national accreditation scheme; and (ii) to establishing accreditation as 'best practice'. This should apply to a broad range of professionals who apply scientific principles to the health and performance of athletes.

5.90 The onus therefore falls to the academies and institutes of the NIN and the clubs/teams within the major professional sports, as the employers of the majority of sports scientists in Australia, to lead the way and introduce mandatory accreditation as an employment/engagement pre-condition. The committee heard evidence that in the UK the success of widespread accreditation administered by BASES was the result of leadership from the EIS and other employers. Senator Di Natale is hopeful that this can be replicated in Australia.

**Recommendation 5**

**5.91 Senator Di Natale recommends that, subject to the Department of Regional Australia, Local Government, Arts and Sport's feasibility study and its consideration of the Australian Crime Commission's and Australian Sports Anti-Doping Authority's findings:**

- **Exercise & Sports Science Australia (ESSA) should be recognised and promoted as the single national accrediting body by all sporting employers in Australia; and**
- **where an individual is hired by an employer in a sports science role, they must be able to demonstrate that they hold current ESSA accreditation as a sports scientist. This must be demanded by employers to prevent rogue individuals from 'code-hopping'.**

5.92 Senator Di Natale believes that in order to establish accreditation for sports scientists as best practice, employers must mandate accreditation as an employment pre-condition. The major sporting employers in Australia, being NIN and the teams within the organisations represented by COMPPS, should stipulate sports science accreditation from the identified body as an employment pre-condition for personnel employed in sport science roles. This should be construed to apply to a broad range of staff and should not be dependent on specific position titles or the method of engagement (ie: full-time employee or part-time consultant).

5.93 A grandfathering period should be implemented to enable personnel currently employed in a sports science role to attain accreditation. A tiered system should be introduced once a significant level of base accreditation has been achieved in the profession. Specialised accreditation should then become a pre-employment condition for personnel working in relevant disciplines.

**Recommendation 6**

**5.94 Senator Di Natale recommends that accreditation as a sports scientist should be a condition of ongoing employment. If an individual's accreditation is rescinded by the accrediting body following a breach of its code of conduct or an individual does not satisfy the re-accreditation requirements, the individual's employment with the sporting organisation should be terminated. Employers should actively confirm the accreditation status and level of the personnel they employ in sports science roles on an annual basis, by formally requesting confirmation from the accrediting body. The accrediting body should ensure that it has the resources and processes in place to respond to these requests in a timely way.**