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WHO – ICNIRP EMF NET
WORKSHOP ON CURRENT TRENDS IN HEALTH & SAFETY RISK
ASSESSMENT OF WORK-RELATED EXPOSURE TO EMFS
HOTEL MICHAELANGELO, MILAN
FEBRUARY 16TH 2007

New Zealand & Australia National Approaches and Solutions

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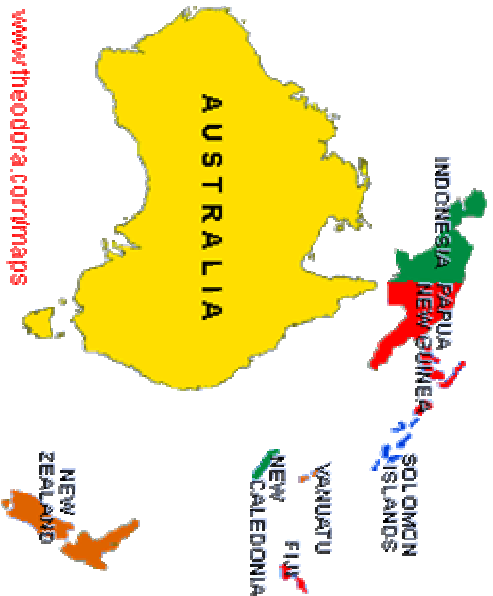
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Australasia Commonwealth of Australia New Zealand



Occupational Health And Safety Systems

- Traditional occupational health and safety systems
- Originated with the British Victorian model
- Administered by Departments or Ministries of Labour and Health
- Impossible to separate the occupational health and safety systems from the context of the compensation systems

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- Woodhouse Commission in the 1960's
- Accident Compensation Scheme
 - no fault compensation scheme
 - replaced Workers Compensation
- Initially covered work related injuries
- Now covers all work & non-work accidents

New beginnings...

- By the 1980's the old laws in both countries were inadequate
- New initiatives based around the prevailing international best practice
- 'tripartite' approach with an involvement of a dedicated institute

New beginnings...

- In Australia, this was achieved
 - National Occupational Safety and Health Committee (NOSHC)
 - Worksafe Australia
 - Workcover in States
- New Zealand
 - Occupational Health & Safety Bill
 - Fourth labour government through the 1980's
 - H&S had a low legislative priority
 - Health & Safety In Employment Act was passed in 1992 under the management of the Department of Labour
 - Government fell in 1990
 - Accident Compensation Act was modified to become more like a commercial insurance scheme but still no fault

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National Occupational Health & Safety Committee (NOHSC) (New Zealand)

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- Major report in 2005.
- Probable under-performance in recognition of occupational disease
 - failing requirements of the International Labour Office (ILO).
- 10 year strategy begins

Workplace Health & Safety Strategy for New Zealand

- 700 to 1000 premature deaths from work related disease
- 100 sudden deaths due to work related injury
- 17,000 to 20,000 new cases of work related disease each year
- 200,000 ACC claims for work related injuries

EMF Safety

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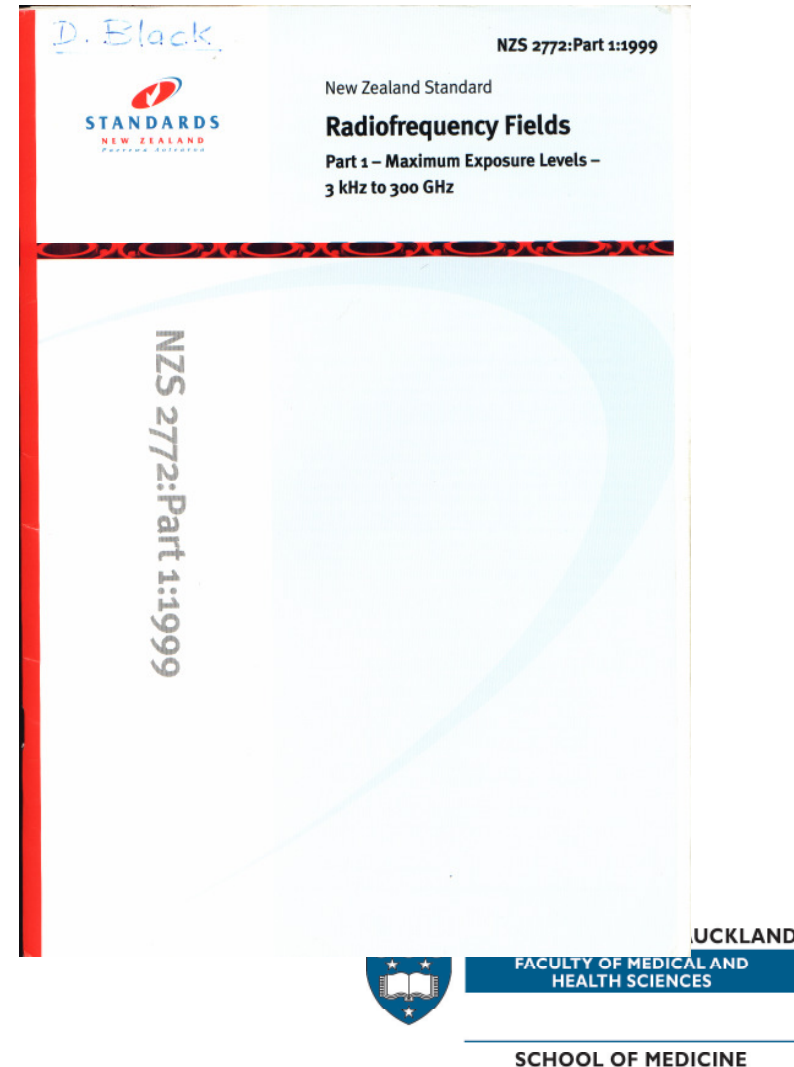
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- Government Radiation Labs
 - ARPANSA
 - NRL
- Support IRPA/ICNIRP/WHO
- Australian Standard 1985
- NZ Standard 1990
- Difficulty in harmonising revisions

New Zealand Standard- NZS2772

- New Zealand published current radio frequency exposure standard in 1999
- Based on joint Australasian work
- Incorporates requirements for exposure minimisation



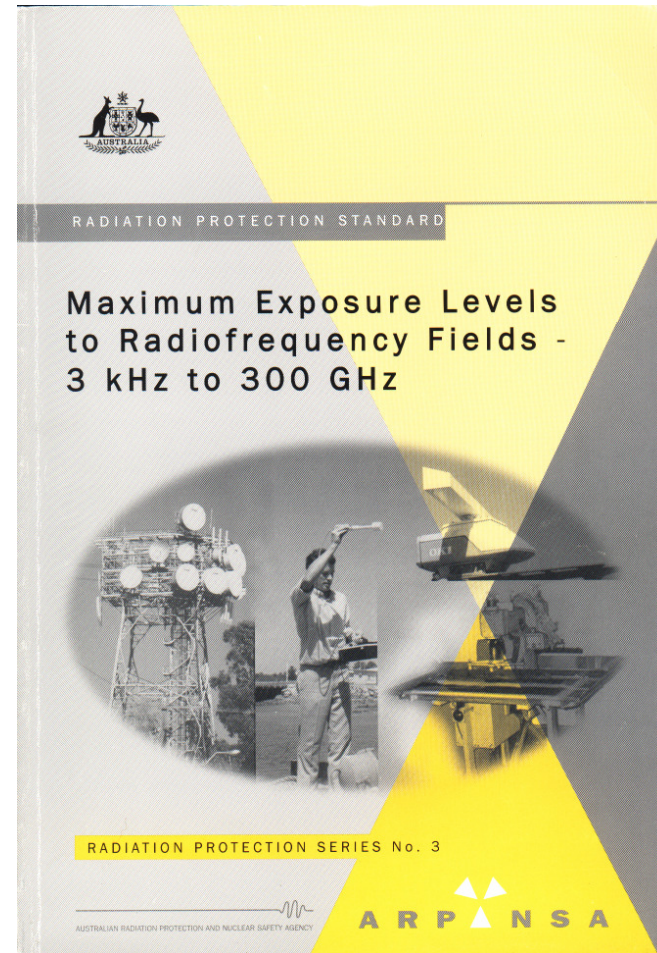
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Australian Standard-RPS3

- Australia published new Standard 2002
- Closely based on ICNIRP
- Detailed rationale
- Requirements for minimization
- Arguably includes precautionary approach



Australian Standard Sect 5.7

Protection of the General Public

- “minimising, as appropriate, RF exposure which is unnecessary or incidental to achievement of service objectives or process requirements, provided this can be readily achieved at reasonable expense.
- Any such precautionary measures should follow good engineering practice and relevant codes of practice.
- The incorporation of arbitrary additional safety factors beyond the exposure levels of this Standard is not supported..”

Precautionary Approach

- Has worked well in practice and supported by public
- Not supported by NZ Environment Court
 - Shirley 1998
- Recently rejected by NSW Environment Court
 - Telstra 2006
- Never applied to occupational exposure

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Occupational Exposure

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- Hierarchy of control
- Defined population
 - Skilled & Trained
 - Not hypersensitive
 - Limited expression of risk
- No place for universal minimization
- Cautionary approach does not fit with best trade practice



Hierarchy of Control (RPS3)

(hazard is exposure in excess of the standard)

- 1. Where practicable, the significant hazard must be **eliminated** (section 8);
- This may involve removing the hazard or hazardous work practice from the workplace. Elimination is the most effective control measure. It should be noted that substitution - replacing a hazard or hazardous work practice with a less hazardous one - does not necessarily result in elimination;
- 2. If elimination is not practicable, the significant hazard must be **isolated** (section 9);
- This may involve isolating or separating the hazard or hazardous work practice from people not involved in the work or the general work areas. It could be done by marking off hazardous areas, or installing screens or barriers;
- 3. If it is impracticable to eliminate or isolate the hazard completely, then the employer must **minimise** the likelihood that the hazard will harm employees (section 10). In addition, the employer must, where appropriate:
 - Provide, make available to, and ensure the use of suitable clothing and equipment to protect the employees from any harm arising from the hazard;
 - Monitor employees' exposure to the hazard;
 - Seek the consent of employees to monitor their health; and
 - With their informed consent, monitor employees' health.
 - This includes introducing work practices that reduce the risk. It could limit the amount of time a person is exposed to a particular hazard, or involve the use of protective equipment.

Section 5 of RPS 3

Occupational Protection

- Clear guidance for
 - Protection
 - Training & Supervision
 - Medical Assessment
 - Notification of incidents
 - Provision of information to employees
 - Record Keeping
 - Post Incident Exposure Management

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Section 5 of RPS 3

- Occupational exposure to pregnant women not allowed
- Reference to human rights issues (HREOC 2001)
- Provision for controlled areas (defined) to allow occupational exposure to other than RF workers

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Legal Decisions

- NZ Shirley Case (1998)
- Australia Telstra Case (2006)
- No landmark decisions on occupational exposure
- No real doubt about meaning as synchronised with other H&S law
- No precautionary principle, no ALARA

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Mandated or Not

- Australian RPS3 partially mandated
- New Zealand Standard Voluntary
 - Current discussions about NES
- Not a clear cut decision ie regulate or not
 - Current USA position regarding ICES
 - European position from mandating of ICNIRP values

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New Australian ELF standard due soon

- Aust & NZ use ICNIRP 1998 as a standard
- New Standard will not be entirely based on ICNIRP
 - Elements of ICNIRP & ICES
- ICES ELF has different approach to safety factors and uncertainty
- Potential to harmonise NZ & Aust again but officials not convinced

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Academia & Industry

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- ACBR in Melbourne
 - Research
 - Training
- ARPANSA
- University of Auckland SOPH
 - iTmedical Group
 - Epidemiology
- Interphone Participation
- Measurement Industry in Australia
 - NATA



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Summary

- New Zealand is moving towards World class workplace health and safety systems
- The ruling Standards in both New Zealand and particularly Australia for radiofrequency at least reflect this.
- Standards for lower frequencies are in the future but the approach to best practice is evident now.