Challenges to conformity assessment models of changing supply chains: – some Australian experiences

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Overview

- How changing supply chains have impacted on areas of Australia's economy
- Changes in conformity assessment infrastructure
- Risks introduced from poor transparency and information asymmetries
- Challenges to conformity assessment procedures of undesirable market outcomes
- Example of where surveillance testing can benefit the market.

Assumptions about supply chains

1. Transparency – if there are questions relating to the goods conformity with requirements or specifications, answers can be obtained in a reasonable timeframe.
2. Behaviour – all players in a supply chain behave with an acceptable level of fairness and integrity.

Supply Chains – Then and Now

Until 1980s, Australia's economy:

- Significant manufacturing sector making a broad range of products
- Imports subject to protection including tariffs on imported goods
- Conformity assessment in regulated sectors performed by government laboratories or by private sector laboratories which were NATA accredited
- Imported goods subjected to conformity assessment in Australia
- NATA's laboratory accreditations reflected the makeup of the economy
- 'Certification' largely restricted to approval by regulators
- No systems of management system certification

Characteristics of the ‘old economy’

- Local raw materials → components → finished product → wholesalers → retailers
- Product traceability was straightforward
- Most risk could be managed by the manufacturer.
- Regulatory oversight was straightforward
- The conformity assessment was generally at two points – the suitability of raw materials and the finished product

Characteristics of modern supply networks

- Often complex –transnational , multiple suppliers of raw materials/components and final assembly plants
- Dynamic – frequent changes to parts of the supply network that are not visible to downstream players
- Traceability of supply network challenging for goods that are not uniquely identifiable
- If goods are non-conforming with requirements, may be difficult to identify source of fault
- Poor management of network may lead to diffusion of responsibility/ lack of accountability

Product attributes

- Search attributes – what can be observed by an end user
- Experience attributes - features that can be readily identified after consumption or use
- Credence attributes - claims about characteristics which cannot reasonably be checked by end users even through use or experience

An example from the Australian economy - construction

- Significant proportion of materials and products are imported
- Less local testing, international standards and new products and materials
- Extensive deregulation - move from prescriptive requirements to a performance-based, government to private sector
- Testing and certification still relevant but greater role for other expertise: e.g. private sector engineering consultants and building surveyors
- Knowledge of credence attributes more difficult to ascertain/ more important to evaluate

Non-conforming product

Growing number of instances of non-compliant materials found in major construction works

Structural fasteners	Materials containing asbestos
Cladding	Cement
Cabling	Structural plywood

Extremely bad media where products and materials have been demonstrated to be non-conforming – particularly safety-related

- Conformity assessment being questioned
- Regulatory regimes questioned
- Imports blamed

What is the problem/are there solutions?

Construction industry issue has not led to any trade dispute ….. yet

- Public frustration and (unfair) distrust of imports
- Some in industry calling for on-shore testing and certification of all imported materials and products – not a solution!
- Appropriate conformity assessment procedures, a reliable conformity assessment infrastructure and clear standards are critical
- National quality infrastructure cannot compensate for lack of transparency, fairness and integrity in supply networks
- Hence, can regulatory policy be adjusted to encourage supply chains to do the right thing?

Incentives

One example that drives behaviour

- Australian energy efficiency program for electrical equipment and appliances - ‘E3 Program’ – administered by federal government
- Conformity assessment procedures give latitude to pre-market measures but place emphasis on post-market ‘check-testing’ at accredited laboratories
- Check-testing targeted – risk, supplier history, whistle-blowers
- Penalties can include fines and product recalls

Summary

- Regulatory authority/NQI dialogue can help avoid trade disputation
- ILAC and IAF can facilitate mutual recognition of conformity assessments
- Where national standards/ unique requirements exist, accreditation may be supplemented with means of mutual education
- Where international standards form the basis for conformity assessment, accreditation for testing, inspection and certification activities can be highly effective
- Majority of goods imported into Australia, and those we export do meet business and consumer expectations.
- Conclusion - It is working – but we can always improve

References

Supply chains/networks

C Harland, R Brenchley, H Walker, *Risk in supply networks*, Journal of Purchasing and Supply Management 9 (2003)

D O'Brien, *Towards a quantitative risk analysis framework to identify Non-Conforming Building Products*. Journal of Building Surveying, Appraisal and Valuation Henry Stewart, London. Volume 5, No.4. (2017)

E3 Program for energy efficiency

http://www.energyrating.gov.au/about