Australian Government

Department of Health and Ageing

Therapeutic Goods Administration

Reforms in the Medical Devices Regulatory Framework

Discussion Paper

25 October 2010

Reforms in the Medical Devices Regulatory Framework

Contents

Executive Summary

The Report of the Review of Health Technology Assessment (HTA) in Australia (HTA Review), released by the Minister for Health and Ageing, the Hon Nicola Roxon, and the then Minister for Finance and Deregulation, the Hon Lindsay Tanner, on 27 February 2010, made a series of sixteen recommendations aimed at setting new directions for HTA in Australia to support better health care for all Australians, and to reduce unnecessary regulatory burdens on the sector while providing timely access to new and improved technologies and treatment modalities. The government agreed to 13 of the 16 recommendations. Three recommendations – relating to post market surveillance – are subject to further consideration by government due to the cost implications involved in their implementation.

A number of the recommendations have a direct impact on the Therapeutic Goods Administration (TGA), its interaction with other HTA agencies, and improvement of postmarket programs to better inform premarket regulatory decision making. Recommendation 8, one of the government agreed recommendations, focuses on the role of the TGA in ensuring medical devices supplied to the Australian market are manufactured under appropriate quality controls, are safe to use and efficacious in their application.

Recommendation 8 of the HTA Review states that the TGA in the context of international harmonisation:

a. Continue its role as the independent national regulator solely responsible for assessing the safety, quality and efficacy of therapeutic goods;

b. Respond to issues raised in the consultations regarding third party conformity assessments by July 2010;

c. Increase the rigour of regulatory assessment of higher risk medical devices by 2011 to ensure an appropriate level of evidential review is undertaken to ensure safety, quality and efficacy of these devices prior to entry onto the Australian Register of Therapeutic Goods and to provide a sound evidence basis for Commonwealth HTA processes; and

d. Develop protocols by July 2010 for information sharing with other HTA agencies.

In response to the HTA Review and a number of reviews of the regulatory burden on Australian manufacturers, competing calls for increased regulation of the safety and efficacy of therapeutic goods and changes to the international regulatory scene, the Therapeutic Goods Administration (TGA) has developed a number of proposals which in combination would meet Recommendation 8, including the need for increased pre-market rigour.

The TGA is calling for comments on this discussion paper on proposed changes to the regulation of devices, including:

1 Addition of a new classification rule to Schedule 2 of the medical device Regulations to reclassify all hip, knee and shoulder joint replacement implants from Class IIb to Class III medical devices;

2A The removal of Subregulation 4.1(1) from the medical device Regulations, so as to no longer require Australian medical device manufacturers to hold TGA conformity assessment certification;

2B The proposal to increase pre-market scrutiny for implantable medical devices by amending:

(i) Subregulation 4.1(2) of the medical device Regulations to require a TGA conformity assessment certificate to also be issued for all Class III and AIMD

(ii) Regulation 5.3 of the medical device Regulations to require applications for all Class IIb implantable and long-term surgically invasive medical devices to also be selected for an application audit prior to inclusion in the ARTG;

2C Increasing third party assessment of devices:

(i) That the TGA commence discussions with the EC over a program of confidence building with the designated Notified Bodies under the MRA, to include sharing of product assessments and joint audits of medical device manufacturers; and

(ii) That further consultation be undertaken to investigate the development of a system whereby Australian based assessment bodies can be designated to issue conformity assessment certificates to Australian manufacturers;

3 Amending the way in which a medical device is included in the ARTG and enhancing identification of devices approved for supply in Australia;

4 Publication of device product information on the TGA Website.

Introduction

The TGA is seeking comment from stakeholders on proposals to reform the regulatory framework for medical devices to:

- Accommodate best regulatory practice within a risk based structure;
- Take account of feedback as a result of two consultation papers released in 2008 (Attachment 2) and 2009 (Attachment 1); and
- Explore mechanisms to implement the recommendations, as agreed by government, of the HTA Review, released in early 2010.

The Consultation Process

Invitation to comment

Relevant industry sectors, professional and consumer groups, and individuals are invited to provide comment and input to the consideration of the proposals outlined in this discussion paper.

The TGA is inviting submissions, views and input from all interested parties by close of business on **Friday 17 December**. All interested parties are welcome to provide input to this consultation process.

The TGA will use the submissions and input received to help inform future regulatory directions.

Once the consultation period has closed, the TGA will continue to work with stakeholders in formulating the final direction in this matter.

Please forward all consultation feedback to:

Office of Device Authorisation
Therapeutic Goods Administration
PO Box 100
WODEN ACT 2606

Or via email to: devices@tga.gov.au

Please note:

A list of names of parties making submissions will be published on the TGA website.

All submissions will be placed on the TGA's website.

For submissions made by individuals, all personal details other than your name will be removed from your submission before it is published on the TGA's website.

Confidential material contained within submissions should be clearly marked. Reasons for a claim to confidentiality must be included in the submission coversheet. Where possible confidential material will be redacted from information published on the TGA website.

This document is intended to be a consultation document and should therefore not be relied upon for advice regarding the regulation of medical devices.

Background

The Therapeutic Goods Administration (TGA) regulates the quality, safety and performance of medical devices supplied in Australia, using a regulatory framework modelled on principles established by the Global Harmonization Task Force (GHTF)[1]. The framework allows inclusion of medical devices in the Australian Register of Therapeutic Goods (ARTG), which in turn allows these to be legally supplied in, or exported from Australia.

The fundamental components of the framework are:

- A set of Essential Principles setting out requirements for safety and performance of a medical device;
- A classification system for medical devices based on the risk the device presents to the patient, the user and the environment;
- A set of Conformity Assessment Procedures, used by the manufacturer of a medical device, to demonstrate the device is in compliance with the Essential Principles of safety and performance;
- Assessment of the application of those procedures by a review organisation, such as a Certified Assessment Body or regulatory body, including initial and on-going surveillance audits of the manufacturer's quality management system; and
- Inclusion as a 'kind of medical device' on the Australian Register of Therapeutic Goods.

Overview of Conformity Assessment of a Medical Device

Conformity assessment is the name given to the processes that are used to demonstrate that a device and manufacturing process meet specified requirements.

In Australia this means that the manufacturer must be able to demonstrate that both the medical device and the manufacturing processes used to make the device conform to the requirements of the therapeutic goods legislation which are set out in:

- Therapeutic Goods Act 1989 (the Act), and
- Therapeutic Goods (Medical Devices) Regulations 2002.

Conformity assessment is the systematic and ongoing examination of evidence and procedures to ensure that a medical device complies with the Essential Principles. It provides objective evidence of the safety, performance, benefits and risks for a specific medical device and also enables regulatory bodies to ensure that products placed on the market conform to the applicable regulatory requirements.

There are different conformity assessment procedures that a manufacturer can choose to follow to demonstrate that they have met the essential principles for a particular medical device. The classification of a medical device determines the conformity assessment procedures a manufacturer

[1] The Global Harmonization Task Force was conceived in 1992 in an effort to achieve greater uniformity between national medical device regulatory systems. This is being done with two aims in mind: enhancing patient safety and increasing access to safe, effective and clinically beneficial medical technologies around the world.

A partnership between regulatory authorities and regulated industry, the GHTF is comprised of five Founding Members: European Union, United States, Canada, Australia and Japan. The chairmanship is rotated among the Founding Members and presently resides with Australia.

can choose to ensure that the device is adequately assessed. Higher classification devices must undergo more stringent conformity assessment procedures than lower classification devices.

An outline of the different stages of conformity assessment and who is responsible for each stage is as follows:

1. The **manufacturer** is responsible for:
   - Demonstrating that they have met the essential principles for a particular device. This involves assessment of:
     - the technical documentation for the design of the devices,
     - the manufacturing processes used to manufacture the devices,
     - the risk analysis,
     - the clinical evidence, and
     - ongoing monitoring and vigilance procedures that will be in place once the device is available for supply.
2. The **regulatory body** is responsible for issuing conformity assessment evidence[2] in the form of a certificate. This demonstrates that the manufacturer has been assessed and has the appropriate systems in place to manufacture the devices. This assessment (which will vary depending on the conformity assessment procedures selected by the manufacturer) includes:
   - confirming that the conformity assessment procedures are appropriate for the classification of the device and have been applied correctly,
   - systematic examination of the documentation provided and procedures undertaken by the manufacturer, and
   - may include an on-site audit of the manufacturing premises.

   In accordance with the current legislation, for devices manufactured outside Australia the TGA is able to accept the assessment of regulatory bodies that are considered to have the appropriate authority and expertise. As the Australian and the EU regulatory requirements are similar, the TGA has determined that certificates issued by EU Notified Bodies may be accepted as conformity assessment evidence for the supply of devices in Australia. There are medical devices that are exceptions to this determination.
3. The **manufacturer**, once they have obtained the conformity assessment evidence, must then make an Australian Declaration of Conformity (DOC) that declares that the device complies with:
   - the applicable provisions of the Essential Principles,
   - the classification rules, and
   - an appropriate conformity assessment procedure.
4. The **manufacturer** then has ongoing responsibilities to maintain the appropriate records and procedures required to demonstrate continued compliance with the essential principles. They are also responsible to apply for re-certification prior to the expiry of existing conformity assessment evidence.

[2] Conformity assessment evidence is also known as manufacturer's evidence. The latter term is used particularly when a sponsor submits their evidence to the TGA via eBusiness Services (eBS).

For a medical device to be included in the Australian Register of Therapeutic Goods (ARTG), the TGA must be satisfied that evidence exists appropriate to the perceived risks of the device to support its safe and effective use, and that an appropriate system is in place for monitoring the ongoing performance and safety of the device.

Once this conformity assessment evidence has been accepted by the TGA, a sponsor can lodge an application to include a medical device in the ARTG.

The following exceptions to the above process should be noted:

- The conformity assessment evidence needs to be registered with the TGA for all medical devices, except Class I non-measuring and non-sterile medical devices, Class 1 IVDs and Class 1-3 in-house IVDs. However, an Australian Declaration of Conformity and supporting evidence in a suitable technical file must be maintained by the manufacturer for Class I medical devices and Class 1 IVDs.
- Conformity assessment evidence is also not required for some systems and procedure packs, however the manufacturer must hold and maintain evidence that each medical device in the system or procedure pack meets the Essential Principles and that the relevant conformity assessment procedures have been applied.

These elements of the framework are applicable to all medical devices.

The TGA has had seven years' experience with the medical devices regulatory framework, based on the GHTF model, the transition to which was finalised in October 2007. Over that time, a number of influencing factors have arisen which indicate the framework is in need of enhancement in some areas to better reflect the TGA's legislative requirements to ensure the quality, safety and performance of medical devices, while ensuring advances in new technologies and treatment modalities are made available in a timely manner for use in Australia.

The influencing factors include:

- A paper released by the European Commission (EC) in 2008, proposing to recast the Medical Device Directives, and citing as part of the rationale concerns within the Commission about the designation processes and relative competence of some of the Notified Bodies (NBs) operating in the European Union (EU) , in the assessment of medical devices, particularly with regard to higher risk medical devices.
- A review of annual reports, for the period 2002 – 2008, of the Notified Bodies Operations Group (established by the EC to oversight the operations of the NBs) supports the views of the EC that '…not all NBs are created equal…', in that it details differences in designation processes of the NBs by the member state regulatory authorities, and shortcomings found in NB's performance of their duties within the EU regulatory framework.
- Experience gained over recent years, both in Australia and elsewhere, indicates that the evidence provided by the manufacturer, and the degree of scrutiny normally applied to major orthopaedic joint implants for market entry, and incremental changes made to the devices during their market life is insufficient to ensure safety and longevity of these types of implants.
- In 2005, Europe amended the Medical Device Directive to up-classify major orthopaedic implants. The result of this re-classification is an increase in the evidentiary requirements to demonstrate quality safety and performance of the implant which must be provided by the manufacturer, and a requirement for that evidence to be reviewed and accepted by a Notified Body before marketing approval is granted.

- The recent release by the US FDA of the results of an internal review of the 510(k) assessment processes and the announcement earlier this year of an external review to be conducted by the Institute of Medicine. These reviews were instigated after a review by the Government Accountability Office (GAO) determined the 510(k) review process was used inappropriately for a number of higher risk medical devices which should have undergone a Pre-Market Assessment (PMA).
- The initialling of the revised EU-Australia Mutual Recognition Agreement in mid 2009 and the anticipation the new MRA will become effective in 2010.
- The finalisation of the Canada-Australia MoU in relation to Australia accepting designated Canadian Registrar assessments of Canadian manufacturer's Quality Management Systems as part of the assessment for market entry in Australia.
- A number of submissions received by the HTA review public consultation process, particularly from professional clinical colleges/associations, health insurance providers and consumers groups being critical of the level of assessment undertaken by the TGA of high risk medical devices prior to the granting of marketing approval

Previous Discussion papers

In late 2008 and early 2009, the TGA released discussion papers requesting comment relating to two issues where the TGA was considering some amendments to the existing framework for medical device regulation. They were -

- Re-classification of Joint Replacement Implants (See summary in Attachment 1)
- Use of third party CABs for medical devices manufactured in Australia (See summary in Attachment 2)

Subsequent to the release of the TGA's consultation papers the government announced its decision to review all aspects of the Commonwealth's Health Technology Assessment (HTA) processes. The terms of reference for the HTA review[i] made it clear that TGA's own processes for assessment of medical devices prior to market entry, including the possible use of third party conformity assessment bodies (CABs), were within the scope of the HTA review. For this reason TGA considered it premature to proceed with some of the issues raised in the consultation papers within the timeframes originally proposed.

The report on the Review of Health Technology Assessment in Australia (the Report) has now been released. In response to the recommendations of the Report, the TGA now proposes a number of regulatory reforms, which encompass the issues raised in the two previous discussion papers, as well as other matters.

The HTA Review and TGA

The 27 February 2010 HTA Review report made sixteen recommendations aimed at setting new directions for HTA in Australia to support better health care for all Australians, and to reduce unnecessary regulatory burdens on the sector while providing timely access to new and improved technologies and treatment modalities.

The Australian Government agreed to 13 of the 16 recommendations with the remaining 3 recommendations – relating to post market surveillance - subject to further consideration by government due the costs associated with their implementation.

Recommendation 8 focuses on the role of the TGA in ensuring medical devices supplied to the Australian market are manufactured under appropriate quality controls, are safe to use and efficacious in their application. This recommendation is the focus of this discussion paper.

A number of other recommendations in the report have a direct impact on the TGA, its interaction with other HTA agencies, and improvement of post market programs to better inform premarket regulatory decision making. These will not be discussed in this discussion paper.

Recommendation 8:

That the Therapeutic Goods Administration (TGA) in the context of international harmonisation:

a) Continue its role as the independent national regulator solely responsible for assessing the safety, quality and efficacy of therapeutic goods for entry on to the ARTG and marketing in Australia;

b) Respond to the issues raised in consultations regarding third party conformity assessment by July 2010, with a view to implementing changes agreed by government by 2011;

c) Increase the rigour of assessment of higher risk medical devices by 2011, to ensure an appropriate level of evidential review is undertaken to ensure safety, quality and efficacy of these devices prior to entry on the ARTG and to provide a sound evidence basis for Commonwealth HTA processes; and

d) Develop protocols for information sharing with other HTA agencies through the Single Entry Point (SEP), subject to commercial-in-confidence constraints on the outcomes of its safety assessments.

Devices Regulatory Reform Proposals

Proposal Summary

Proposal 1	**1**	**Reclassification of joint replacement implants** A new classification rule is added to Schedule 2 of the medical device Regulations to reclassify all hip, knee and shoulder joint replacement implants from Class IIb to Class III medical devices.
Proposal 2	**2A**	**Use of third party assessment bodies for Australian manufacturers** That Subregulation 4.1(1) is removed from the medical device Regulations, so as to no longer require Australian medical device manufacturers to hold TGA conformity assessment certification.
	2B	**Increasing pre-market scrutiny for implantable medical devices** **(i) Devices requiring a TGA Conformity Assessment Certificate to be issued** Subregulation 4.1(2) of the medical device Regulations be amended to require a TGA conformity assessment certificate to also be issued for all Class III and AIMD implantable medical devices. **(ii) Applications to be selected for auditing** Regulation 5.3 of the medical device Regulations be amended to require applications for all Class IIb implantable devices to also be selected for an application audit prior to inclusion in the ARTG.
	2C	**Recognition of third party assessment bodies** **(i) Confidence building for EU Notified Bodies designated under the MRA** That the TGA commence discussions with the EC over a program of confidence building with the designated Notified Bodies under the MRA, which might include sharing of product assessments and observed audits of medical device manufacturers. **(ii) Recognising Australian third party assessment bodies** That further consultation be undertaken to investigate the development of a system whereby Australian based assessment bodies can be designated to issue conformity assessment certificates to Australian manufacturers.
Proposal 3	**3**	**Amending the way in which a medical device is included in the ARTG and enhancing identification of approved devices** **(i) amend the way in which a kind of device is included on the ARTG**; and **(ii) enhance the ability to identify devices that have been approved by the TGA for supply in Australia.**
Proposal 4	**4**	**Publication of device product information on the TGA Website**

Proposal 1 - Reclassification of Joint Replacement Implants

The TGA proposes to add a new classification rule to Schedule 2 of the *Therapeutic Goods (Medical Devices) Regulations 2002* to reclassify all hip, knee and shoulder joint replacement implants from Class IIb to Class III medical devices. See Attachment 1 (page 28) for the summation of the previous consultation process on the re-classification of joint replacements.

The proposed classification rule will only capture those components that are intended to replace a natural articulating surface of a shoulder, hip or knee joint. It will not capture other implantable components or accessories such as screws, pins or wedges.

The wording of the proposed Australian classification rule is as follows:

- *An implantable load bearing component of a hip, knee or shoulder joint replacement, which functions in a similar way to the natural joint, is classified as Class III.*
- *This clause does not apply to ancillary components or accessories of joint replacements, such as screws, wedges, plates or surgical instruments.*

Examples of the types of medical devices to be reclassified as Class III include;

- Hip joint components:
  - Total hip joint replacement systems and components;
  - Total resurfacing systems;
  - Partial resurfacing components (acetabular or femoral head);
  - Monoblock femoral head replacements; and
  - Bipolar components;
- Knee joint components:
  - Total knee joint replacement systems and components;
  - Femoral knee components;
  - Tibial knee components; and
  - Unicompartmental components (lateral or medial replacement);
- Shoulder joint components:
  - Total shoulder joint replacement systems and components;
  - Humeral components; and
  - Glenoid components.

The proposed classification rule is substantially equivalent to that introduced into European legislation by Commission Directive 2005/50/EC, which states:

- *Hip, knee and shoulder replacements shall be reclassified as medical devices falling within Class III*
- *Hip, knee and shoulder replacement means an implantable component part of a total joint replacement system which is intended to provide a function similar to that of either a natural hip joint, a natural knee joint, or a natural shoulder joint.*

- *Ancillary components (screws, wedges, plates and instruments) are excluded from this definition.*

In January 2007 the European Commission released a guidance document to further clarify the intent of this classification rule, in which they state that:

- *the objective of Directive 2005/50/EC is to reclassify as class III, implanted load bearing components that function in a similar way to the natural joint.*

It should be noted that the European classification rule appears to only apply to components of *total* joint replacements; and is silent on the classification of *partial* joint replacements.

Therefore, the proposed Australian classification rule may differ from the European classification rule in that it will capture load bearing components of both partial and total joint replacements.

The TGA considers reclassifying components of partial joint replacements as Class III to be appropriate due to the adverse experience gained by Australian orthopaedic surgeons, and in particular, the data obtained from the Australian National Joint Replacement Registry (NJRR) regarding adverse events and revision rates for these types of implants. Partial joint replacements are undertaken in a substantial number of patients, and the rate of revision for partial replacements is higher than the revision rate of total joint replacements[ii].

This proposal addresses recommendation 8c from the HTA Review.

Transition Period

The proposal to reclassify joint replacement implants has direct implications for affected products currently included in the ARTG as Class IIb medical devices.

Because these products will be classified as Class III medical devices from the date of implementation of the new Regulations, it will be necessary to provide a transition period for affected manufacturers and sponsors to include the products as Class III medical devices in the ARTG.

The TGA proposes a two year transition period for this proposal.

For affected Class IIb devices included in the ARTG at the time of implementation of the new classification rule the TGA will contact each of the affected sponsors notifying them of the change and the new requirements. If an application is submitted to the TGA to assess the products within the two year transition period, the products can continue to be supplied until the assessment is finalised. At the current time Class III devices attract a mandatory audit and the scheduled fee for this process will apply.

If an application is not received by the end of the two year transition period, the affected devices will not be able to be supplied until the sponsor has included them in the ARTG as Class III medical devices.

For new products intended for introduction to the market after commencement of the transition period, sponsors will need to submit an application for a Class III medical device. As with any new application for inclusion in the ARTG, these products will not be able to be supplied until such assessment has been completed and the device is Included in the ARTG.

Proposal 2 - Third Party Assessment Bodies and Supporting Reforms

This proposal involves a package of reforms aimed at addressing the outcome of the third party conformity assessment consultation (See Attachment 2 page 37 for the detailed analysis of this consultation), while at the same time addressing concerns raised during the Department's HTA review regarding the appropriate level of pre-market scrutiny for higher risk medical devices.

The three sub-proposals below are intended to be read in conjunction with each other, and would be applied as a single package of reforms. The sub-proposals are not intended to be considered in isolation, and the TGA would not propose to proceed with one without the others.

This proposal addresses recommendations 8b and 8c of the HTA review.

Proposal 2A – Use of third party assessment bodies for Australian manufacturers

Subregulation 4.1(1) currently requires a TGA conformity assessment certificate to be issued to manufacturers who manufacture medical devices in Australia, before the devices can be included in the Register.

The TGA proposes to remove Subregulation 4.1(1) from the *Therapeutic Goods (Medical Devices) Regulations 2002*, so as to no longer require Australian medical device manufacturers to hold TGA conformity assessment certification.

This will allow Australian manufacturers to either maintain their existing TGA certification, or use other equivalent certification issued by acceptable third party assessment bodies to support medical device entries in the ARTG, as is currently available to overseas manufacturers.

Currently acceptable certification includes certificates issued under the European MDD 93/42/EEC by a recognised Notified Body. The range of assessment bodies and/or types of certificates that will be acceptable may change in the future (see Proposal 2C).

This will result in Australian medical device manufacturers being subject to the same regulatory requirements and processes as overseas manufacturers; including being required to gain TGA conformity assessment certification for some higher risk devices (see Proposal 2B).

The TGA has issued conformity assessment certificates to approximately 120 Australian medical device manufacturers. Some of these manufacturers would no longer be required to hold TGA certification, and may opt to utilise CE certification to support their ARTG entries.

Transition arrangements are not required for this part of the proposal.

Proposal 2B – Increasing pre-market scrutiny for implantable medical devices

In recognition of the recommendations and concerns raised during the Department's HTA review, the TGA proposes to increase the level of pre-market scrutiny for all implantable medical devices.

This element of the proposal is made up of two parts:

1. Requiring a TGA conformity assessment certificate to be issued for the highest risk (Class III/AIMD) implantable medical devices; and
2. Requiring medical device applications to be selected for auditing for the lower risk (Class IIb) implantable medical devices.

This proposal is designed to focus on those invasive medical devices that are also subject to other Government HTA review processes for the purposes of reimbursement.

2B(i) – Devices requiring a TGA Conformity Assessment Certificate to be issued

Subregulation 4.1(2) currently requires a TGA conformity assessment certificate to be issued for specific kinds of high risk medical devices. In particular, devices containing:

- Tissues of animal origin;
- Substances of microbial or recombinant origin;
- Stable derivatives of human blood or plasma; or
- Medicines.

In addition to these high risk products, the TGA proposes that Subregulation 4.1(2) of the *Therapeutic Goods (Medical Devices) Regulations 2002* be amended to require a TGA conformity assessment certificate to also be issued for all Class III/AIMD implantable medical devices intended for long-term use.

This would require the reference in subregulation 4.1(2) to medical devices manufactured outside Australia be removed to subject Australian manufacturers to the same regulatory requirements or processes as overseas manufacturers (See proposal 2A).

Medical devices covered by current classification rules 3.4, 5.2, 5.7 and 5.9 would be subject to this proposal. Typical examples of these types of Class III/AIMD medical devices are:

- Joint replacements reclassified as Class III under Proposal 1;
- Implantable pacemakers and defibrillators;
- Implantable accessories to Class AIMD medical devices, such as pacemaker leads;
- Ventricular assist devices, heart pumps and total artificial hearts;
- Prosthetic heart valves;
- Implantable contraceptive devices, such as IUDs;
- Implantable radionuclide sources, such as radioactive seeds used for brachytherapy; and
- Breast implants.

Transition Period

This proposal has direct implications for affected products currently included in the ARTG on the basis of European Notified Body certification.

As such, it will be necessary to provide a transition period for affected manufacturers to have a TGA conformity assessment certificate issued for their medical devices.

The TGA proposes a four year transition period for this purpose.

For affected devices included in the ARTG at the time of implementation of the new regulations, if an application is submitted to the TGA for conformity assessment certification within the four year transition period, the products can continue to be supplied until the assessment is finalised.

If a conformity assessment application is not received by the end of the four year transition period, the affected devices will be cancelled from the ARTG, and will not be able to be supplied until a TGA conformity assessment certificate has been issued, and the devices are included in the Register.

For new products intended for introduction to the market after commencement of the transition period, manufacturers will need to submit a new TGA conformity assessment application. As with any new application, these products will not be able to be supplied until such assessment has been completed and the device is Included in the ARTG.

Note: joint replacements reclassified as Class III under Proposal 1 would still be subject to a two year transition period.

Periodic review

It is proposed that Subregulation 4.1(2) be reviewed regularly, to ensure that the list of devices subject to conformity assessment remains aligned with public health concerns and that provision is made for adequate regulation of evolving technology. These reviews may add, or delete, from the list.

Any future additions to Subregulation 4.1(2) would be subject to separate consultation before any amendments to the Regulations were made.

2B(ii) – Applications to be selected for auditing

Regulation 5.3 currently requires applications for the following types of medical devices to be selected to undergo an application audit prior to being included in the ARTG:

- Barrier contraceptives other than condoms;
- Implantable contraceptive devices;
- Implantable breast prostheses, other than water/saline filled implants;
- Class IIb devices intended to disinfect other medical devices;
- Class AIMD devices;
- Prosthetic heart valves;
- Implantable intra-ocular lenses;
- Intra-ocular visco-elastic fluids; and
- Class III devices not assessed under the European MRA.

In addition to these products, the TGA proposes that Regulation 5.3 of the *Therapeutic Goods (Medical Devices) Regulations 2002* be amended to require applications for all Class IIb implantable medical devices to also be selected for an application audit prior to inclusion in the ARTG.

Medical devices covered by classification rule 3.4 would be subject to this proposal. Typical examples of these types of Class IIb medical devices are:

- Spinal fixation devices;
- Orthopaedic fixation devices;
- Bone screws, plates, pins and wires;
- Finger, wrist and ankle joint prostheses;
- Artificial bone matrix implants;
- Non-absorbable implants such as sutures, staples and anchors;

- Surgical mesh, such as hernia repair devices;
- Long-term invasive vascular access devices, such as implantable ports;
- Maxillofacial implants;
- Peripheral vascular stents, biliary stents etc.; and
- Systems and procedure packs containing any of the above devices.

Periodic review

The TGA also intends to regularly review the list of devices required to undergo an application audit prior to entry in the Register; with a view to adding specific types of devices to the list if safety or performance issues arise due to new or novel technologies.

Any future additions to Regulation 5.3 would be subject to separate consultation before amendments to the Regulations were made.

Transition Period

No transition period is required for this part of the proposal. Any application received for these kinds of medical devices after the regulations come into effect will be selected for an application audit. An assessment fee will apply to these application audits and this will be explored in the cost recovery impact statement yet to be developed.

Proposal 2C – Recognition of third party assessment bodies

During the consultation into the use of third party assessment bodies it was generally agreed that if third party certification is going to be accepted by the TGA in order to approve medical devices for supply in Australia, then the TGA should have a greater degree of confidence in certificates issued by those third party assessment bodies.

This element of the proposal is made up of two parts:

1. Undertaking formal confidence building of those European Notified Bodies designated under the MRA; and
2. Setting up a system to enable assessment bodies based in Australia to operate as a third party for the purposes of issuing certification under the Australian legislation.

2C(i) – Confidence building for EU Notified Bodies designated under the MRA

Australia has a Mutual Recognition Agreement (MRA) with the European Commission (EC) for conformity assessment processes. The MRA is currently in revision and will allow for confidence building to occur so that both parties can be assured of the quality of the assessing body. The TGA and the EC have yet to undertake any confidence building arrangements.

To date, although the MRA has been generally beneficial to Australian manufacturers, there has been little uptake of the option by European based manufacturers as currently some high risk devices are excluded subject to confidence building, and European manufacturers of lower risk devices do not need to use the MRA provisions in order to have their products included in the Register. If the TGA proceeds with the other proposed reforms, there may be more uptake of the MRA option by European manufacturers.

The TGA proposes to commence discussions with the EC over a program of confidence building with the designated Notified Bodies under the MRA, which might include sharing of product assessments and observed audits of medical device manufacturers.

After the MRA confidence building has been completed, it is anticipated that the TGA would give greater weight to CE certificates issued by a Notified Body that has undergone confidence building, compared to certificates issued by other non-MRA Notified Bodies. Possible options for achieving this might include:

- Only accepting CE certificates from MRA Notified Bodies as Manufacturer's Evidence; and
- Requiring all applications supported by non-MRA Notified Bodies to undergo a mandatory application audit.

This part of the proposal may also require the review of the definition of TGA Conformity Assessment in the future.

2C(ii) – Recognising Australian third party assessment bodies

Currently only the TGA is able to issue manufacturers with conformity assessment certificates under the Australian medical devices legislation.

To promote competition and enable further choice for Australian manufacturers, it is proposed that further consultation be undertaken to investigate the designation of Australian based assessment bodies to issue Australian conformity assessment certificates.

It is anticipated that such a system would work in a similar manner to the European Notified Body system, where a single Australian competent authority would be able to designate an Australian third party to undertake assessments of a manufacturer's quality system to Australian requirements. The resulting certification would then be able to be used to support applications for medical devices to be included in the Register before being supplied in Australia.

Further consultation will be required to discuss options for a system to designate Australian third party assessment bodies, where a key topic will be who should be responsible for designating the assessment bodies. This is particularly important given that the TGA may continue to operate as an assessment body in competition with any designated parties.

Proposal 3 - Amending the way in which a medical device is included in the ARTG and enhancing identification of approved devices

At present, medical devices, with the exception of Class III and Active Implantable Medical Devices (AIMDs), and Class 4 IVDs and Class 4 in-house IVDs, are included as a group on the ARTG under a single entry if they have the same:

- sponsor;
- manufacturer;
- risk classification; and
- GMDN code and term.

The rationale for this method of ARTG entry for medical devices is twofold:

- the regulatory framework for medical devices is based on;
  - the manufacturer taking responsibility for the quality controls and procedures used for device manufacture and the ongoing monitoring of the safety and performance of the device once it is in the market; and
  - the sponsor taking responsibility for keeping records for supply of each model of the device and reporting any issues that occur once in the market; and
- the concerns that the regulatory costs involved in pre-market assessment of each model or variation of a device, and the annual maintenance of the ARTG records would impact on the retail cost to the healthcare system and consumers.

The disadvantages with this approach are:

- the regulator does not hold records of the models of devices supplied under each entry into the ARTG (with exception of Class III and AIMDs and Class 4 IVDs and Class 4 in-house IVDs) and supplied in Australia which inhibits the ability to monitor the safety, performance and regulatory compliance of devices once they are supplied to the market;
- subsequent models of that kind of device, which may include new technologies are not assessed prior to supply; and
- healthcare providers and consumers cannot identify whether a device has been assessed by the TGA and is able to be supplied in Australia.

To rectify these issues, the TGA is proposing to:

- amend the way in which a kind of device is included on the ARTG; and
- enhance the ability to identify devices that have been approved by the TGA for supply in Australia.

3(i) – Amending the way a kind of device is included on the ARTG

The TGA is proposing to require sponsors to itemise the devices and/or various models that are supplied under the same ARTG entry. Sponsors will be required to identify the different models in the application form, to be assessed by the TGA prior to making a decision to include the devices on the ARTG. If approved, this list of devices identified by model number or trade name will appear as a list of devices under the ARTG entry.

It is proposed that this list of devices will be accessible to healthcare providers and consumers in the public view of the ARTG.

As new models become available, sponsors will be required to submit an application to vary the existing ARTG record to add a new model of that kind of device. This new model would undergo assessment if the kind of device is Class IIb or above, and if it meets the requirements for supply, will be added to the ARTG.

This amendment will lead to more detail about what devices are being supplied in Australia and:

- will enhance the regulator's ability to monitor the safety and performance of all devices of that kind supplied in Australia;
- will ensure that the device being supplied under a particular inclusion is the same kind of device; and
- enable healthcare providers and consumers to search the ARTG to find the device model.

Cost Implications

The assessment of the subsequent variations of devices will result in increased regulatory costs for pre-market assessment but will not impact on the annual charges paid by sponsors.

It is proposed to have a transition period with no fees however a fee to vary the inclusion will be charged after this transition period.

Proposed Transition Times

Sponsors will be required to provide this information for all models at the time of entering a new inclusion. Entries currently included at the time of legislative change will have to be updated within a time frame of 1 year from the legislative changes.

Legislative Changes

Amendments to the Act will be necessary to require sponsors to notify the TGA of changes and to include a list of all models or products under the one entry as a condition of inclusion. Entries can be suspended or cancelled from the register if the sponsor fails to comply.

IT Requirements

Changes to the IT system will need to occur so that sponsors can enter/change/add to the list of products under each entry.

3(ii) – Enhancing the identification of approved devices

The TGA is also proposing to amend the legislation to require sponsors of medical devices to publish the ARTG number on the information that accompanies a medical device (e.g. the product labels, instructions for use or packaging of the device).

This is expected to increase visibility of the ARTG number for medical devices to enable healthcare providers and consumers to easily identify medical devices approved for supply, and assist in cross referencing the device with the ARTG record. This change will also greatly enhance the TGA's ability to identify, and better manage those medical devices that have been supplied to the Australian market without first gaining approval by the TGA.

This amendment is in line with medicines regulations which require the AUSTR or AUSTL number on the label.

Cost Implications

This change should not adversely impact on regulatory costs as sponsors are already required to publish their contact details on the information that accompanies a medical device. This amendment would only require sponsors to add the ARTG number to their contact details.

Proposed Transition Times

The TGA proposes to implement this proposal 12 months following the amendment of the regulations.

Sponsors will be required to label all devices with the ARTG number in accordance with Regulation 10.2 (amended) and essential principle 13.2 *Information to be provided with medical devices – location.*

Legislative Changes

Amendments to the regulations will be necessary to require sponsors to include the ARTG number on the label.

Proposal 4 - Publication of device product information on the TGA Website

Currently published information

Currently the TGA publishes limited information about medical devices included on the ARTG. The information can be viewed through the publicly accessible version of the ARTG, published on the E-business TGA website.

Available information is limited to

- Label name of the inclusion
- identity and address of the sponsor
- identity and address of the manufacturer
- conditions applied to the entry
- the product identified by GMDN code
- effective date of the inclusion
- intended purpose of the device
- unique device identifier (for Class III and AIMD's only)

Public information from the FDA for medical devices

By comparison, the FDA publishes far more comprehensive information about a range of approved devices. This information can be, but is not limited to –

- general announcement of a device approval;
- copy of the approval letter;
- Summary of Safety and Effectiveness Data;
- Instructions for Use
- Patient instructions
- Web links to general resource information – NIH information, clinical papers, etc

A typical example of a general announcement of approval for a device can be found on the FDA website at:
http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/DeviceApprovalsandClearances/Recently-ApprovedDevices/ucm201473.htm

This announcement document contains links to a number of the other documents published relating to the assessment and approval of the device.

Public information for medicines in Australia

Commencing October 2009, the TGA began publishing comprehensive information on the TGA website in relation to new prescription medicines evaluations and major changes to existing medicines.

The information is made available in a document known as an AusPAR – Australian Public Assessment Report for Prescription Medicines. These reports are available on the TGA website at: http://www.tga.gov.au/pmeds/auspar.htm

An AusPAR provides information about the evaluation of a prescription medicine and the considerations that led the TGA to approve or not approve an application.

For submissions that are approved the AusPAR is generally available on the website no more than a month after the TGA has registered the product on the Australian Register of Therapeutic Goods (ARTG). This allows time for the AusPAR to be prepared and the company to confirm that the proposed AusPAR does not contain any commercially sensitive information.

For submissions that are rejected the AusPAR cannot be published until a 90 day appeal period is complete.

The TGA also publishes Consumer Medicine Information (CMI) and Product Information (PI) for medicines on its website.

The CMI is a leaflet that contains information on the safe and effective use of a medicine.

The information has been written by the pharmaceutical company responsible for the medicine. TGA regulations require that CMI must be made available to consumers either in the pack or in another manner that will enable the information to be given to the person to whom the medicines are administered or otherwise dispensed.

A CMI includes:

- the name of the medicine;
- the active ingredients as well as the inactive ingredients;
- the dosage of the medicine;
- what the medicine is used for and how it works;
- any warnings and precautions, such as when the medicine should not be taken;
- any interaction the medicine might have with food or other medicines;
- how to use the medicine properly;
- side effects;
- what to do in the case of an overdose;
- how to store the medicine properly;
- the sponsor's name and address; and
- the date the CMI was last updated.

PI provides health professionals with a summary of the essential scientific information to allow the safe and effective use of a medicine under nearly all circumstances.

As a condition of registration certain medicines, mainly those prescribed by a doctor, are required to have a PI document which provides information relating to the safe and effective use of the medicine, including information regarding the medicine's usefulness and limitations. PI documents are agreed with the Therapeutic Goods Administration (TGA) as part of the medicine's approval process before it can be made available in Australia.

The information in these documents assists doctors, pharmacists and other health professionals in prescribing and dispensing medicines and also in their consultations with patients, such as to better educate a patient on the medicine they are being given.

PI should contain the following information:

- name of the medicine;
- description;
- pharmacology;
- clinical trials;
- indications;
- contraindications;
- precautions;
- adverse effects;
- dosage and administration;
- overdosage;
- presentation and storage conditions;
- name and address of the sponsor;
- poison schedule of the medicine; and
- date of approval.

Establishment of similar publications for medical devices

In the interests of improving the transparency and accountability in our decision making processes, the TGA is proposing to develop a similar program for medical devices.

The TGA seeks comments from stakeholders in relation to the publication of such information about medical device assessments. Specific issues which need to be addressed include:

- The types or classes of devices which should be included in such a scheme:
  - Only higher risk classification devices such as Class III and AIMD;
  - All medical devices including lower risk classification devices;
  - All higher risk medical devices, and 'more interesting' lower risk devices where the technology is new or innovative for example;
- The information which should be included when published, including the depth of that information;
- Responsibility for authorship of the information (i.e. the manufacturer or the TGA);
- Responsibility for ensuring information is up to date;
- Whether to publish, or not, information relating to rejected applications:
  - Should all rejections be published, including lower risk classifications such as Class I and IIa;
  - The information which should be released if the application is rejected;

- The reasons for rejection; and

· Any other information useful and relevant to the clinical user and consumers.

Attachment 1

Re-classification of Joint Replacement Implants

Background

The regulatory framework for medical devices utilises a 4 level risk based classification scale, designating devices as either Class I, IIa, IIb or III (lowest to highest risk). The level of pre-market assessment applied to a device and its manufacturer is commensurate with the risk classification of the device.

In Australia, at present, major orthopaedic implants are considered class IIb devices, and can be entered on the Australian Register of Therapeutic Goods on the basis of the sponsor presenting evidence, in the form of European EC Certification, that the device has undergone a satisfactory assessment in a regulatory framework with requirements very similar to those of Australia.

Experience emerging over recent years, both in Australia and elsewhere however, suggest that the evidence required to be provided by the manufacturer, and the degree of scrutiny normally applied to a class IIb device for market entry, and incremental changes made to the device during its market life is insufficient for these implants.

Regulation of these products in other markets

When originally implemented in 1993, the European Medical Devices Directive classified orthopaedic implants as Class IIb medical devices. However, because of concerns raised by a number of regulatory agencies, in 2005, Europe amended the Medical Device Directive to up-classify these implants – the re-classification had a five year phase in period, ending in September 2010. The result of this re-classification is an increase in the evidentiary requirements to demonstrate quality safety and performance of the implant which must be provided by the manufacturer, and a requirement for that evidence to be reviewed and accepted by a Notified Body before marketing approval is given.

The United States classifies these types of implants variously, generally dependant on the technologies embodied in the device – some (those utilising simple materials, technologies, manufacturing processes and implant/fixation techniques) are eligible for assessment via the 510(k) process where a manufacturer is required to demonstrate 'substantial equivalence' to an already approved device, while other, more complex devices, require 'full' pre-market assessment prior to marketing approval being granted.

Both Canada and Japan, like Australia, have implemented a GHTF based regulatory framework, and these devices are classified equivalent to the Australian Class IIb. GHTF is yet to consider whether re-classification of these devices within their guidance documents is appropriate, or whether they should remain Class IIb.

In October 2009, the TGA released a consultation, *Consultation paper on a proposal for the re-classification of joint replacement implants*, proposing a similar re-classification, as has occurred in the EU, for these implants in Australia, but extending the re-classification to include both partial implants as well as total implants - evidence from the AOA National Joint Replacement Register infers partial implants have the same issues as total implants.

The Consultation Paper

The Consultation Paper released by the TGA in October of 2009 proposed -

- The reclassification of joint replacement implants from Class IIb to Class III, with the consequent increase in premarket review prior to marketing approval being granted and the device entered on to the Australian Register of Therapeutic Goods (ARTG);
- The reclassification to apply to both partial and total hip, knee and shoulder implants;

- A transition plan, over two years, for prostheses currently included on the ARTG which would allow continued supply while the device(s) were subject to review as appropriate for class III medical devices; and
- Continued access to non-transitioning implants, for use in partial revision surgery through the Special Access Scheme on an as required basis.

The paper also asked for –

- Suggestions for alternative options to the proposed re-classification which could achieve the intended objective of increased pre-market scrutiny prior to regulatory approval, and
- Comment on any likely impact on current devices supplied to the market, or planned for supply to the market

Submissions to the TGA discussion paper

Fifteen organisations responded to the discussion paper with written submissions.

- Prostheses Sponsors **3**
- Industry Organisations **2**
- Health Insurance Organisation **1**
- Health Insurance Provider **1**
- Government Agencies **3**
- Consumer Representative **1**
- Professional Organisations **2**
- Healthcare Provider **1**
- Healthcare provider organisation **1**

Analysis of responses

Of 15 responses to the paper, only two were not supportive of the broad proposal to reclassify major orthopaedic implants as class III medical devices.

One organisation, representing the industry was not supportive of the proposal, citing increased regulatory burden and cost on Australian manufacturers of such devices, who do not export to other parts of the world, '…. for no additional benefit.'

There are only two manufacturers of major orthopaedic implants operating in Australia, and both of the organisations have a strong export market to other parts of the world, including the EU. As such, they have already had to transition these products to Class III under the Medical Devices Directive amendments introduced in August 2005, to continue supply into Europe beyond September 2010. The proposed re-classification in Australia introduces equivalent requirements to the MDD so both organisations will already have the appropriate documentation to support re-classification of their products under this proposal.

The majority of sponsors of orthopaedic implants supported the broad re-classification, with only one organisation disagreeing, citing concerns with Unique Product Identifiers (UPI) and variants, associated with entering these products on to the ARTG, although no specific examples of possible concerns were provided.

The general response from sponsors and industry organisations was that Australia should only consider re-classification of total implants in this reform, citing that the re-classification of partial implants was not in alignment with the re-classification underway in Europe, and such re-classification would introduce a higher regulatory burden in Australia than Europe.

One healthcare provider suggested that other orthopaedic implants such as trauma plates, screws and nails should also be re-classified.

Attachment 1A to this paper provides an analysis of data from the National Joint Replacement Register operated by the Australian Orthopaedic Association.

That analysis concludes that partial replacements are associated with higher revision rates and when compared to total replacements they are the subject of a similar number of adverse event reports and complaints. The post-market surveillance experience would indicate that the risk classification of partial joint replacements needs to be at least as high as that of total implants and that partial joint implants need closer attention both at the market authorisation and market monitoring stages of their life cycle.

Responses to the proposal for a notification process for existing products in the market place, with a two year transition period to the amended requirements was mixed. In general, industry organisations and sponsors considered 2 years to be insufficient, while organisations representing clinical users suggested it is possibly too long.

It should be noted that the two year transition period proposed, is the period in which applications for transitioning product must be lodged with the TGA. Supply of products which are the subject of these applications can continue beyond the two year period, until the application has been assessed and a determination made on their continued inclusion in, or removal from, the ARTG. This proposal is seen as the best balance in achieving fairness to existing product, while at the same time accommodating the time taken to ensure an appropriate review of the application is undertaken.

A number of respondents raised concerns regarding re-imbursement for components of implant systems which are not transitioned to class III, but which may be required to accommodate partial revisions.

Funding of such components in the private healthcare sector is predicated on their being included on the ARTG, but if not transitioned to class III such components/systems will be removed from the ARTG at the end of the two years, but will continue to be made available through the Special Access Scheme operated by the TGA.

Resolution of this will be pursued through discussions with the Australian Health Insurance Association prior to implementation of these reforms.

Attachment 1A

Analysis of the Performance of Partial Implants

Performance of Partial Implants

The current proposal is for all joint replacements supplied in Australia to be Class III. However, this has met with some resistance from industry groups who wish for the TGA to adopt exactly the same approach as the European Union. The European Union has only moved to re-classify total hip knee and shoulder joint replacements – partial joint replacements will remain in the lower risk Class IIb category.

The TGA has assessed post market surveillance experience in with these medical devices in Australia in reaching the conclusion that partial hip, knee and shoulder joint replacements should also be reclassified as Class III medical devices

The NJRR experience

The NJRR has been in operation for approximately 11 years and as of October 2009 the Register has published 10 annual reports. The 2009 report is based on the analysis of 472,966 primary and revision hip and procedures up to and including 31 December 2008. The NJRR experience with shoulder implants is much shorter, but is nonetheless significant.

The NJRR recognises that the rates of revision[iii] of joint replacement surgery are affected by a number of factors, such as patient age, gender, whether the implant is cemented, etc. However it also recognises that the type of implant used also affects the outcome of surgery greatly.

The NJRR differentiates between three types of total hip replacement and four types of partial hip replacement:

Total Hip Replacements

1. Conventional (*femoral component for resected femoral head and acetabular component*)
2. Total resurfacing (*femoral component for non-resected femoral head and acetabular component*)
3. Thrust Plate (*femoral component for resected femoral head with lateral fixation plate and acetabular component*)

Partial Hip Replacements

1. Partial Resurfacing Hip Replacement (*partial articular surface replacement*)
2. Monoblock Hip Replacement (*fixed femoral component and large head*)
3. Unipolar Modular Hip Replacement (*femoral component and exchangeable head*), and
4. Bipolar Hip Replacements (*femoral component and standard head combined with a mobile exchangeable polyethylene insert in a metal shell*)

Table 1 provides a brief summary of the experience with hip replacements in Australia.

Type of Hip Replacement	N Revised	N Total	Obs. Years	Revisions per 100 Obs. Yrs	Exact 95% CI
Primary Partial	**1196**	**37169**	**82725**	**1.4**	**(1.36 - 1.53)**
Partial Resurfacing	2	10	21	9.6	(1.17 - 34.78)
Monoblock	660	18185	38658	1.7	(1.58 - 1.84)
Unipolar Modular	269	9941	18463	1.5	(1.29 - 1.64)
Bipolar	265	9033	25584	1.0	(0.91 - 1.17)
Conventional Total	**4095**	**147422**	**511244**	**0.8**	**(0.78 - 0.83)**
Cemented	487	17471	70977	0.7	(0.63 - 0.75)
Cementless	2366	80540	264203	0.9	(0.86 - 0.93)
Hybrid	1242	49411	176065	0.7	(0.67 - 0.75)
Thrust Plate	**4**	**191**	**847**	**0.5**	**(0.13 - 1.21)**
Total Resurfacing	**437**	**12093**	**43347**	**1.0**	**(0.92 - 1.11)**
TOTAL	**5732**	**196875**	**638164**	**0.9**	**(0.88 - 0.92)**

Table 1: Revision Rates of Primary Hip Replacement 1/9/1999 – 31/12/2008 [iv]

The NJRR differentiates between total knee (femoro-tibial and patello-femoral) replacement, and the following five types of partial knee replacement:

1. Partial Resurfacing Knee Replacement (*partial articular surface replacement*);
2. Unispacer Knee Replacement (*Medial or lateral compartment articular spacer*);
3. Patella/Trochlear Knee Replacement (*Patella and trochlear articular surface replacement*);
4. Unicompartmental (*medial or lateral unicompartmental knee replacement)*;and
5. Bicompartmental (*medial and patello-femoral replacement*).

Table 2 provides a brief summary of the experience with knee replacements in Australia.

Type of Knee Replacement	N Revised	N Total	Obs. Years	Revisions per 100 Obs. Yrs	Exact 95% CI
Partial Resurfacing	14	113	200	7.0	(3.83 - 11.76)
Unispacer	27	39	85	31.7	(20.87 - 46.07)
Patella/Trochlear	132	1292	3999	3.3	(2.76 - 3.91)
Unicompartmental	2052	28822	107675	1.9	(1.82 - 1.99)
Bicompartmental	6	90	80	7.5	(2.77 - 16.41)
Total Knee	5406	197301	661601	0.8	(0.80 - 0.84)
TOTAL	**7637**	**227657**	**773640**	**1.0**	**(0.97 - 1.01)**

Table 2 - Revision Rates of Primary Knee Replacement 1/9/1999 – 31/12/2008 [v]

The NJRR differentiates between three types of total shoulder replacement and three types of partial shoulder replacement:

Total Shoulder Replacements:

1. Total Resurfacing (*resurface humeral head, replace glenoid*);
2. Conventional Total (*replace humeral head and glenoid with a conventional ball/socket joint*); and
3. Reverse Total (*replace humeral head and glenoid with a reverse ball/socket joint*).

Partial Shoulder Replacements:

1. Partial Resurfacing Shoulder Replacement (*partial articular surface replacement*);
2. Hemi Resurfacing Shoulder Replacement (*resurface humeral head*);and
3. Hemi Shoulder Replacement (*replace humeral head*).

Table 3 provides a brief summary of revision rates for shoulder replacements.

Type of Shoulder Replacement	N Revised	N Total	Obs. Years	Revisions per 100 Obs. Yrs	Exact 95% CI
Partial Resurfacing	0	31	23	0.0	(0.00 - 16.33)
Hemi Resurfacing	4	350	316	1.3	(0.35 - 3.25)
Hemi Shoulder	18	931	795	2.3	(1.34 - 3.58)
Total Resurfacing	1	23	26	3.8	(0.10 - 21.20)
Conventional Total	26	1372	1225	2.1	(1.39 - 3.11)
Reverse Total	34	974	814	4.2	(2.89 - 5.84)
TOTAL	**83**	**3681**	**3198**	**2.6**	**(2.07 - 3.22)**

Table 3: Revision Rates of Primary Shoulder Replacement 16/4/2004 – 31/12/2008[vi]

Data in Tables 1 - 3 indicate partial joint replacements are used in 18.9% of hip arthroplasty, 13.3% of knee arthroplasty and 35.6% of shoulder arthroplasty. The NJRR has recorded over 37,000 partial hip joints, and over 30,000 partial knees between 1999 and 2008 and over 1000 partial shoulder replacements between 2004 and 2008. This represents a significant body of data on partial joint implants.

With the sole exception of Hemi Resurfacing, the data indicates the revision rates of partial implants are higher than those of the total counterparts.

This data suggests the risk of revision and poor procedural outcome associated with partial joint replacement is higher than when compared to the corresponding total joint replacement implants.

On that basis, there is no clear rationale for concluding that implants used in partial procedures inherently present less risk than implants used in total procedures and they should, as a consequence, be subject to he same level of scrutiny before marketing approval as total implants.

TGA Experience

Some hip replacement components, particularly hip replacements, are modular and can be used in both partial and total procedures. Further, the NJRR considers resurfacing hip replacements where both the femur and the acetabulum are resurfaced to be total hip replacements, where others may consider these to be partial replacements.

Implant modularity and the lack of a clear definition about what constitutes a partial and a total implant makes the partial/total implant distinction difficult.

The TGA has put into place a process for considering what action should be taken on implants that are identified by the NJRR as having higher than expected revision rates. Over the last few years the TGA has considered 5 partial hip replacements, 3 total resurfacing hip replacements and 5 partial knee replacements because they had higher than expected revision rates, and whether these should be allowed to remain in the market given the associated higher revision rates.

Perhaps the major observation about the current regulatory arrangements for joint replacement implants is the inadequacy of the information in the Australian Register of Therapeutic Goods to allow adequate implant tracing. Many adverse event reports and the NJRR report on implants by model name. Many sponsors supply more than one model of the same type of implant, sometimes made by different manufacturers.

The ARTG records these types of products only to the level of the GMDN preferred term. This means a sponsor that supplies several joint implants of the same type from the same manufacturer can “group” all the implants into a single inclusion. It also means having only the model name of an implant is not sufficient for identifying the Australian sponsor in using the ARTG The need to be able to trace partial joint replacements in the ARTG is as urgent and important as that of total joint replacements.

Conclusion

Partial joint replacement requires different skill sets, different surgical instrumentation and different design to total joint replacements. Further, partial replacements are associated with higher revision rates and when compared to total replacements they are the subject of a similar number of adverse event reports and complaints. The post-market surveillance experience would indicate that the risk classification of partial joint replacements needs to be at least as high as that of total implants and that partial joint implants need closer attention both at the market authorisation and market monitoring stages of their life cycle.

Attachment 2

Use of Third Party Conformity Assessment Bodies for Medical Devices Manufactured in Australia

Background

The Therapeutic Goods Administration (TGA) regulates the quality, safety and performance of medical devices supplied in Australia, using a regulatory framework modelled on principles established by the Global Harmonization Task Force (GHTF). This process allows inclusion of medical devices in the Australian Register of Therapeutic Goods (ARTG), which in turn allows these to be legally supplied in, or exported from Australia. For a summary of conformity assessment activities in other countries refer to Attachment 2A page 50.

To be included in the ARTG the TGA requires applicants to hold, or have access to evidence that the conformity assessment procedures applied by the manufacturer demonstrate a medical device is in compliance with the Essential Principles and that the manufacturer has applied an appropriate conformity assessment procedure to the medical device in demonstrating that compliance. For all but the lowest risk medical devices, this includes evidence that the manufacturer's Quality Management System has been assessed by a Conformity Assessment Body (CAB) and is in compliance with the requirements of the conformity assessment procedure. Satisfactory assessment by the CAB is evidenced with the issuing of a conformity assessment certificate identifying the manufacturer, the conformity assessment procedure used by the manufacturer and the range of devices to which the assessment is applicable.

For the majority of medical devices supplied in to Australia, the TGA accepts conformity assessment certificates issued by European based CAB's referred to as Notified Bodies (NBs).

The *Therapeutic Goods Act 1989* (the Act) and the *Therapeutic Goods (Medical Devices) Regulations 2002* (the Regulations), however, requires the TGA to issue conformity assessment certificates for devices where the device:

- contains a medicinal component, or are intended to contain a medicine which acts on the body in a manner ancillary to the device; or
- contains materials of animal origin, that have been rendered non-viable; or
- contains tissue, cells or substances of or recombinant or microbial origin; or
- contains stable derivatives of human blood or plasma which acts in a manner ancillary to the device; or
- is manufactured in Australia (other than low risk Class I devices).

For the purposes of this document, medicinal components, materials of animal origin, tissues, cells or substances of recombinant or microbial origin, or stable derivatives of human blood or plasma are referred to as "designated materials".

The requirement that TGA issue conformity assessment certificates to Australian manufacturers has been questioned over a number of years by the medical device industry sector, which sees this requirement as an unfair restriction on Australian manufacturers relative to overseas manufacturers. This position has been articulated most recently in the Productivity Commission's reports *Rethinking Regulation* in January 2006 (the "Banks Review") and *Annual Review of Regulatory Burdens on Business: Manufacturing and Distributive Trades* (August 2008).

In response to these concerns, the TGA released a discussion paper *Use of Third Party Conformity Assessment Bodies for Medical Devices Supplied in Australia* in December 2008, seeking the views of stakeholders on a number of proposed options to address these concerns. The discussion paper is available on http://www.tga.gov.au/devices/drthirdparty.htm#paper.

Workshops were organised in Sydney and Melbourne for stakeholders to share their views and perspectives, and invited international speakers from the United States and Europe (represented by

the United Kingdom) to share their experiences from an international regulatory point of view. Copies of the presentations from these workshops are at http://www.tga.gov.au/devices/drthirdparty.htm

Submissions to the TGA discussion paper

Forty three organisations responded to the discussion paper. Industry was the major contributor, with 61% of submissions, government and professional organisations provided 14% of the submissions each, as well as 9% from Conformity Assessment Bodies (CABs) and 2% from consumer representatives. Figure 1 depicts this spread.

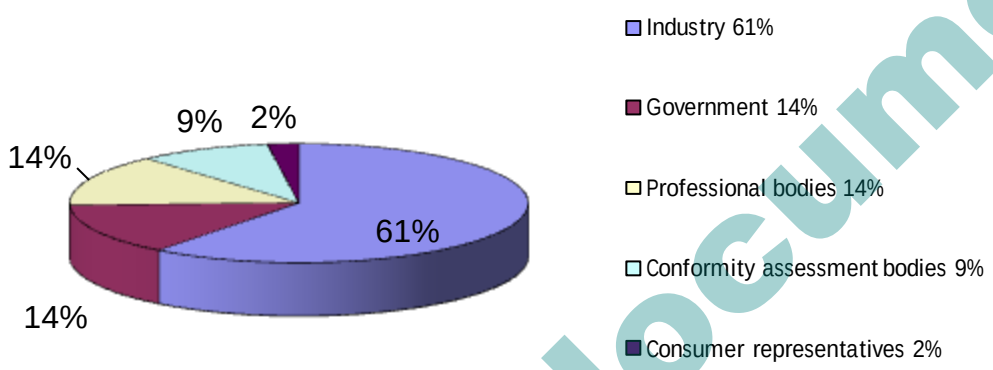

Figure 1: Distribution of submissions to discussion paper

Analysis of responses

The Consultation Paper released by the TGA in December 2008 included a series of questions about conformity assessment processes in Australia. The discussion below presents a brief overview of stakeholders' responses to these questions and provides a discussion of some of the implications of the viewpoints expressed.

It should be noted not all stakeholders responded to all questions. In particular, the response from the consumer sector was in the form of a general position statement calling for consumer engagement and transparency of assessment, funding and postmarket monitoring processes, but did not specifically address the questions raised in the paper.

This discussion is by no means definitive but aims to outline considerations that must be taken into account if a full consideration of options is to take place. Any change will have sub sequential flow-on effects and it is important that future regulatory decisions are made taking consequences into account.

Question 1

1. Do you think TGA should continue to be solely responsible for undertaking conformity assessments for devices that contain a designated material?

If so, why? If not, who should do this?

Overview of stakeholder views:

Industry - Most responses from the industry sector do not think that the TGA should continue to be solely responsible for undertaking conformity assessments (CAs) for devices that contain a designated material. Other comments suggested the TGA needs to better define 'designated material' to capture Australian practices; retain control over biological materials and products of fermentation to maintain international consistency and to provide a higher level of safety assurance.

CABs – The CABs who submitted responses were all of the view that TGA should not have the sole role of issuing conformity assessment certificates for Australian manufacturers. Views were mixed, however, on whether the TGA should be responsible for assessment of devices containing designated materials. All respondents indicated the TGA should be responsible for making the final regulatory decision, however the basis for making the decision (review of CAB assessment reports or acceptance of CAB issued certificates) was not clearly enunciated. One respondent considered '*…overall device approval …*' for all but devices containing designated materials should be the responsibility of the CABs.

Government organisations – Most Governmental agency or organisation responses indicate the TGA should retain the role of CAB for designated materials, with one qualifying and suggesting it be restricted to '*… devices when it has not been done before to a sufficient standard and there is not a suitable alternative, or where it would significantly benefit Australian health outcomes.*'

Professional organisations – Several professional colleges and organisations representing healthcare professionals responded to the request for comment, but only half responded directly to this question. Those that did felt appointed CABs could undertake review of devices containing designated materials.

TGA response: The TGA has considered the views expressed by stakeholders and believes there are a number of important considerations in reflecting on possible changes to future regulation, and specifically in relation to undertaking conformity assessments for medical devices that contain a designated material.

Current Australian processes require that a medical device that contains a medicinal component, such as a drug-eluting stent, and devices that contain a material of animal or other biological origin, such as collagen implants, are required to be assessed by the TGA. The nature of such therapeutic products means that their use inherently comes with higher risks, both to patients and to the health of the Australian community.

Most submitters acknowledge that there is a need for different regulatory treatment for products of different levels of risk, regardless of where that level of rigour occurs. The TGA agrees with this. The regulatory framework for medical devices is a risk-based framework. The TGA is firmly of the view that products of higher risk must continue to attract higher levels of rigour in the pre-market evaluation stage of the product lifecycle.

Industry's views are also, generally, supported by various Australian Government reviews, including the Banks Review in 2005, the Medical Device Industry Action Agenda in 2006 and more recently the Productivity Commission's annual review of regulatory burdens on business, released in 2008. Variously, these reviews have recommended that Australian manufacturers should have access to the services provided by third party CABs to assess and certify they have correctly applied the Conformity Assessment Procedures of the regulatory framework.

However, none of these reviews have considered, or made recommendations relating to the TGA's role as the only acceptable assessment organisation in reviewing the conformity assessment of medical devices containing high risk materials, as detailed above.

For each of these materials, other regulatory agencies also impose unique Australian requirements as an element of the country's bio-security framework. These agencies currently rely on, and have confidence in the review processes undertaken by TGA to supplement their own approval processes. Office of Device Authorisation also has responsibilities to other Offices within the TGA (in the case of medicines and blood derivatives) or external government agencies such as AQIS and OGTR (in the case of animal origin or recombinant materials).

Implementing a provision allowing third party CABs to perform assessments on these devices would require consultation with, and consideration by these agencies of their own obligations and requirements, including possible increased workloads, and presumably some form of assessment, confidence building and oversight of the CABs by the agencies before such a proposal would be found acceptable to them.

The TGA believes that it is important that medical devices containing a medicinal component continue to attract the same rigour as that medicinal component would should it be regulated as a medicine. These components are commonly classed as a prescription medicine, for example, antibiotics, steroids and hormones. Assuring the quality and safety of these medicines is essential for the welfare of the patient. Materials of animal or other biological origin also require specialised assessment to ensure the absence of transmissible substances such as viruses and prions.

It is the TGA's view that manufacturers of high-risk medical devices and their products containing a designated material should continue to be subject to review by the TGA prior to market entry. The TGA believes this approach will continue to provide the degree of safety assurance required by the public.

Question 2

2. Do you think TGA should continue to be solely responsible for undertaking conformity assessments for Australian made devices intended to be supplied in Australia? If so, why? If not, who should do this?

Overview of stakeholder views:

Views from all sectors favour opening up the option for Australian manufacturers to have a choice of CABs but that view was not universal, with some organisations suggesting caveats in the process.

Industry – Responses from the industry sector was strongly in favour of opening up the option for Australian manufacturers to have a choice of CABs but that view was not universal. One respondent suggested the TGA should retain the responsibility, but have the ability to 'outsource' the assessment '*… when the risk was acceptable*.' Many respondents qualified their view by indicating CABs should be subject to review/appointment/recognition by the TGA prior to being able to offer services in Australia – this links in with Question 5 regarding whether the TGA should have a role in auditing/assessing CABs operating in Australia. Another respondent also suggested Australian manufacturers should be able to engage CABs ' *… if they can offers services at a lower cost than the TGA*.' Two respondents suggested the option of a manufacturer to engage the services of a CAB should not be available to those whose intended market was solely within Australia. While many respondents suggested the TGA should have no role in issuing Conformity Assessment Certificates to Australian manufacturers, at least two respondents suggested the manufacturers should have a choice of engaging either the TGA or a CAB.

CABs – Four responses were received from CABs, three international organisations and one Australian based. Of the international organisations, only one had a wholly owned Australian subsidiary, the other two operating internationally and flying assessment staff in as required. The international organisations all favoured opening up access to Australian manufacturers to engage the services of CABs other than the TGA, while the Australian based organisation was not in favour of the option, suggesting '*…. if the system was working well, it should not be changed …..*'

Government organisations – Five responses were received from Government organisations at both the State and Federal level and one international government agency. Those with a mandate of supporting industry development all favoured opening up access for Australian manufacturers to CABs. One agency, charged with monitoring and ensuring a holistic approach to community health and safety favoured opening up the access, but stressed ' *… the key issued is the accreditation, assessment, regulation and monitoring of CABs*'. The international respondent cited the EU model of Notified Bodies as a good example of CABs operating in a regulatory framework and supported its extension into Australia.

Professional organisations – Of the seven organisations representing healthcare professionals that responded, only two addressed the question and offered the firm view that Australian manufacturer's should be able to engage the services of a CAB.

Question 3

3. Do you think TGA should be solely responsible for undertaking conformity assessments for any or all classes of medical device? Should CABs be permitted to undertake assessments of any or all classes of medical device?

Overview of stakeholder views:

The majority view of industry, governmental industry development agencies and CABs is that, when designated by the TGA, CABs should be able to assess all manufacturers of all devices, including those containing designated materials. Organisations representing the users of these devices (the implanting or prescribing clinicians), and those with a broader purvey of public health and safety issues, however, were more conservative in their views on the subject, considering the responsibility for assessment of manufacturers and their devices containing designated materials should remain the responsibility of the TGA.

Industry – The majority view of industry responses to this question was that CABs operating in Australia should be designated for the assessment of all classes of and types of devices. A number of respondents qualified this by suggesting the TGA should retain responsibility, within a risk based framework, for the higher risk devices. Commonly cited as higher risk in these responses were the designated materials. Two respondents suggested that while the TGA should not be directly involved in assessment of the manufacturer of products containing designated materials, a review of the CABs' report should be undertaken by the TGA before an application is accepted for entry on the ARTG.

CABs – Of the four responses received, three were of the view that the CAB's should be able to undertake assessment of all manufacturers and all classes of device, regardless of risk classification. One CAB suggested there should be a transition process where both the TGA and the CABs provided the service as a move to CABs undertaking all assessments, and another two suggested the TGA should focus strongly on assessment, accreditation and monitoring of CAB activities. One CAB suggested the TGA should make its regulatory decision based on assessment reports provided by the CAB to the TGA – this view links in with Question 4 relating to whether the CABs should issue reports or certificates based on their assessment of a manufacturer and their products.

Government organisations – Those Government agencies charged with facilitating innovation and trade, favour CABs being able to offer their services for assessment of all manufacturers and devices regardless of class, however one agency, charged with monitoring and ensuring a holistic approach to community health and safety, favours a risk based approach to the question, and considered the TGA should have particular control of the assessment of higher risk devices, and only if the TGA can ensure that CABs cannot transgress or fail to be diligent in their assessments, then it may be acceptable for CABs to assess any or all devices.

Professional organisations – Of the professional organisations who addressed this question, two considered CABs should be able to offer their services to manufacturers of all classes of device regardless of risk and two considered the assessments of manufacturers and their higher risk devices should remain the province of the regulator – the TGA.

Question 4

4. Do you think a CAB should issue certificates for acceptance, or otherwise, by the TGA or should they produce a report of their findings for the TGA to consider prior to issuance of a certificate? Should the approach be the same for all classes of device?

Overview of stakeholder views:

Views expressed by respondents were reasonably evenly balanced on whether conformity assessment bodies should issue certificates for the TGA's acceptance; or whether they should produce a report of their findings for the TGA to consider before issuing a certificate.

Industry – Opinions from industry responses were evenly divided on whether a manufacturer should be required to provide a certificate or an assessment report provided by a CAB in support of an application for a conformity assessment certificate and inclusion of products on the ARTG. A number of those favouring the TGA reviewing an assessment report and simply accepting a CAB issued certificate suggested a risk based approach be used, for example certificates be accepted for lower risk products and reports assessed for higher risk products. There were also a small number of respondents who suggested the TGA should require neither a certificate or a report for review, but should accept a declaration from the manufacturer that a certificate has been issued.

CABs – Only two responses from CABs addressed this question directly. One was of the view that CAB issued certificates should have the same '…*value/meaning as TGA approvals* ….' The second suggested the CABs should produce certificates and the TGA should '… *evaluate the results*.' It is unclear from this response whether this evaluation should be of the certificate or supporting reports.

Government organisations – Two of the three government agencies responding to this question suggested the TGA should be provided with both certificates and reports detailing the assessment and findings and outcomes from CABs for review in considering the application for inclusion on the ARTG.

Professional organisations – Only two of the six professional organisations addressed this question directly, with a third indicating it did not have a strong opinion. Views were balanced with one organisation suggesting the CAB should issue a certificate, '….*not simply a recommendation to the TGA.*' Whereas the second suggested the TGA should make its regulatory decision '… basing it on assessment and audit reports from the CAB….'.

Question 5

5. Should TGA have a role in designating Australian CABs? If yes, why? If not, who should perform this function?

Overview of stakeholder views:

Respondents overwhelmingly thought that the TGA should have a role in designating Australian CABs, especially where they are responsible for undertaking conformity assessment on Australian manufactured products. This was viewed as a necessary role for the TGA to ensure the current high standards of Australian manufactured product is not diminished.

Industry – Only three responses from industry felt the TGA should not have a role in designation of CABs operating in Australia. One suggested any designation process should make suitable use of MRAs such that EU Notified Bodies should be acceptable to Australia while a second suggested NATA should be given the designation responsibility. A third suggested TGA involvement in the designation process should be *'… optional not exclusive;'*

CABs – Only two of the organisations responding to this paper in favour of the introduction of CABs directly addressed the question, with both in favour of the TGA having designation responsibility for CABs operating in the medical devices sector of the Australian market.

Government organisations – None of the responses received suggested TGA should not have a role in the designation of CABs operating in Australia, however one organisation suggested the responsibility should reside with the TGA provided European Notified Bodies be given '*…automatic Australian designation …*' and the TGA cease operation as a CAB because of a perceived conflict of interest.

Professional organisations –Organisations responding to this question were all in favour of the TGA having a role in the designation process for CABs operating in Australia, with one organisation suggesting JAS-ANZ may also have a role to play.

TGA response: It is clear from the responses from all stakeholders, there is support for the TGA to be responsible for designating

Question 6

6. Should TGA retain responsibility for making the final decision to allow supply of a medical device into the Australian marketplace? If yes, why? If not, who should hold this responsibility?

Overview of stakeholder views:

The overwhelming view of stakeholders was supportive of the TGA retaining responsibility for making the final decision to allow supply of a medical device into the Australian market.

Industry – Of all industry respondents, only two indicated anything other than the TGA should be responsible for the final regulatory decision for inclusion of a device on the ARTG. One response suggested a '….*risk based approach should be applied'* but did not elaborate on what this meant, and a second suggested the TGA should not be responsible '… *because of the high cost of the service.*' , suggesting at the same time fees should be adjusted for smaller manufacturers producing lower risk items.

CABs – Only one respondent directly addressed the question suggesting the TGA will always have final responsibility for the safety and performance of medical devices supplied in Australia.

Government organisations – Of the three government organisation responding to this question, two suggested TGA should have the responsibility for making the regulatory decision, one citing the need for the decision to be made by a government agency with parliamentary accountability. The third response suggested the CABs should be able to issue a '… *certificate of acceptance* …' under a risk management framework where the certificate is considered 'conditional' and taking effect as a 'full' certificate only after a defined timeframe, in which the TGA has not raised an objection to its issuance.

Professional organisations – Two respondents provided input to this question, both indicating the TGA should be the '… *final arbiter on regulatory decisions.*'

Question 7

7. Are there other matters you wish to be considered in relation to conformity assessment for medical devices?

Overview of other issues raised by stakeholders:

Most of the matters raised and questions asked relate to implementation and operational detail of a scheme allowing manufacturers to engage the services of a CAB to assess their application of a conformity assessment procedure to their processes and products.

A number of issues/questions were raised or statements made in response to this general question and, in no particular order, are summarised below.

Industry –

- Suggestion the TGA should institute a process to approve NBs suitable for undertaking conformity assessment. If these bodies are already accredited, the TGA only needs to check that the accrediting body met the criteria. Where devices marketed in Australia have been certified by an NB, then the NB should be considered equivalent to a competent authority.
- Suggestion that other matters to be considered in relation to conformity assessment for medical devices should include:
  - risk assessment;
  - regulatory impact on medical practice; and
  - mutual recognition, cost offsets, free trade agreements.
- The TGA is not accredited to issue **13485** conformance acceptance certificates, so companies have to obtain duplicate accreditation from a European NB to export products in Europe.
- Respondent believes industry can start engaging CABs early so that at the end of the process the QMS and CA can be approved in a short time. The TGA approach is consultative, but does not engage with the QMS or the product until completion of the CA application.
- Respondent questions whether the market is big enough for multiple CABs operating in Australia.
- Respondent believes the TGA should automatically accept CAB conformity assessment reviews for overseas manufacturers.
- Suggestion a CAB in Australia should be called a Notified Body. If most of the medical devices included in the ARTG have European evidence, it would make sense to use an existing term.
- Suggestion provided of operational means to achieve the suggested new structure.
- Suggestion there is a need to provide an equitable marketing solution to those medical device companies that transitioned their products.
- Respondent believes that annual charges from maintaining medical devices on the ARTG will cover post-marketing surveillance. Higher risk devices should attract higher fees, to cover random TGA reviews of assessment reports.
- Suggestion that fees for initial designation and ongoing surveillance for CABs should be borne by the CABs who want to operate in Australia.
- Suggestion that while the certificate of free sale is essential for device approvals in many Asian markets, when online evidence of TGA approval of devices is required, a voluntary subsidiary

notification site on the ARTG would enable manufacturers to post the names of individual medical device models under their respective GMDN codes.

- Suggestion that the TGA should open consultation on the issue of harmonised technical standards.
- Concern was expressed at the concurrent review of third party CA and the proposed new regulatory framework for *in vitro* diagnostics may duplicate requirements for conformity assessments applied to medical devices.
- Suggestion that Australia request the UK MHRA and JAS-ANZ to advise the TGA on the development and maintenance of a designation process for CABs.
- Suggestion the TGA should stop acting as a CAB.
- Respondent proposes that a consultation process should guide the implementation program and timetable.
- Suggestion that the TGA should appoint CABs to carry out conformity assessment certification and performance testing Class III medical devices and AIMDs.
- Respondent proposes that performance testing protocols for Class 4 IVDs should be developed through a public consultation process.
- Suggestion that a transition period of 5 years could see the TGA assume the role of a designating authority.
- Suggestion that the TGA and industry association should establish a permanent consultation and review group to monitor the designation process and the performance measures for CABs.
- Suggestion that the TGA should adopt a similar post market role as EU Competent Authorities.
- Respondent believes the TGA should not change the current system used by Sponsors importing CE certified product from overseas manufacturers.
- Respondent believes that unless an Australian CAB is accredited to issue EC certificates, companies would have to go through the process again to supply in Europe.
- Respondent questions whether Australian manufacturers will be constrained to use an Australian designated CAB.
- Suggestion that the TGA should consider aligning with the European NB system through a specific MRA for CABs. Respondent believes the TGA should retain its role as the regulatory body approving and overseeing clinical trials in Australia.Respondent would welcome CABs that can undertake overseas TGA audits.
- Respondent believes the Australian concept of variants is inconsistent with CA procedures for Class III devices in Europe and adds an unnecessary layer of complexity.
- Respondent recommends theTGA accepts CAB conformity assessment review for Class 4 IVDs and that performance testing be granted a similar flexibility where suitability and safety for use in the Australian market can be established through third parties.

CABs – Only one CAB responded to this question. They believe that assessing the quality of products differs fundamentally from assessing whether the manufacturer conforms with manufacturing regulations. Even though regulations for manufacture are followed, a product may not achieve its purpose to the standard expected in Australia, and were not in favour of the introduction of commercial CABs in to Australia.

Government organisations –

- Organisation believes that patient safety and quality must remain paramount. This examination should provide an opportunity to ensure that patient safety and quality of care are central to all considerations. Standards for medical devices must be exacting and maintained to avoid harm.
- Statement that the TGA is not accredited as an ISO 13485 conformance acceptance body with JAS-ANZ, but provides certificates to conforming Australian medical device companies. Companies have to obtain duplicate accreditation from ENBs to sell into Europe. This anomaly could be eliminated if third party conformity assessment was allowed for Australian manufacturers.
- Statement citing industry concerns that the current system is not flexible enough to deal with convergent (hybrid) and highly innovative products.

Professional organisations – No further issues were raised by any of the professional organisations or colleges who responded to the paper.

In summary

- The overwhelming view of the industry stakeholders is supportive of the TGA, as the regulator, being responsible for the regulatory decision to grant marketing approval for all medical devices in Australia.
- There is strong support from industry, industry related organisations and government agencies responsible for industry development, for the amending of the medical devices regulatory framework, to allow CABs to provide assessment cervices to Australian manufacturers.
- Organisations representing the users of higher risk medical devices (the implanting or prescribing clinicians) and agencies with a broader remit of ensuring a high level of public health and safety were more cautious, and considered assessments of such devices should continue to be undertaken by the TGA.
- The majority of stakeholders believe the TGA should be responsible for assessment, designation and monitoring of CABs providing services to Australian manufacturers.
- Views were mixed on whether the TGA should make the regulatory approval decision based on certification issued by a CAB, or on reports of their findings provided by the CAB.

Attachment 2A

Conformity Assessment Activities in GHTF Partner Economies

Europe

The European Union is a federation of 27 nation states in Europe. Regulatory directives are developed by the European Commission, and each member State is required to transpose the directive(s) into national law – resulting in a common regulatory framework across the Union, but administered individually at the national level.

At the time of establishment of the current medical devices regulatory framework in Europe, one of four approaches was taken to regulation of medical devices in individual countries:

- No regulatory requirements at all;
- Minimal requirements, for example a notification scheme of devices supplied to the market;
- Individual type examination of devices by an independent testing authority; and
- Assessment of manufacturer's quality management systems for the manufacture of the range of devices produced.

Where it was undertaken, maintenance of notification/registration schemes were operated by the regulatory agency, while type examination activities and certification were provided by commercial organizations. In jurisdictions where the implementation of quality management systems was the basis of regulation, assessment of these was generally undertaken by the regulatory agency.

The challenge for the EU was to develop and establish a common framework for regulation taking these wide differences in to account.

The resulting framework required, at the national level, each member State either establish or appoint an existing government agency to act as the *Competent Authority* for implementation of the regulatory framework, including designation of assessment bodies for the purpose of assessing the conformity assessment procedures applied by manufacturers to their products.

These assessment bodies are referred to as *Notified Bodies*, and may be designated for the assessment of some or all categories of medical devices, and for some or all conformity assessment procedures applicable to those devices.

Generally the *Competent Authority* acts as both the *Regulatory Authority* and *Designating Authority* for all devices in the jurisdiction, but this is not always the case. In many jurisdictions, a single authority is responsible for the regulation of medical devices, active implantable medical devices and in-vitro diagnostic devices. However in others, these device categories may be separated over two, or in some instances, three separate Competent Authorities. In one member State there are two *Competent Authorities* for a single device category.

Further complicating the matter however, is the fact that in some member States, the role of *Regulatory Authority, Competent Authority* and *Designating Authority* is undertaken by different organizations, and sometimes by different organizations for different device categories.

Germany, for example, splits the three roles across three different organizations, however the three roles are undertaken across the three categories of devices, and has a two *Competent Authorities* for In-vitro Diagnostic Devices. Belgium on the other hand has three different organizations undertaking the role of *Regulatory Authority, Competent Authority* and *Designating Authority* for the three different device categories, while the United Kingdom has a single agency undertake all roles across all device categories.

As a consequence, across the 27 member States, there are 34 separate organizations, of which:

- 30 are *Regulatory Authorities* responsible for implementation of the legislative requirements to implement the regulatory framework;

- 30 are *Conformity Assessment Bodies* responsible for regulatory activities such as postmarket vigilance; and
- 31 are *Designating Authorities* responsible for assessment and appointment of the Notified bodies.

Annex XI of the Medical Device Directive[1] identifies the criteria to be met by a Notified Body as:

- Independence from the design, manufacture or supply of the devices in question;
- Integrity and impartiality of the organization and staff;
- Competence in the field of medical devices – technical, clinical and manufacturing;
- Trained and experienced staff to undertake the designated assessment activities and report on findings;
- Facilities and infrastructure to undertake the designated assessment or verification activities; and
- Possession of adequate liability and professional indemnity insurance
- Ability to maintain confidential, any information gained in undertaking the designated assessment activities.

Ongoing activities of Notified Bodies is oversighted by the Notified Bodies Operations Group (NBOG), established by the member states and the Commission in 2000 after a number of member states expressed concerns that the performance of notified bodies and designating authorities responsible for them was '….uneven and inconsistent …'.

To quote from the 2004 annual report of the NBOG –

> *If true, this represented an unacceptable risk that non-compliant medical devices were being put on to the EU market thus threatening the health and safety of European citizens. But even if untrue, the simple perception of poor performance meant that the public and political confidence in the European system of regulatory control was being undermined.*

Since inception in 2000, the NBOG has published four annual reports detailing their activities and findings – 2002, 2003, 2004 and 2005-2008, and all are available from the Commission website.[1]

The future direction of the European Regulatory Framework

Many of the competent authorities and notified bodies are operating in compliance with the spirit of the regulatory framework but none-the-less, recognizing these issues, in early 2008 the Commission released a public consultation document titled '*Recasting of the Medical Devices Directives*'.

Since the inception of the Active Implantable Medial Device Directive in 1990, two further directives detailing regulatory frameworks for medical devices (1993) and in-vitro diagnostic medical devices(1998) have been introduced, and two directives on blood derivatives (2000 and 2001), along with six modifying directives to these original directives.

Citing from the consultation paper –

> *'…. Since 2005, a number of drivers have come in to play that necessitates not only a simplification of these four texts, but also a strengthening of the whole legal framework.*"

The consultation document outlines the commitment of the Commission to redraft this multitude of directives in to one single document and signals proposals to:

- extend the scope of the Directives, in particular, to include medical devices consisting of non-viable human cells and/or tissues and/or their derivatives and devices incorporating such cells and/or tissues and/or their derivatives with an ancillary action to that of the medical device;
- re-inforcement of the essential requirements and a strengthening of the evaluation procedures for the highest risk category products, including a proposal that assessment of 'high risk' devices be centralised in either a division within the EMEA or similar device specific organisation;
- Review of the notified body designation procedures and the possibility of centralising the designation process rather than the current model where individual states are responsible for designation of bodies within their jurisdiction, to 'even out' the perceived differences between member states;
- consolidation of expertise, in particular through the creation of a Medical Device Committee inside the European Medicines Agency (EMEA), the competence of the latter being extended to cover not only medicinal products but also medical devices;
- a system of vigilance and market surveillance that is more effective and more coordinated between Member States;
- a specific update following the revision of the New Approach Directive philosophy; and
- an alignment with international regulatory principles.

Of particular relevance to this paper, are the second, third and fourth points above.

Market Authorisation in Europe

At present Europe has no equivalent of the Australian Register of Therapeutic Goods. Once a manufacturer, and their product(s) have been assessed by a Notified Body and appropriate certifications issued, the manufacturer is able to affix the CE mark to the product and place the product on the market.

Canada

Similar the European Union, Canada is a federation consisting of 8 provinces and 3 territories, but unlike the EU, medical device regulation is administered at the federal level.

Canada introduced a new regulatory framework for medical devices, based on GHTF principles, in July 1998. The framework embodies the GHTF principles of compliance with safety and effectiveness requirements, a four level risk based classification of devices and application of an appropriate conformity assessment procedure, by the manufacturer, to the device and the manufacturing process.

The regulatory agency for medical devices in Canada is the Medical Devices Bureau within the Therapeutic Products Directorate of Health Canada. The Medical Devices Bureau administers the Medical Devices Regulations established under the Food and Drugs Act.

Prior to introduction of the new framework, there was no requirement for manufacturers to implement or maintain a QMS. The requirement for manufacturers to implement an appropriate QMS was also incorporated in the regulatory framework, and became mandatory in January 2003 for all manufacturers of class II, III and IV medical devices.

Although there has always been a requirement in Canada for medicines manufacturers to implement Good Manufacturing Practices (GMP) and satisfactory implementation GMP was, and is, assessed by an Inspectorate within the Therapeutic Products Program, at the time of establishment of this new medical devices regulatory framework, Health Canada had no capacity or experience in assessment of manufacturing quality management systems for devices.

In lieu of establishing this capacity, Health Canada established the Canadian Medical Devices Conformity Assessment System (CMDCAS). This system establishes and outlines the responsibilities of the Medical Devices Bureau, to accredit a body to oversight the appointment of external certification bodies and the role of these external certification bodies in the regulatory framework.

The Bureau has appointed the Standards Council of Canada (SCC) to assess and accredit organizations known as Registrars to undertake QMS audits and certification of manufacturers of medical devices on their behalf.

While such a third party approach has been developed, it is important to note the Bureau retains an oversight role over the accreditation and registration process of the Registrars including:

- Co-chairing, with SCC, the CMDCAS Management Committee charged with managing CMDCAS issues and procedures relating to the accreditation of Registrars;
- Participate, at its discretion, as technical experts in the SCC assessment, re-assessment and surveillance audits of Registrars;
- Reviewing SCC assessment, reassessment and surveillance audit reports of Registrars;
- Participate, at its discretion, as observers to Registrar audits of manufacturer's QMS; and
- Removal of recognition of a Registrar and recommend to SCC that corrective action be taken, and potentially recognition be suspended or withdrawn.

The role of the Registrar within the CMDCAS is specifically restricted to assessment of a manufacturer's QMS to ensure the system is in compliance with the International Standard *ISO 13485:2003 – Medical Devices – Quality management systems – requirements for regulatory purposes*, and the issuance of appropriate certification. No assessment is undertaken, for regulatory purposes of the medical devices produced by the manufacturer.

At its inception, the scheme had a total of 16 registrars accredited by SCC. A merger of two registrars – Amtac Certification Services and Intertek Testing Services - occurred in 2004 reducing this number to 15.

The recognition of one Registrar – Orion Registrar Inc. – was suspended by SCC in June of 2005 and finally withdrawn in September of the same year, on the grounds that ' …. *Orion Registrar Inc. no longer met the requirements of Section 32.1 of the* [Medical Device] *Regulations*'. No further explanation has been offered.

Section 32.1 of the Regulations details the requirements of a Registrar to have sufficient training, experience and technical knowledge in design and manufacture of medical devices, and assessment of implementation of associated quality management systems.

Market Authorisation in Canada

Canada operates a system of *establishment licencing* and *device licencing* to authorize the marketing of medical devices.

Manufacturers of class I medical devices are required to have an *establishment licence* which details, in general terms, the types of class I devices manufactured. With authorization from the manufacturer, the licence may be held by the importer or distributor.

The holding of an establishment licence is sufficient authorization for marketing of class I medical devices – these **do not** require a device licence.

Importers and distributors of class II, III and IV medical devices are required to hold an *establishment licence*.

Manufacturers of class II, III and IV devices are **not** required to hold an establishment licence. They are required to have a *device licence* for each of the medical devices they manufacture. With authorization from the manufacturer, the licence may be held by the importer or distributor, on their behalf.

For class II, III and IV medical devices, a *licence application* must be lodged with the regulatory agency, accompanied by an acceptable QMS certificate issued by one of the accredited Registrars.

For class III devices, a Premarket Review Document containing information about the device, including:

- Background information about the device and its application;
- Safety and effectiveness studies, including:
  - List of standards used;
  - Method of sterilization and an attestation the sterilization process has been validated;
  - Summary of validation studies; and
  - Bibliography;
- Device labelling;
- Certification of the QMS by an accredited Registrar;

For class IV devices, a Premarket Review Document containing information about the device, including

- Background information about the device and its application
- Risk assessment
- Quality plan
- Device specific information including:
  - material and manufacturing process specifications;
  - manufacturing methods and associated quality control activities; and
  - standards used in the relevant processes;
- Safety and effectiveness studies, including validation studies of:
  - pre-clinical;
  - clinical;

- literature studies;
- manufacturing;
- sterilization for the device; and
- Specific information for devices of biological origin;

· Device labelling; and

· Certification of the QMS by an accredited Registrar.

Satisfactory review of the licence application and associated documentation will result in Health Canada issuing a device licence authorizing marketing of the device in Canada.

Japan

The Pharmaceutical Affairs Law was initially established in 1943 to ensure the quality, safety and efficacy of medicines, cosmetics and medical devices in Japan. It has undergone a number of revisions since then, but the most significant was announced in 2002 and took effect in April of 2005. This revision saw the introduction of a new regulatory framework for medical devices, based on GHTF principles.

The framework embodies the GHTF principles of compliance with essential principles of safety and performance, a four level risk based classification of devices and application of an appropriate conformity assessment procedure, by the manufacturer, to the device and the manufacturing process.

The introduction of the revised Pharmaceutical Affairs Law (PAL) in 2005 saw the establishment, from three pre-existing organizations, of the Pharmaceuticals and Medical Devices Agency (PMDA), a quasi-independent agency within the Japanese administration, which works in co-operation with the Ministry of Health, Labour and Welfare (MHLW) which is the regulatory agency responsible for the new framework.

The PMDA is responsible for assessment and certification of both the manufacturer's QMS and the medical device(s) produced by the manufacturer. It is important to note that while PMDA has primary responsibility for conduction of medical device assessments and other related activities, the PMDA does not issue device approvals, but makes recommendations to the MHLW. The final authority to issue the device approval rests with the MHLW.

A significant revision which occurred with the introduction of the revised framework, was the introduction of third party certification by Registered Certification Bodies for certain controlled 'generic medical devices' of moderate risk (class II), while maintaining governmental reviews by the PMDA of higher risk medical devices. There are currently 12 Registered Certification Bodies, but it is important to note that not all of these organizations are registered to certify all types of class II medical devices. The certification organizations undertake both assessment of the manufacturer's QMS and the technical dossier describing the device.

Generic medical devices, often referred to as 'me-too' devices, are comparable to already approved medical devices, or predicate devices. The assessment of these generic medical devices by a Registered Certification Body **is limited** to those devices for which the MHLW has authorized a translated Japanese Industrial Standard (JIS).

Although the PAL incorporates a GHTF based risk classification system, the regulatory agency, using the Japanese Medical Device Nomenclature System (JMDN) has also published a list associating a classification with each device type. That list suggests there are in the order of 1800 class II medical devices, however there are only about 800 devices with associated Japanese

Industrial Standards. Consequently, only ~ 45% of class II devices are assessable by Registered Certification Bodies. Like the PMDA, the Registered Certification Body PMDA makes recommendations to the MHLW. The final authority to issue the device approval rests with the MHLW.

All other class II devices, for which no JIS exists, are subject to the same approval process as class III and class IV devices and are assessed by PMDA before a report and recommendation for approval is provided to the MHLW.

All high risk class III and class IV devices, and all new medical devices for which there is no substantially equivalent predicate, regardless of classification, are assessed by the PMDA.

While, under the old regulatory framework, the responsibility for inspection and assessment of all Japanese manufacturers was the responsibility of the prefecture governments, this responsibility has now been reduced to only Japanese manufacturers of class III medical devices. The PMDA now undertakes inspection and assessment of Japanese manufacturers of class IV medical devices and all off shore manufacturers of class III and class IV medical devices. PMDA also undertakes inspection and assessment of class II medical device manufacturers where their products are not eligible for assessment by a registered Certification Body.

Market Authorisation in Japan

Previously a foreign company was able to utilize the services of a regulatory agent to prepare and lodge documentation for assessment on its behalf, but the device marketing approval was granted direct to the offshore manufacturer. The new framework is based on market approvals being granted to a Marketing Authorisation Holder (MAH), designated by MHLW, who must be resident in Japan.

The MAH carries all regulatory responsibilities and authorisations for product release to the Japanese market. The MAH may be a manufacturer resident in Japan, a subsidiary (located in Japan) of an off shore manufacturer, a distributor for an offshore manufacturer or an organization specifically established to provide MAH services to off shore manufacturers, where the distribution is undertaken by a third organization.

The internal structure of the MAH is defined in the PAL. The organization is required to have three 'controllers' –

- General manager responsible for oversight of manufacture, distribution and placing of product on the market
- Quality assurance controller in charge of Good Quality Practice (GQP)
- Postmarket safety controller in charge of vigilance activities

For class I medical devices, these roles can all be fulfilled by one individual. Class II medical devices require at least two individuals, and class III and IV medical device require a separate individual for each role.

Marketing approval for a medical device requires a combination of either licencing, notification, certification or approval, depending on the classification of the device.

A manufacturer, resident in Japan, requires two licences – one to manufacture medical devices and the second to act as the MAH for those devices. Manufacturers not resident in Japan do not need to be licenced, but do need to notify themselves to the regulatory authority. Market Authorisation Holders operating on behalf of overseas manufacturers require an MAH licence.

The manufacturer of a medical device must then either notify the regulator (class I), obtain device certification from either a Registered Certification Body or PMDA (class II with or without a JIS respectively) or obtain a device approval from the MHLW (class III and IV).

United States of America

The USA is a member of, and active participant in the GHTF, but is the only member not to have a medical devices regulatory framework based on GHTF principles. It must be said however, the framework implemented under the Federal Food, Drug and Cosmetic Act, does have many common characteristics with the GHTF principles.

In lieu of a risk based classification system, the FDA places all medical devices into one of three regulatory classes based on the level of control necessary to ensure safety and effectiveness of the medical device:

- Class I - General Controls;
- Class II - General Controls and Special Controls; and
- Class III - General Controls and Premarket Approval.

This classification designation is risk based, class I being considered the lowest risk and class III the highest, but unlike the GHTF risk based classification system using rules, the FDA assigns the classification based on device type and publishes the risk class in the Code of Federal Regulations.[1]

General controls include:

- Establishment registration of manufacturers, distributors, repackagers and relabelers resident in the USA, or located off shore;
- Listing of the medical devices with the FDA;
- Manufacturing devices in accordance with the Quality System Regulations (QSRs);
- Labelling of the devices in accordance with the regulations; and
- Submission of a premarket notification 510(k) before marketing the device.

Most class I devices are exempt from the 510(k) premarket notification process and/ or the QSRs.

Special Controls may include:

- Specific labelling requirements;
- Compliance with mandatory or voluntary performance standards;
- Postmarket Surveillance activity requirements; and
- Other requirements outlined in device type specific guidance documents.

In recent years, instead of down classifying some class II devices, the FDA has exempted a small number from the need to submit a 510(k) premarket notification.

Premarket approval is required where the FDA does not consider sufficient information exists in the general domain to assure safety and effectiveness solely through the application of general or special controls. This is the process of review, by the FDA, of technical, scientific and clinical data

generated and provided by the manufacturer to demonstrate the safety and effectiveness of the device.

Most, but not all, class III devices require premarket approval – for some devices a 510(k) premarket notification is sufficient.

In common with the GHTF regulatory model, more regulatory scrutiny is applied to a medical device as the risk presented by the device increases. That scrutiny can be separated in to two components:

- Assessment of technical documentation – either a 510(k) submission or PMA dossier; and
- Inspection and verification the QMS operated by the device manufacturer is in compliance the Quality System Regulations.

Assessment of the former is undertaken by the relevant Branch of the Office of Device Evaluation (ODE) within the Centre for Devices and Radiological Health (CDRH).

Assessment of the QMS is undertaken by the Office of Compliance (OC) within the CDRH.

The FDA Accredited Persons Inspection Program

One of the elements of the FDA Modernisation Act, introduced in 1997, was to create an "Accredited Persons Program to provide manufacturers of eligible devices an alternative 510(k) review process that could yield more rapid market clearance decisions enabling the FDA to use its scientific review resources for higher risk devices. Development of this system required the FDA to establish a designation and on-going monitoring process to maintain confidence in the reviews undertaken by the third parties of low to moderate risk devices.

The program has two elements:

- Assessment of 510(k) applications for a designated range of devices; and
- Ongoing inspection of a manufacturer's implementation of their Quality Management System.

Eligible manufacturers

Participation in the assessment by Accredited Persons program is voluntary for manufacturers, but does need agreement by the FDA that the manufacturer is able to use an Accredited Person in lieu of the FDA. For example, only if the most recent inspection by the FDA was rated 'No Action Indicated" (NAI) or 'Voluntary Action Indicated' (VAI) is approval likely to be granted. In addition, the program is structured such that the FDA will undertake every third inspection to ensure audits undertaken by the Accredited Person, and subsequent corrective actions by the manufacturer, are of the same standard if the FDA undertook all inspections.

One further group of restrictions imposed on manufacturers regarding access to the program relate to the scope of the manufacturer's export activities and the recognition of the Accredited Person in other jurisdictions. To be eligible to engage the services of an Accredited Person:

- The manufacturer either markets or intends to market the device in one or more foreign countries; and
- the Accredited Person is certified, accredited or otherwise recognized by one of the foreign countries in which the device is to be marketed.

The intent of these provisions is to focus the use of third party inspections on manufacturers that operate in the global market and are likely to be subject to multiple inspection/audit requirements. Access is not available to US resident manufacturers supplying only the domestic market.

Eligible devices

Under this program, all class I devices not exempted from the 510(k) process and designated lower risk class II devices are eligible for third party review.

Specifically excluded from the program are:

- Any class III device;
- Any class II device which is permanently implantable, life supporting or life sustaining;
- Any class II device for which clinical evidence is required, to demonstrate partial equivalence to a predicate, as part of the 510(k) submission; and
- Any device which requires multi-centre review (ie with CEBR or CEDR).

When initiated, only class I and designated class II devices, for which FDA device specific guidance documents were available, were eligible for assessment under the program. This restriction has now been lifted to some extent, but it is still necessary for the Accredited Person to have the scope of their accreditation extended on a person-by-person and device-by-device basis.

Eligiblity as an Accredited Person

To be eligible for consideration as an Accredited Person, a person/organization must:

- be legally constituted entity permitted to undertake the activities for which they are seeking accreditation;
- not be a federal government employee;
- have documented organizational and operational policies and procedures, including the ability to interface directly with FDA systems;
- be independent and not owned or controlled by a manufacturer, supplier or vendor;
- not engage in the design, manufacture, promotion or sale of devices;
- have specialized education or experience to assure a technically competent review, demonstrated knowledge of the regulatory framework for medical devices; and
- protect against any potential exposure to a conflict of interest.

Although documentation relating to the program suggests the Authorised Person is an organization, such as BSI, AMTAC, TUV SUD America, etc, the accreditation process imposes a number of requirements on each individual employed by the organization who will undertake the inspection/assessment. Requirements include, for example:

- A minimal educational qualification requirement;
- Completion of three classroom training courses provided by AAMI and the FDA, covering:
  - AAMI GMP/QMS: Industry Practice and Requirements;

- FDA Quality System Inspection Technique (QSIT); and
- FDA Investigator Training; and

· Completion of three joint inspections of manufacturing facilities, in company with an FDA inspector, who will assess competence of the individual.

All requirements must be met before the organization and the individual auditor will be accredited by the FDA's Third Party Recognition Board (TPRB).

For this reason, as at April 2010, only 8 of the 16 organisations recognized by the FDA have at least one inspector qualified and accredited to conduct independent inspections under the program.

Success, or otherwise, of the program can be measured in the number of manufacturers availing themselves of the option, in comparison to the number of 510(k) applications processed by the agency annually.

Year	Total 510(k) applications processed	Average FDA time to decision	510(k) applications with 3rd Party review	3rd party review expressed as a %	FDA time in addition to 3rd Party Review
2001	4248	83	96	*	23
2002	4320	81	120	*	31
2003	4247	78	185	*	40
2004	3107	64	241	7.8%	35
2005	3130	54	240	7.7%	34
2006	3240	54	278	8.6%	39
2007	3192	n/a	233	7.3%	43

*- data not presented as the Total 510(k) processed figure incorporates both ODE and OIVD

Table 1 – FDA 510(k) applications assessed using the Accredited Persons Program

Advice from FDA officials suggests that fewer manufacturers than anticipated have availed themselves of the alternative to submitting an application for assessment by the FDA.

The relatively low uptake has been attributed to a number of reasons, but primarily –

· The low number of organizations accredited under the program with sufficiently trained staff to undertake the assessments

· The difficulty these organizations have in finding manufacturers prepared to submit to observed audits required as part of the training program

· The initial and recurring fees associated with inspections and assessments by the Accredited Persons, in addition to the assessment fees associated with review of a 510(k) application.

Marketing Authorisation in the United States

Although the FDA allows the operation of third party accredited persons to undertake ongoing assessment of a manufacturers operations and review of 510(k) applications, the regulatory decision to issue marketing approval, or not, continues to reside with the FDA.

The FDA makes the regulatory decision to approve devices eligible for this program based on reports provided by the third party, detailing their findings at inspection and review.

Summary Table

These roles of the regulators and Cab's in these four jurisdictions are summarized in the table below, and are compared with the current regulatory framework in operation in Australia.

	Device types	CAB	Designation by	Regulatory decision by
European Union	Low Risk High Risk	Notified Body	Regulatory Authority	Notified Body
United States	Only designated (US) class II and III intended for export as well as local consumption	Regulatory Authority - FDA, **OR** Designated 3rd Party	Regulatory Authority - FDA – Third Party Review Board	Regulatory Authority - FDA
	All others	Regulatory Authority - FDA	Regulatory Authority - FDA	Regulatory Authority - FDA
Canada	Quality Management System assessment for all devices	Registrar	Standards Council of Canada (acting on behalf of Health Canada)	Regulatory Authority – Health Canada
	Device (product) Assessment	Regulatory Authority – Health Canada	-	Regulatory Authority – Health Canada
Japan	Class II, but limited to availability of a translated JIS standard (approx half of class II's)	PMDA (Gov't Agency outside of MHLW)	MHLW	Regulatory Authority - MHLW
	Class II, III and IV	Registered Certification Body	MHLW	Regulatory Authority - MHLW
Australia	Low Risk	TGA takes account of evidence of 3rd party assessments	-	Regulatory Authority - TGA
	Designated Higher Risk	TGA takes account of reports generated in 3rd party assessments	-	Regulatory Authority - TGA
	Designated High Risk	Regulatory Authority – TGA – but may take in to account of reports generated in 3rd party assessments	-	Regulatory Authority - TGA

Table 2 – Summary of GHTF Frameworks

[i] http://www.health.gov.au/internet/main/publishing.nsf/Content/hta-review

[ii] Insert reference here – e.g. NJRR 2009 Annual Report

[iii] Revision of a primary implant is sometimes mistakenly regarded to be a "performance problem". However revision surgery leads to considerable morbidity and a low but significant mortality rate. Therefore premature revisions or high revision rates associated with an implant should clearly be regarded as a safety concern.

[iv] Australian Orthopaedic Association National Joint Replacement Registry, Annual Report, Hip and Knee Arthroplasty, October 2009, Page 14.

[v] Australian Orthopaedic Association National Joint Replacement Registry, Annual Report, Hip and Knee Arthroplasty, October 2009, Page 107.

[vi] Australian Orthopaedic Association National Joint Replacement Registry, Supplementary Report, Demographics of Shoulder, Elbow, Wrist, Ankle and Spinal Disc Arthroplasty, October 2009, Page 4.