MITSUBISHI MOTORS

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Spirited Cars for Spirited People

SUBMISSION TO

PRODUCTIVITY COMMISSION INQUIRY

INTO

POST–2005 ASSISTANCE ARRANGEMENTS

FOR THE

AUTOMOTIVE MANUFACTURING SECTOR

MAY 2002

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POST 2005 ASSISTANCE ARRANGEMENTS FOR THE AUTOMOTIVE MANUFACTURING SECTOR

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CONTENTS

1. INTRODUCTION

This submission addresses some of the issues raised in both the Government's terms of reference to the Commission and Attachment B to the Commission's circular of 21st March 2002. It does not seek, however, to be exhaustive as Mitsubishi Motors Australia Ltd (MMAL) is a party to the Federal Chamber of Automotive Industries' (FCAI) submission which explores many of the issues of interest from an industry perspective. Consequently this submission confines itself to providing observations and perspectives on matters of particular interest to MMAL.

2. MMAL PROFILE

Shareholding

Mitsubishi Motors Australia Limited (MMAL) is an unlisted public company incorporated in South Australia and wholly owned by Mitsubishi Motors Corporation (MMC) of Japan. DaimlerChrysler (DC) currently owns 37% of MMC with an option to purchase further equity before October 2003.

Business Undertakings

MMAL's business activities include:

- the manufacture & distribution of passenger cars for the Australian and export markets;
- the importation & distribution of passenger cars and light commercial vehicles; and
- the manufacture and sale of automotive components and tooling to Australian and overseas customers

Facilities

MMAL's facility at **Tonsley Park** consists of:

- the Assembly Plant for Magna/Verada vehicles supplied to the domestic market and overseas markets
- the Stamping and Hardware Plant which stamps steel panels and fabricates sub-assemblies such as axles and fuel tanks for the Magna/Verada. Steel panels are also exported to Japan for the production of the Diamante sedan
- the Toolroom which designs and makes dies for the stamping of panels, jigs and fixtures used in car assembly and dies for export and domestic customers

The **Lonsdale** manufacturing facilities include:

- the Grey Iron Foundry which makes iron castings such as engine blocks, exhaust manifolds, balance shafts and brake components for locally produced vehicles. Substantial quantities of engine blocks are also exported to MMC's engine plant in Japan;
- the Aluminium Foundry which casts cylinder heads for locally produced vehicles and export as well as intake manifolds; and
- the Machine Shop which machines the iron and aluminium castings for assembly into local engines and for export to Japan

In addition MMAL has Regional Sales Offices in Adelaide, Brisbane, Sydney, Melbourne and Perth, a representative office in Dubai, United Arab Emirates, as well as Parts & Accessories Warehouses in Adelaide and Sydney. Total employment in MMAL's facilities is currently 3271.

3. INDUSTRY ISSUES

Market Issues

Domestic Demand

The Medium/Large segment of the Australian market is dominated by the four local producers. This segment is the largest segment accounting for over 30% of total new vehicle sales, with total annual volume running at about 250,000/year. Over the next 20 years we would expect the total Australian market to reach 1.0 to 1.1 million sales per year, with the Medium/Large segment to reach 280,000 to 290,000 per year (about 28% of market).

The major influence on passenger motor vehicle (PMV) demand for all buyer groups – business, government and private – is the level of economic activity/growth in Australia and major overseas markets. In addition associated factors such as unemployment rates, the level of consumer and business demand for goods and services, changing levels of government expenditure, international demand and price levels for Australian commodities and products, all impact on both the need for new vehicles and on the ability of different groups to purchase new vehicles.

These factors also influence the key issue of vehicle affordability (discussed below) that is governed not only by vehicle prices and interest rates but also by fuel costs, service costs, parts costs and government taxes and charges.

In addition, changes in government policy directly related to the car industry, such as FBT treatment of motor vehicles and GST or luxury tax levels, obviously have the potential to impact market demand. Similarly any movements in government policy designed to improve the average age and safety profile of the car parc (by encouraging the removal of old, unroadworthy vehicles for example), will impact on new vehicle demand. The Australian car parc remains relatively old by developed country standards with 50% of all cars on the road more than 10 years old, and 30% more than 15 years old. The average age of cars scrapped is approaching 20 years. All this points to a high level of potential "pent up" demand for new vehicles.

Demographic changes are also expected to have a significant effect on future market demand. A declining birth rate, smaller families and an aging population will impact on both the level of demand for new vehicles, as well as the type of vehicles. A trend is likely towards recreational vehicles with more retired people using vehicles for holiday travel and to smaller cars which are generally favoured by women.

Competition for the consumer dollar is also affected by the relative attractiveness of other 'big ticket' items such as housing, home renovation and major holidays. Discrimination against the automotive industry in this area through the imposition of differential sales taxes has now been overcome by the introduction of the GST. Nevertheless, compared to other OECD countries, Australia's love affair with real estate still appears to impact on the propensity to purchase new motor vehicles.

Finally, the trend towards inner city living and the increasing congestion on major roadways have the potential to soften future demand for motor vehicles. While the convenience of motor vehicle ownership has always been highly valued in Australia, there is a significant risk that any future substantial improvements in public transportation options could attract increasing patronage at the expense of vehicle sales.

Pricing & Affordability

Since 1996 absolute retail price levels have either tended to fall or remain relatively stable. For example the price of a base Lancer Sedan fell from $22,200 in 1996 to $20,990 in 2001, while a base Magna V6 Sedan increased marginally from $29,650 to $29,890 over the same period. During that time average weekly earnings (AWE) have increased from $715 to $850. The net

result is that new car affordability has improved. The multiple of AWE required to purchase a Magna has reduced from 41.5 to 35.2 and Lancer has reduced from 31 to 24.7. Taking account of the additional features that have been added to both vehicles over the period, (Magna – air conditioning, driver airbag, ABS, and remote keyless entry valued at over $4,000 and Lancer – air conditioning valued at over $2,000), the adjusted price of these vehicles has fallen considerably.

No doubt this improved new car affordability has contributed to some extent to the total annual new car market increasing from an average of around 600,000 prior to 1995 to the record 780–800,000 level since 1997/98.

However, two other important factors have probably had a greater impact on the size and composition of the new car market since 1996. Firstly, the substantial aging of the car parc since 1976 – with the number of cars over 10 years old increasing from just over 1 million in 1976 to over 5 million in 1995 – has pushed up the replacement potential substantially.

Secondly, substantial reductions in tariffs have encouraged the introduction of an imported range of new, well priced, diverse products including small sedans/hatchbacks and medium sized recreational SUVs. In particular, the introduction of very low priced products in the small car segment (mainly from Korea) has moved a large number of traditional second hand car buyers into the new car market.

Exchange rate movements increase/decrease cost pressures and consequently can influence pricing and affordability. However, imported vehicles and components come from a variety of different currency sources and inevitably cost pressures will vary. The extent of any flow on of those pressures to vehicle pricing will depend on competitor price movements. It is market forces that are the key to setting vehicle prices.

This is borne out by comparing changes in recommended retail prices (RRPs) with currency movements since 1996. As mentioned above imported products such as Lancer have generally experienced a reduction in retail price since 1996. Lancer's retail price has dropped by about 6%, with an additional 10% real reduction due to added specification, giving a total real reduction of about 16%. There has been a matching cost reduction of about 16% from duty changes (25% to 15%) and from the GST introduction (6.1% reduction). However the exchange rate cost increase over the same period 1996–2001 (92Y to 65Y = 41.5% cost increase) has not been recovered to any significant

degree. In fact importers of both CBU vehicles and OE components for assembly in Australia have generally not been able to recover much of the currency induced cost increases, except in products at the higher end of the market.

International comparisons of vehicle pricing and affordability suggest that Australian consumers are not disadvantaged. The figure below illustrates that Australian RRP's, excluding tax, compare very favourably with the USA (generally identified as the best value for money vehicle market in the world) on a product by product basis.

Fig: 1 Vehicle Pricing (USA vs Australia)

	USA RRP US$ excl tax	A$ Equiv At 53c/US$	Australia RRP (A$) excl tax
Lancer	$13,947	$26,315	$19,082
Pulsar	$11,799	$22,262	$18,627
323	$13,075	$24,670	$18,814
Corolla	$13,370	$25,226	$18,173
Verada	$28,447	$53,674	$45,445
Avalon	$30,405	$57,368	$45,445
Maxima	$27,099	$51,130	$43,627

Source: MMAL April 2002

The figure below illustrates that in terms of affordability the situation in the USA improves due to higher average income levels. However, in view of the size of that market and the likely broader income spread, the affordability difference is modest, particularly in the lower end of the market.

Fig: 2 Vehicle Affordability (USA vs Australia)

	USA	AUSTRALIA
AWE (FullTime A$)	$1,260	$850
RRP (less Tax) – **Lancer**	$26,315	$19,082
Weeks to Buy @ AWE	20.8	22.4
RRP (less Tax) – **Verada**	$53,674	$45,445
Weeks to Buy @ AWE	42.5	53.5

Source: MMAL April 2002

The average tax inclusive outcome is unlikely to be markedly different. State sales taxes vary in the USA from 1% to 14% and average around 8%.

Exports

As far as export market destinations are concerned, developed countries such as the USA have a substantial demand for Medium/Large sized vehicles. This segment is the largest in the USA, accounting for about 25% of total sales (about 4.2 million/year), and while there is a growing market for recreational SUV type products, the demand for traditional Medium/Large cars is expected to continue to be strong over the longer term.

In recent years Australian manufacturers have been successfully exporting to developing countries such as the Middle East and South East Asia and markets in areas such as China and India are also opening up. These markets have a burgeoning middle class population, with a growing demand for Medium/Large cars. Although absolute volumes are relatively small by mass production volume standards, the demand is expected to continue to grow over the long term and Australia, with its optimal cost base for relatively lower volume Medium/Large car production, is an ideal source for this growing demand.

The development of further export markets will largely depend on two factors. Firstly, the ability of local manufacturers to become integrated into their shareholder's global manufacturing strategies and, preferably, nominated as the sole source of supply for particular models. Secondly, the outcome

of the Australian Government's strategy to achieve reductions in regional automotive tariff and non-tariff barriers by bi-lateral negotiation, attaining membership of proposed trading blocs or through multi-lateral forums.

Significant automotive trade barriers remain in a number of countries, particularly in the South East Asian region. The level of tariffs, the linking of those levels to engine capacity and a range of non tariff obstacles effectively exclude the possibility of significant vehicle exports to this region.
In response to this situation MMC and DC have either set up new plants or entered partnerships with locally owned companies or governments in a number of highly protected markets. Financial inducements from the host country are a common feature of such initiatives. From MMAL's perspective the benefits of this strategy are the increased potential for exports of engine components and CKD vehicles.

The Australian industry's interest in seeing the automotive trade barriers in the region reduced goes beyond the issue of direct market access for our own exports. At present, with world overcapacity in automotive production, we have too many vehicles chasing too few markets and this obviously increases the pressure on those markets, like Australia, with relatively modest and transparent assistance regimes. The opening up of current highly assisted markets will help to diffuse that pressure by providing a wider array of export options to the world's vehicle producers.

Suppliers

Vehicle manufacturers are progressively becoming less vertically integrated, outsourcing work to suppliers that formerly was performed in-house. In addition car design and manufacture is moving away from a situation where individual components are assembled on to the motor vehicle towards modular construction methods.

These developments (and this is very much the case for MMAL) are creating new opportunities for suppliers to:

- involve themselves in module design and supply; e.g. instrument panels, suspension modules
- perform, for more than one motor vehicle producer (MVP), tasks that were formerly carried out by individual car companies (e.g. seat assemblies, steel fuel tank systems).

As a result opportunities are arising for increased component exports by suppliers as a result of the Australian operations of MVP's adopting global or part-global vehicle platforms. The platform for MMAL's new models will support a range of vehicles to be manufactured in the USA, creating the potential for MMAL's Australian suppliers to export components to its affiliate in the USA.

The New Tax System

Apart from the impact of the transitional period over 2000/2001, which caused some timing distortion in sales due to postponement of purchases, the GST has not yet resulted in any discernible impact on absolute volumes or market structure.

Higher new vehicle demand from both private and fleet buyers was a common assumption prior to the introduction of the GST. It was anticipated that the new system would particularly benefit fleet sales and, in turn, sales of the Medium/Large vehicles favoured by fleet buyers.

So far none of these expectations have been realised. The market has tended to remain flat after the 1998 peak, with economic uncertainty and GST uncertainty (how would GST work/when would input tax credits apply) causing the motor vehicle market to slow through 1999-2001. In mid-2001 the Government brought forward the implementation of full input tax credits for business sales to remove uncertainty and boost confidence. At this stage it is still not clear whether this will lead to a stronger new car market through 2002, although the signs are promising over the first four months of the year.
The only significant structural change in the market that has occurred with the introduction of GST has been a move away from 4X4 pickups towards 4X2 pickups. Prior to GST 4X4 pickups were sales tax exempt for primary producers. Post GST 4X4's were still GST free to primary producers, but they had to pay the initial GST up front and then wait for three months for a GST credit. This greatly reduced the sales level of 4X4 pickups. With full input tax credits now available on both 4X2 and 4X4 pickups, as well as any other vehicle used for business purposes, many primary producers are electing to make do with the cheaper 4X2's where possible. Alternatively, if a 4X4 vehicle is required they, now have the option of purchasing SUV type 4X4s, particularly with the newer range of lower priced products now available.

The retention of taxes on luxury motor vehicles does not appear to have affected that segment, which is the only traditional passenger car segment that has continued to grow through the period 1997-2001.

The current FBT arrangements support the practice of major businesses running their own car fleets. Any change to these arrangements would undoubtedly result in individuals in a business environment being forced to purchase their own vehicles. This would have obvious and severe ramifications for a local industry heavily dependent on fleet sales.

Financial Issues

Investment & Profitability

MMAL's comparatively small investment of $140 million over the past five years is due to two main factors. Firstly, MMAL launched the current Magna/Verada in 1996 and the majority of the $500 million invested in the vehicle was spent prior to the 5 years in question. Secondly, MMAL's shareholders imposed restrictions on investment in recent years as part of a corporate debt reduction strategy.

However, preparation for the launch of the 2003 model and the recent approval for development of new models for introduction from 2005 will see the value of investment rise to around $700 million for the period 2002-2005.

MMAL's profitability on export vehicles has generally been greater than on domestic sales. Export vehicles tend to be more highly specified than domestic vehicles and therefore more profitable.

In the case of the USA, MMAL's product is marketed as the Diamante and positioned in the near luxury market segment. This vehicle is broadly equivalent to the domestic Verada, which is the most profitable in the domestic range but accounts for less than 10% of the domestic sales mix.

Foreign exchange rates have also been a contributing factor to export profitability. The depreciation of the AUD against the USD in recent years has allowed MMAL to pass on to the distributor price reductions, which have helped to lift volume and profitability for both parties, even as the vehicle ages.

In comparison the domestic Medium/Large market has been very competitive in recent years with limited price increases, strong incentives and fleet discounts being offered by all manufacturers in an attempt to maintain their share of a stagnant market segment.

Production

Scale Economies

Due to the fluctuating demands of export and domestic markets, plant utilisation had not been consistently high over the life cycle of the current model. Currently, average utilisation is 72% of standard capacity. Although average annual volumes have remained relatively stable, monthly fluctuations have been significant with 50% change in line speed occurring in a 12 month period. These variations inevitably impacted on the productivity and quality of the manufacturing process, as the plant's facilities and layout were optimised for planned capacity. This resulted in direct and structural manning inefficiencies at lower volumes. To address these issues, facilities and layouts were progressively modified to increase flexibility over a wide range of volumes, followed by a total plant restructuring designed to create an even leaner and more variable structure. Total plant flexibility had to increase to minimise plant fluctuations and existing flexible working day arrangements were further enhanced to give even greater flexibility. Temporary Variable Labour (TVL) was then introduced to reduce the lead and lag issues associated with hiring and de-hiring.

MMAL's current, relatively low volumes require only a one-shift operation to achieve capacity and the fixed cost component is relatively high. Many plants produce their volumes on a two or three shift basis, fully utilising their plant and tooling and equipment. This provides high volume at relatively lower facility investment and associated fixed costs. In turn, this promotes relatively lower cycle times for the equivalent volume, greater utilisation of capital equipment, (e.g. robotics and paint shop), and less indirect management and engineering, effectively reducing the fixed costs.

On the other hand few plants can match MMAL's levels of flexibility. Unless volumes can be kept as smooth as possible throughout the year, the impact on efficiencies at lower than planned volumes is much more severe in a more automated environment.

Introducing two or three shifts to MMAL's manufacturing operation at Tonsley Park is possible and would provide significant increases in volume for relatively small capital investment. The main challenges to overcome in introducing additional shifts would be large press capacity, logistics into plant and the cost and availability of additional labour.

MMC's recent announcement of a major new investment involving the production of two models provides the potential for better facility utilisation, efficiency and project ROI. Multiple models can also help minimise and synchronise the risks associated with stepped volume increases during demand fluctuations.

Productivity & Cost Reductions

MMAL has ongoing programs of productivity improvement and cost reduction. These have included:

- improved system for vehicle flow following the manufacturing process to reduce delivery time
- empowered workers in the correction of process faults
- introduction of enhanced problem resolution through cross functional team based activities
- a trained workforce in "Plan, Do, Check, Act" procedures along with,
- participation in Quality Circles
- Quality Gate System – a project management tool to ensure each component development phase meets the required quality standards

Further introduction of new technologies to improve competitive strength through the use of advanced materials, adopting world's best practice engineering and design principles, advanced processes and technologies (e.g. robotics automation) will reduce future costs.

The following figures indicate recent cost reductions and productivity improvements.

Fig: 3 Reduction in Manufacturing Costs

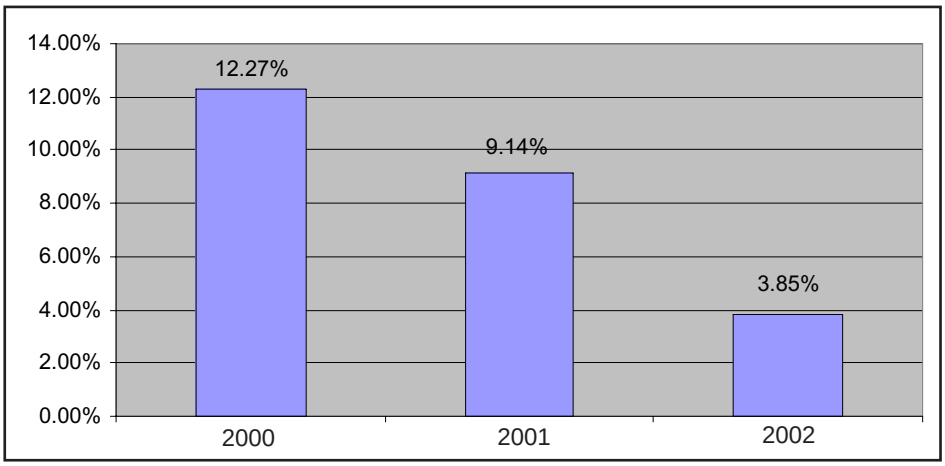
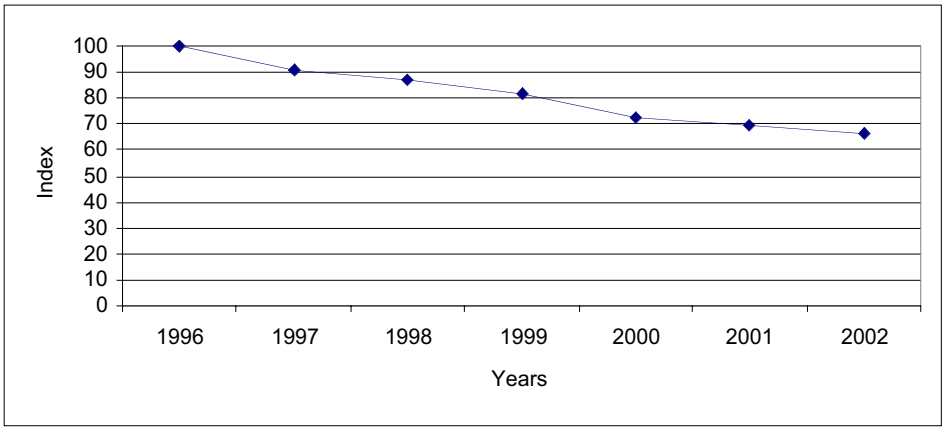


Fig: 4 Manufacturing Improvement (Hours/Unit)



Workplace Issues

Industrial Relations

The Enterprise Bargaining provisions of the Workplace Relations Act have provided benefits to MMAL through the introduction of strategic flexibility into our entire operations to meet market responsiveness and international competitiveness needs.

MMAL's focus has been to identify and negotiate key strategic initiatives that we foresee as necessary to meet anticipated demand, reduce operating costs and, most importantly, seize opportunities to increase our production volumes.

To meet this need, MMAL has negotiated, through an EBA, an agreed mechanism to engage TVL to a level of 15% (20% for 6 month peak periods) of our total production workforce. This segment of our workforce is engaged through an international organisation which is represented in Australia, and fluctuates significantly according to our production needs. Mechanisms also exist whereby these workers may be directly engaged by MMAL should the business case exist to increase our production workforce on a more permanent basis.

This negotiated agreement has enabled MMAL to respond in a cost effective manner to the volatile North American export market and provide a fast and efficient reaction to our customer's requirements. From MMC's viewpoint, it is welcomed as an extremely efficient arrangement enabling MMAL to compete for additional business and generate additional revenue.

Further initiatives, designed to increase flexibility and negotiated through the EBA processes, include a unique work pattern within MMAL (operating a 9 day fortnight in areas of need). This flexibility provides many opportunities to create additional capacity or to manage reduced demand or supplier interruptions. For example, MMAL can generate an additional 24 days production to meet capacity needs and/or use the to meet additional demand requirements. We can also use some of these days flexibly across the year to balance our production rates to meet market needs by, for example, attributing more or less days within a month on a planned basis at no additional cost to the Company or any loss to employees.

Conversely, we have frequently utilised these days to adjust to supply chain disturbances, and enable recovery at a later date, whilst minimising impact on the organisation, our customers and our employees.

In addition, MMAL's approach has been one of ensuring mechanisms exist which enable on-going change in our operations. We do not treat, and never have treated, enterprise negotiations as a 'big bang' approach. Rather, strategic flexibility as described above and meaningful facilitative, consultative provisions have been implemented enabling us to introduce change in a systematic way in response to business demands.

Our strategy under the enterprise bargaining process, while still open to further improvement, has contributed to additional positive outcomes such as:

- Strategic downsizing and total re-organisation of our workforce in Year 2000 to international benchmark levels. The highlight was the complete streamlining and flattening of our manufacturing management structure reflecting international best practice and establishing a benchmark for the local industry.

- Improved cost and efficiency in responding to export demands at short notice through our flexible labour and work pattern management techniques as described above.

- The company's ability to turn around its financial performance by $200m in twelve months, significant credit being given by shareholders and the Board to our labour arrangements, flexibility and successful restructuring program undertaken in 2000.

Our ability to achieve these outcomes has evolved out of, and been assisted by, our enterprise agreements.

On a negative note, the instability that the bargaining process has created within the supply chain is cause for serious concern. The pattern bargaining approach that has emerged is inconsistent with the general thrust of the Workplace Relations Act. The use of 'Protected Industrial Action' creates significant pressures within the Industry to maintain stability and confidence in production and delivery requirements.

It is also apparent that the provisions of the Workplace Relations Act are not conducive to an expeditious resolution of disputes, let alone facilitating a return to normal work without disruption across the industry whilst the issues in dispute are worked through.

This issue is cause for serious concern, and needs to be addressed. The industry cannot limp from one dispute to another without severely eroding confidence levels in domestic and, particularly, export customers and our shareholders, as we compete for limited available investment capital.

Further improvements in work practices are still essential if the industry is to maintain the momentum towards international competitiveness.

The MVPs will need to work even more closely with our suppliers to improve supply chain management and effectiveness. This has already been identified globally as a key strategy in improving lead times, efficiency, flexibility, customer responsiveness, and costs. Many industrial implications will arise as we explore the various opportunities that may exist for the industry and individual MVPs. While some of these are already being realised, the uncertainty for all parties arising out of the Transmission of Business and Freedom of Association provisions of the Workplace Relations Act needs to be resolved.

The impact of supplier enterprise negotiations and the Union approach to pattern bargaining also pose problems, particularly given our reliance on inventory management practices, such as Just in Time, and the accelerating, essential move to more direct supplier in line sequencing arrangements. The ability for one supplier to affect all MVPs and the industry in general is too regularly observed and future impacts will be exacerbated as even more reliance is placed on suppliers in the effective functioning of MVP operations.

Further flexibility in work patterns may be necessary, particularly where the need arises to substantially increase capacity or where maximum capacity levels in normal operating conditions are being targeted. To this end, the issue of operating some aspects of our facility (e.g. maintenance over weekends as a normal work arrangement rather than as overtime) across 7 days of the week will need to be addressed in a cost effective manner.

Finally, the industry has yet to resolve the issue of reforming our maintenance structures through the introduction of an accredited 'Automotive Tradesperson' able to perform cross-functional activity in both mechanical and electrical skills. Such tradespersons will be highly skilled and will facilitate improved flexibility and effectiveness in responding to workplace situations and utilisation of our labour resources. The industrial and training arms within the industry and the Unions, with Government support and assistance, need to explore further and develop appropriate training packages on this issue and resolve the industrial/Union issues that have blocked progress on this initiative.

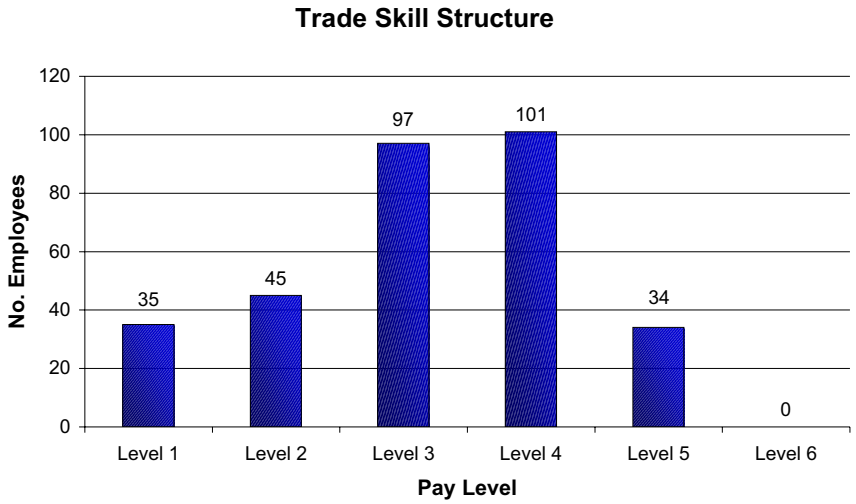
Skills & Training

MMAL has progressed, in line with the Award restructuring decisions emanating from National Wage Case decisions of the early 90's, from classification based structures to the introduction of competency based structures. A nationally accredited training framework for production, trades and technical employees underpins the new structures.
An essential component of the production structure is the attainment of the Vehicle Industry Certificate (VIC) which incorporates progression based theoretical training and skills performed on the job. The VIC is a mandatory requirement for all new production employees to undertake. The qualification is transferable across the auto manufacturing sector and major component suppliers and comprises a combination of generic and industry specific training.

The VIC is based on a skills matrix and is delivered over 4 years and is a combination of knowledge and displayed skills. To date, approximately 3,000 employees have successfully completed this certificate and of our current workforce, 76% have attained the VIC with another 16% due to complete it this year. MMAL is presently in the process of upgrading this certificate to be competency based to meet our needs and to comply with changes in Government regulations.

Our workforce has 312 tradespersons, made up of electrical and mechanical streams. We provide a competency based skills structure that enables them to progress through pay levels based upon the displayed competency of knowledge based training. The skills matrix provides for MMAL's current and future requirement of necessary skills. Further, it is structured so that employees can attain nationally accredited and transferable certificates.
The following figure shows the number of Trade employees in each skill level.

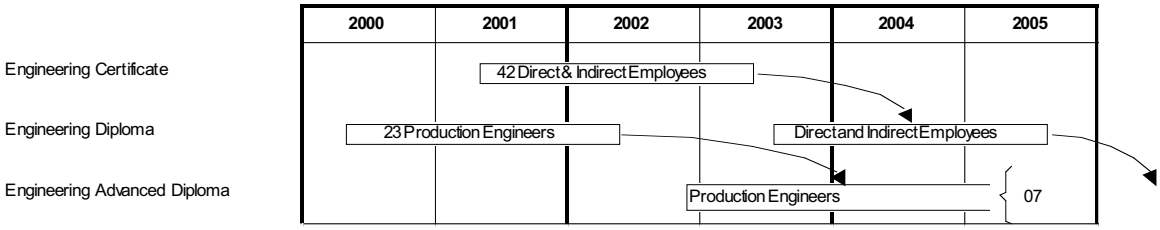
Fig: 5 Trade Skill Structure



Source: MMAL HR Division

It is recognised that the requisite engineering support must be available for the development of future models and plant improvement. The following figure shows current levels of staff development and the ongoing development plan.

Fig: 6 Staff Development

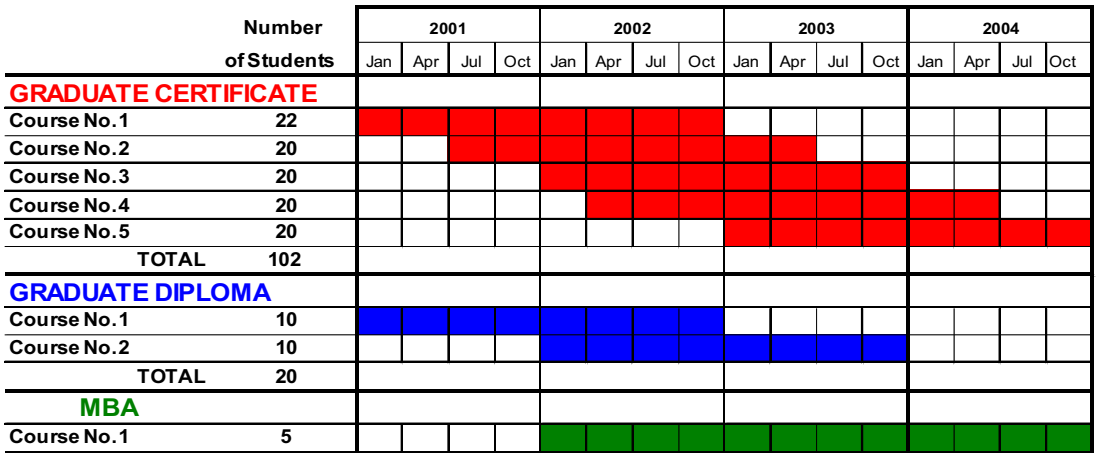


Source: MMAL HR Division

We have a further 180 para professionals associated directly with the manufacturing of our product. Previously, this group was somewhat overlooked with regard to their development. Since restructuring our organisation, major development strategies have been implemented with the introduction, in association with the University of Adelaide, of a Graduate Certificate in Management (Manufacturing) and Graduate Diploma's being made available. To date, 55 employees have begun these studies and it is expected to have 35 graduates by the end of 2002.

The following figure shows the graduate plan:

Fig: 7 Staff Development – University Study



Source: MMAL HR Division

In addition to support the career development of production operators, a nationally accredited leadership certificate has been introduced and, at a national level, the Automotive Training Authority (ATA) provides a presence on behalf of the industry in the national training framework.

Major outcomes from the introduction of competency based structures include a reduction in demarcation issues and a consequential broadening of the employee skill base leading to increased flexibility in the allocation of the workforce.

For the future, the availability of a skilled workforce in South Australia is a major issue for MMAL. The significant restructuring and downsizing of the company between 1999 - 2001 has affected all areas and employment categories - production to professional to managerial – within the organisation. Now, with "variant" model development and growth-focused strategies, MMAL will have to supplement its workforce in the staff/management levels. Our staff selection activities and discussions with our professional employment agencies indicate that we will face some difficulties in capturing experienced individuals to undertake middle to senior level roles across areas such as Product and Production Engineering, Purchasing, Logistics, Manufacturing Management, and Sales and Marketing specialist operations.

The recent decision to commit to a major new model program will require significant recruitment in these and other areas and we will need, at least in part, to locate and source these skills interstate and attract them to our South Australian operations. In the case of senior product engineering design personnel, we are already experiencing the need to search overseas in the U.S. and Europe to attract such personnel, and we would expect this need to continue as we implement our new model program and further develop MMAL's R&D contribution to MMC's Global engineering capability.

At this stage we have not experienced any labour or skills shortages in our production workforce. Pre-requisite skill and knowledge attributes are in place to ensure that new entrants are able to meet the requirements for working at MMAL. To date we have enjoyed a good employment base to meet our needs. Our internal training programs (i.e. the Vehicle Industry Certificate) provide an excellent platform for new entrants to learn and apply new skills relevant to our needs, while at the same time providing them with generic skills and knowledge which are readily transferable across a range of industries.

The issue of "aged" employees in the production environment is one we need to regularly monitor and manage, particularly with changes to the compulsory retirement age. This is necessary given the physical nature of tasks involved.

In relation to trades areas, once again our training programs and association with the local education institutions, particularly TAFE, assist us to meet emerging skill requirements flowing from technological developments. However, there are concerns that, due to the large amount of project work now taking place within Australia, a shortage of skilled tradespersons may emerge, particularly in the field of toolmaking, patternmaking, and electrical trades.

Research & Development

There is a great deal of anecdotal evidence, and pieces of empirical data which strongly suggest that local R&D in the automotive industry has been in long term decline.

It is difficult however to quantify the extent of this decline because companies report on total Business Expenditure on R&D (BERD) and there is no breakdown of source.

The following sections canvass the forces which have been at work to bring about a decline, and contends that Australia has some competitive advantages that, with appropriately supportive policy settings could make us a global source for the intellectual inputs associated with the design and manufacture of motor vehicles.

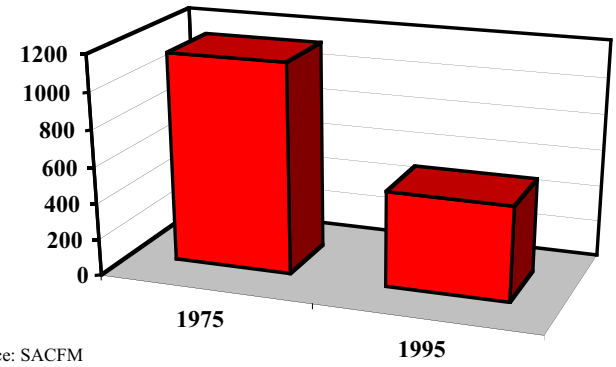
Location of R&D

Historically the Australian industry had relatively high levels of local R&D because it was building uniquely Australian product with high local content levels. Furthermore, the processes were designed for volumes that were extremely low by international standards so that they too were uniquely Australian.

Data in Figures 1 and 2 however, suggest that there has been a significant and long term decline in local process R&D.

Figure 1 shows membership in the former Australian Society of Industrial Engineers and since the automotive industry has been the traditional engine of skill formation for this particular discipline, it may be inferred that substantially less process design is being undertaken locally.

Fig: 8 Membership – Australian Society of Industrial Engineers

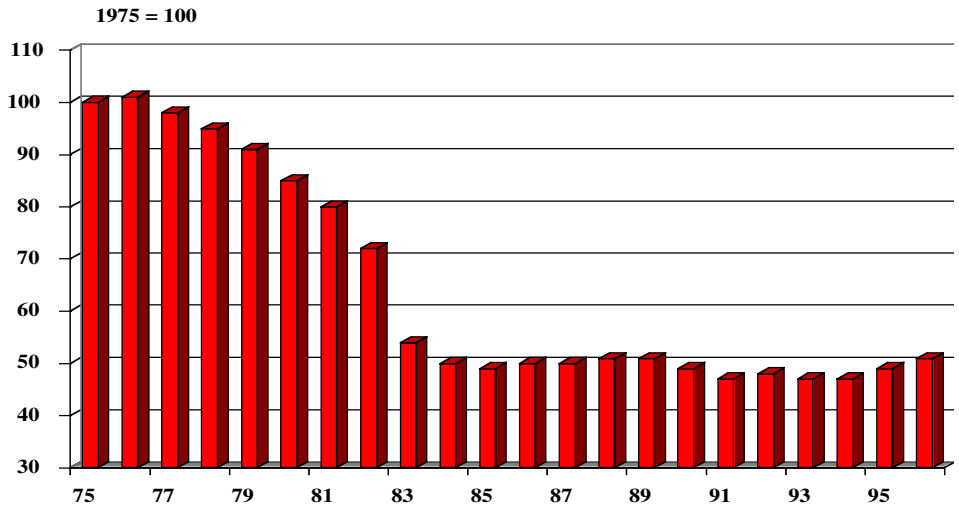


Source: SACFM

Whilst there are some mitigating factors such as:
While such factors as technological change, improved work practices, and a trend for shop floor operatives to take responsibility for some of the functions traditionally performed by specialist engineering personnel, partly explain this dramatic decline, the fact remains that the industry has lost much of the capacity it once had for process R&D.

A similar decline is evident in toolmaking which is the physical manifestation of the Process R&D function because it is the toolmaker who captures product geometry and builds the tool, which replicates that geometry many times over in the production process.

Fig: 9 Employment – Automotive Related Toolmaking



Source: DSD & SACFM

To some extent, this trend also reflects the globalisation of product design where economics favour the manufacture of two or even three sets of tools for production of the same parts but in different geographic locations.

The publication *Making the Future Work* (Allen & Unwin 1993) states that in the late 1960s GMH & Chrysler had collectively developed a pool of some 3000 people *"Skilled in the science of making things"*. This figure now stands at around 450, although it is complemented to some extent, by contract personnel at peak load periods during a project.

Since these functions are still required to produce motor vehicles, and notwithstanding efficiency gains, it is clear that they are, to a considerable extent, being undertaken in other locations.

A continuation of the trends evident in the data set out above could ultimately leave Australia as a nation that has lost the knowledge of how to make things. As the Allen & Unwin publication states *"Multinational capital can site turnkey production facilities anywhere in the world; the real national asset is in the ability to design what takes place within those facilities, because the same generic processes can be applied to similar or even quite different, industries in the economy"*.

The same is true of product R&D. All but one Australian vehicle is based on an international platform so that much of the intellectual input is coming from locations external to Australia, with localisation of design, and some engineering for compliance with statutory requirements, being the principal Australian contributions.

Evidence presented to the previous Commission inquiry stated that globalisation of automotive design increases the costs (for component producers) of meeting customers' requirements and places Australian firms at a disadvantage.

Since the process of globalisation began around the same time that Federal Government policy began to wind back the high levels of protection previously afforded the local industry, it is somewhat difficult to determine how much of the decline in local R&D is attributable to the need for local vehicle producers to reduce the associated fixed costs for competitive reasons, and how much has been the result of globalisation. Certainly globalisation has made alternative sources for intellectual inputs much more relevant and accessible, and has provided an alternative to the under utilization of intellectual assets between model local cycles that historically characterised the Australian industry.

Yet as the pace of globalisation is catching up with the rate of tariff reduction, Australia is emerging as a very cost effective location in which to undertake both product & process R&D.

Product design can cost less than 50% per unit of output than in the US and one Australian vehicle producer, recognising both the quality & cost effectiveness of Australian engineering, has established engineering capacity with which to service wider corporate R&D requirements.

In addition to factors of currency and general cost structure, Australia's historical geographic isolation has produced a uniquely innovative engineering culture based on a fundamentally different, and inherently more cost effective approach to the discipline.

The same is true of tooling. International benchmarking undertaken by the South Australia Centre for Manufacturing shows Australia in the lower quartile of pricing and up to 40 % cheaper than the US.

From the foregoing it would appear that the relocation of R&D activity out of the Australian automotive industry has arisen from the imperative to lower fixed cost structures within local car companies as part of their response to reducing protection levels, rather than cost disability.

However, the fact that it has been technically feasible to purchase R&D offshore as required, the strong automotive engineering tradition still resident in Australia, together with a greater measure of sophistication in a globalised industry that now better appreciates its assets in the various regions, all suggest that Australia should be positioning itself as a major intellectual resource for the global industry.

Such a move is now facilitated by technology than enables work on the same project to continue around the clock regardless of location and, since one result of globalisation is a rationalising of the number of vehicle platforms being built around the world, there is a need for policies that assist the Australian industry to participate in that process. Corporate headquarters need to be convinced that Australia has an engineering base that is characterised by high skill levels combined with a low cost structure, if we are to rebuild and expand our R&D capability.

Of even greater intellectual and financial value than activity associated with the cycles of model launch, is the R&D that produces "breakthrough" changes in product and process technologies such as propulsion (eg fuel cell), drive line configurations, commercially viable use of exotic materials, alternative vehicle body constructions etc. Globalisation, together with equity & partnership relationships between the multinational car companies, is rationalising and centralising these undertakings to R&D facilities that are corporately designated and funded. Thus Australia must strive for allocation of such a role by top level corporate decision making processes if it is to participate in these sort of R&D activities, and policy framed to promote such outcomes is required to reverse the exodus of R&D functions which has been an unintended consequence of successive policy regimes.

Summary

Australia remains one of very few countries in the world with the capability to do a car "from the ground up". This capability was developed when Federal policies created an industry that was very insular and introverted, and necessity created a strong capability across the whole range of intellectual and physical inputs required to build motor vehicles.

An unintended consequence of subsequent policy regimes, in combination with increasing centralisation of technical resources within multinational vehicle producers, has seen a winding back of that capability, particularly in respect of the intellectual aspects of vehicle design and manufacture.

Globalisation, particularly the creation of mega corporations through acquisition and merger, is leading newly created entities and alliances to take stock of their global assets and develop strategies for their rationalisation. As a consequence, Australia's strong and innovative automotive engineering tradition, albeit born of necessity, is just beginning to gain recognition in certain quarters of the international industry. There is a danger however, that the run down in local capability could pass the point of no return before that strength is fully appreciated, and a post 2005 policy regime should seek to reverse the unintended consequences of previous regimes by creating an environment which is conducive to rebuild Australia's automotive intellectual capacity.

Australia has little competitive strength in the very high volume standardized vehicle market. However as the new automotive conglomerates rationalize their global assets, there is already evidence that the innovation & flexibility of the Australian industry, which is a product of its own history, is being identified as an ideal source for the multiplicity of low volume niche platform variants that are becoming of increasing importance in corporate product line up strategies, and this requires the unique and specialised sort of R&D capability that Australia has developed over the years.

Thus a strong R&D capability is critical to Australia's participation in a globalised automotive industry, in terms of both intellectual and physical inputs to the vehicle production process.

Other Issues

Taxes & Charges

The current system of Federal and State taxes and charges has developed in a very ad hoc manner. The original intention behind the levying of various taxes is often lost and later cosmetic and other changes, made primarily for revenue maximisation purposes, tend to ignore consideration of efficiency issues. Once introduced, however, taxes and charges are rarely abolished.

In South Australia there is:

- Payroll tax
- Stamp duty
- Land tax
- Bank account debits tax

At the Federal level there is:

- Pay as you go
- Withholding taxes
- GST
- FBT
- No ABN withholding

In addition there are numerous charges levied, such as filing fees for the lodgement of documents, fees to hold various licences that permit the entity to trade and various other licences such as "dangerous goods" and EPA licences.

Streamlining and simplifying tax administration (including tax collection) has clearly failed to date. In the continuing push to bring forward the collection of all types of taxes, particularly at the Federal level, the degree of reporting and number of remittances have increased significantly. For example, whereas remittances were previously required fortnightly or monthly, they are now required weekly. The increasing number of remittances alone poses a significant administrative burden.

In relation to State taxation, if an entity carries on business in every State and Territory, then it will have eight revenue authorities to report to. The method of tax calculation and disclosure varies between each State – there is no uniformity whatsoever. As well as monthly remittances for State taxes, there is also an annual reconciliation that also differs in each State.

There are also different penalty regimes for each taxing authority and the overall level of penalties is increasing. Apart from flat penalties for errors made (e.g. short or late remittances) there are also interest charges (which at average rates of 12% are significantly higher than current overdraft rates). This reinforces the need for certainty, fewer taxing authorities, uniformity of disclosure methods and uniformity of collection dates.

Any reduction in the number of taxes and charges and the administrations that collect them is desirable. Inefficient taxes should be replaced with efficient ones. This is not to suggest lower levels of tax collected overall, merely the way that it is collected. A lesser number of taxes and tax administrations to collect it would allow companies to reallocate the resources being used to administer tax payments into more productive areas.

Fuel Consumption

MMAL, as a member of FCAI, has committed to two challenging co-operative targets for National Average Fuel Consumption (NAFC). These targets are 6.8l/100km by 2010 and 6.3l/100km by 2015. The concept of a co-operative target is important. Achievement of these targets is dependent on a number of issues, such as the availability of necessary technologies, requisite fuel specifications, customer preferences and policy frameworks. Government has a pivotal role to play in influencing buyer behaviour so that fuel efficiency becomes one of the primary objectives in the buyer's decision process. This will require close co-operation between government and industry in order to achieve a policy framework.

A factor that must be considered is that the viability of Australia's motor vehicle manufacturing industry is dependant on the provision of larger passenger vehicles that service the unique needs of the Australian buying public and provide a niche export opportunity. Any proposed policy framework must be mindful of this.

MMAL is well placed to be an important contributor to the achievement of the above targets. We have access to leading engine technology that has the potential to provide considerable fuel consumption improvements. However, the enabler of some of these technologies is low sulphur petrol. Whilst there has been some significant advance in recent times with the gazettal of national fuel quality standards under the Fuel Quality Standards Act, 2000, a low sulphur fuel standard does not appear likely until late this decade.

We believe this issue will gather greater momentum if Australia were to ratify the Kyoto protocol on climate change. It may well provide the necessary impetus for an agreement between industry and government on the NAFC targets offered.

Australian Design Rules

Progress to date by Governments towards international harmonisation of vehicle standards is welcomed by MMAL. Harmonisation of standards will reduce development and certification costs and open up greater export opportunities. Of particular significance is Australia's signing of the Reciprocal Recognition Agreement of the UN (known as the UN/ECE 1958 agreement). Now that Australia has a place at Working Party 29 (WP29), we must begin to adopt those ECE regulations that have been harmonised with our own ADR's.

The next step must be for Australia to become a technical authority with the ability to issue ECE approvals. We understand that the Department of Transport and Regional Services is working towards this goal. Having the ability to apply for and achieve ECE type approval in Australia will open up many new export opportunities that are not currently viable. We commend the Department's initiatives and achievements to date regarding this issue.

It is fair to say, however, that the harmonisation process has been very slow. Excluding regulations pertaining to lamps, only a handful of regulations have been successfully harmonised with the equivalent ECE regulation. There remain a significant number of ADR's still under review which have the potential to be fully harmonised with the equivalent ECE regulation.

Other Environmental & Road Safety Matters

The environmental benefits of the recently introduced new emissions standards have been assured with the gazettal of national fuel standards. For the first time Australia has enforceable fuel standards that are uniform across the country. Manufacturers now have a clear view of current and future fuels specifications that will enable optimisation of emissions strategies to ensure the best environmental outcomes while achieving the drivability and performance needs of our customers.

There are, however, some aspects that need further work, particularly the issues of sulphur levels and ethanol. Low sulphur fuels, as mentioned above, are an enabler of advanced technologies that will reduce fuel consumption and improve emissions performance. As for ethanol, we are working through FCAI and direct with Environment Australia to achieve an outcome that allows an ethanol content in fuel that will not have a significant detrimental effect on our vehicles.

We are about to start the implementation phase of the new emissions standards brought about by the "Measures for a Better Environment" package. This will see significant benefits to air quality in the longer term.

The successful launch of the fuel consumption label now provides our customers with comparative fuel consumption at point of sale. Although the effectiveness of this initiative is not known at this stage, we remain committed to the fitment of a fuel consumption label to our vehicles, and have supported the recent request by the AGO to include a CO2 value on the label. The fuel consumption labelling ADR is currently under review. MMAL welcomes the proposal to harmonise the test procedure with the equivalent European procedure. It means that we will use the same drive cycle as that used in the new emissions regulations. However, at this time the revised regulation is yet to be gazetted. As the suggested implementation period commences from 1/1/2003, it is imperative that this regulation be gazetted within the next few months.

On the issue of alternative fuels, MMAL has already produced a factory approved LPG kit for Magna, and is looking at the possibility of offering locally manufactured dedicated LPG fuelled vehicles. At this stage MMAL sees LPG as the only alternative fuel that will be generally available in the medium to longer term. However we are keeping a watching brief on other alternative fuels initiatives such as ethanol (as an additive to petrol) and biodiesel.

Our parent company, MMC, is also looking at a number of alternative energy initiatives including research into hybrid technology vehicles, natural gas, methanol and LPG as well as commercial applications for electric vehicles.

We are nearing the end of the implementation phase of new occupant protection standards for offset frontal impact and dynamic side impact. The introduction of these standards has lifted the safety levels of new vehicles to current world best practice. MMAL remains committed to the safety of our customers and will continue to exceed the standards set by government.

The recent introduction of an ADR for vehicle immobilisers has increased the level of security in the new vehicle fleet. The immobilisation programs offered by some State jurisdictions for older vehicles are also to be commended. MMAL, through the FCAI, has been involved in an initiative by the National Motor Vehicle Theft Reduction Council to draft a technical standard for secure compliance labels. This initiative is not fully supported by MMAL as we believe that the compliance plate or label should not be used as the primary vehicle identifier on a vehicle. The main drawback of secure compliance labels is the amount of variable information that must be printed onto the label. We would prefer the direction changed toward a study on secure VIN labels. There are precedents in overseas markets for the use of multiple VIN labels as a security device. VIN labelling is a better practical solution than secure compliance labelling.
MMAL read with interest the draft report "Reducing the Environmental Impacts of End of Life Vehicles" prepared by Environment Australia. We were generally supportive of the draft report and its recommendations. However there has been no further developments since the issue of the draft report in May 2001. We believe that the issue of vehicle recycling has lost some momentum.

By contrast, the issue of pedestrian protection is gaining momentum, particularly in response to developments in Europe. MMAL believes pedestrian impact will gain significant exposure in Australia over the next five to eight years, and may become the focus of possible regulation within the next decade. MMAL remains committed to vehicle safety and this commitment extends beyond occupants to the issue of pedestrian safety. MMAL may be well placed to contribute to pedestrian safety initiatives in Australia due to its close proximity to Adelaide University's Road Accident Research Unit (RARU). RARU have undertaken, and continue to undertake, significant research into the issue of pedestrian safety.

Any discussion of pedestrian safety cannot overlook the issue of vehicle frontal protection systems (VFPS or bull bars). MMAL is a supplier of VFPS and believes they have a place in certain applications. However VFPS must be designed with pedestrian protection in mind and to that end MMAL strongly supports the publication of an Australian Standard for VFPS that includes a pedestrian protection specification. This standard must also address the issues of air bag compatibility and continued compliance with occupant protection regulations. It is taking considerable time to draft a suitable standard through the Standards Australia working group. MMAL will continue to monitor the situation, and provide input into the debate as required through its membership of the FCAI. Both State and Federal governments have a pivotal role to play in ensuring a suitable standard is implemented and, once implemented, is enforced.

4. POST 2005 ASSISTANCE ARRANGEMENTS

Introduction

MMAL notes that the Government's terms of reference to the Commission require the identification of "policy options" rather than the traditional process of developing a prescriptive recommendation. This requirement has been clearly recognised by the Commission in its proposal to establish a range of scenarios for modelling purposes.

The terms of reference also identify the policy options that the Government is seeking as those that would 'assist the sector to achieve long term sustainability'. Implicit in the expression of this objective is the recognition that the industry is in transition from an era characterised by high levels of protection and uncompetitive cost structures, to a longer term future in which the industry will be sustainable in a free and fair international trade environment in automotive products. The management of this period of transition demands that the local industry at least maintains the rates of improvement in all aspects of manufacturing that it has demonstrated over the past decade. It also requires the four vehicle manufacturers, operating from a relatively fragile domestic base, to convince their shareholders that they have an ongoing role as an integral element of global manufacturing capability. Finally, the period of transition requires any government, committed to 'a viable automotive manufacturing sector', to provide the economic environment and industry policy settings essential to attracting increasingly 'footloose' investment from overseas shareholders.

Current Assistance Arrangements

While the current combination of tariffs and ACIS has not stopped the erosion of the MVP's share of the local market it has succeeded in maintaining the momentum, initiated by predecessor assistance regimes, towards an internationally competitive, externally focused industry. In MMAL's experience the current assistance arrangements are appreciated, with reservations, by shareholders when making comparisons with assistance regimes in other mature automotive markets. The reservations relate to the relative complexity of the arrangements, the exaggerated benefits publicly attributed to participants in ACIS and, more recently, the uncertainty generated by the introduction of modulation.

The complexity and exaggerated attribution of benefits are linked. The origin of a duty rebate scheme for the automotive industry dates back over thirty years and emerged out of the policy to protect the component sector with an 85% content rule. Recognising that MVP output would be uncompetitive unless imported components could be sourced at world prices and that the use of the by-law system for goods not produced in Australia would cause undue uncertainty, the decision was taken to introduce an automatic 15% duty free allowance and to exclude automotive components from the by-law system. Since that time arrangements for the industry have always contained a self-funding assistance element in which the very activity that gives rise to a duty rebate benefit also creates an exact equivalent collateral duty liability.

The self-funding assistance element has been expanded under ACIS to 25% of the value of domestic production. Net duty benefits to the four MVPs under ACIS are only derived from other unfunded elements of the scheme and MMAL estimates they amount to less than one-third of published headline numbers.

An alternative to the self-funding approach, adopted by Europe and the United States (as well as a number of less developed markets), is the application of average component tariff rates that are substantially lower than CBU rates. Car tariffs in Europe are 10% compared to a component rate of 3.5% - 4.5%. In the USA the car tariff of 2.5% is matched by the component tariff, but producers of light trucks, (accounting for around 50% of the US market) enjoy protection of 25% on vehicles while sourcing imported components at the 2.5% rate.

In addition to the relative simplicity and transparency of these arrangements, they also obviously fall outside the WTO definition of subsidy.

Both the uncertainty now attaching to ACIS, and a related unintended impact, are largely attributable to investment growth in the component sector far outstripping the projections which formed the basis for the original calculation of the rates at which the various types of ACIS credits should accrue. For example, those projections supported the conclusion that component producers could enjoy a differential rate of return of 25% on investment in plant and equipment without threatening the scheme's global cap or the understanding that capped benefits for MVPs would account for around 65% of total capped benefits.

On both counts the conclusion has been proved wrong. The global cap has been exceeded by around 30% and the resulting introduction of modulation has reduced the MVP share of the capped scheme by over $200 million to about 55% of the total capped pool.

A further unforseen consequence of component sector growth has been the application of modulation to 40% of the production credits attaching to the manufacture of vehicles for the domestic market, despite the fact that those credits (at an industry average local content level of 75%) are self-funding. Although ACIS benefits for domestic production do not "cost" the government, they have been reduced to 71% of their face value, thus providing government revenue with an estimated windfall in excess of $100 million.

Future Assistance Arrangements

As a central element in maintaining the competitive assistance environment essential to attracting discretionary overseas investment, MMAL submits that:

- the tariff on passenger motor vehicles should be maintained at 10% beyond 2005; and
- an ACIS style scheme should be continued.

In exploring options for post 2005 assistance arrangements MMAL submits that the following matters, some mutually exclusive, merit consideration:

- reducing the level of uncertainty in ACIS by providing for a clearer separation of funding for different categories of participants;
- eliminating differential benefit rates for the same type of activity undertaken by different classes of participants;
- the appropriateness of the present balance for MVPs between production benefits on the one hand and R&D and plant and equipment investment benefits on the other;
- the level of tariff on automotive components;
- uncoupling rates of support for production from prevailing tariff rates;
- removal of the partial cap on self-funded benefits for the production of vehicles for the domestic market; and
- extending the duration of the next tranche of assistance arrangements to eight years.

On other issues raised by the Commission, MMAL submits that:

- current tariff arrangements for LCV and 4WD vehicles be maintained; and
- existing tariffs on second hand vehicles be continued.