

Submission to ICT Procurement Taskforce

Department of PM&C

January 2017

Macquarie Telecom Group welcomes the opportunity to participate in the taskforce's consideration of ICT procurement.

Macquarie Telecom Group (MTG) is an ASX listed business founded in 1992. Since 2016, it has operated through three business units, Macquarie Telecom, providing voice and data services for mid-sized businesses, Macquarie Cloud Services, providing hybrid cloud and hosting services, and Macquarie Government, providing communications, cloud and secure Internet services to government clients.

MTG has built, owns and operates three data centres, including one in Canberra targeting government clients' needs.

The MTG has been providing services to Federal government customers since 1999. Initially, it provided telecommunications (voice and data) services. Since 2012, it has provided secure Internet gateway services to numerous Federal departments and agencies, under contracts with two lead agencies. It also provides secure Internet gateway services to state government agencies. MTG also provides cloud services to a growing number of agencies and departments.

This submission seeks to use MTG's experience in supplying services to the Federal Government to highlight issues that we believe are relevant to the present review. Where possible, these issues are presented in the context of case studies, so as to provide a clear and practical picture of the circumstances in which they have arisen.

Initially, though, MTG seeks to better understand the case study described on page 7 of the Department's discussion paper regarding the cloud services panel and the ASD's Certified Cloud Services List. The paper says "non-certified providers can't provide cloud services until certified; this may impact on procurement from these businesses". It is our experience that cloud services that on the Department of Finance cloud panel but are not on the ASD list can – and commonly are – acquired by Federal Government agencies.

While MTG believes there is a need for the ASD certification system to be streamlined and sped up, especially for services certified to "Protected" level, the security certification of cloud services is not, in our view, a real barrier to cloud take up by Federal agencies. Rather, a process to give classification guidance to agencies is a necessary tool to help agencies transition to digital services with more confidence, and therefore more quickly.

Macquarie submits that conservatism is a central feature of the culture of government procurement. It is important that the Government promotes a greater level of cyber security awareness generally among agencies, and communicates how the transition to modern, cloud-based services should be a means for agencies to lift their information security generally and their cyber security stance specifically.

The combination of a cloud services panel and the ASD certification process can assist agencies to feel confident in transforming their ICT environments and overcome the culture of conservatism.

Providing this specialist guidance is an example of an approach that allows agencies to fill a capability gap that is widespread and persistent across government.

Growing awareness of the importance of cyber security among agencies has been a positive development in the past 12-24 months.

However, it is also an area that provides examples of where there has been a lack of "joined up" thinking in applying policy directions in procurement processes, creating unnecessary cost and sub-optimal outcomes. These give important insight into one of the root causes of the culture of conservatism that exists in Government agencies and acts against innovation.

For example, MTG is aware of one agency that responded to the Government direction that agencies examine cloud computing as the first option when acquiring new ICT capability by commissioning an outsourcer to design a cloud-based application for internal use.

The application was created in a test and development cloud infrastructure environment. When the agency was ready to move it into production, it sought to have the application moved to a more secure cloud platform.

Only at this point did the outsource developer inform the agency that the application had been created natively on an overseas-based platform that did not meet the security accreditation the agency deemed appropriate for the application. The outsourcers then advised that a redesign to allow the application to operate on <u>any</u> alternative cloud infrastructure would require additional expense equal to that already invested.

The agency subsequently sought and acquired from Macquarie an alternative security arrangement to in effect provide a security layer between the agency and the cloud infrastructure.

This incident illustrates several issues.

Firstly, there was what might appear to be a capability gap in the agency that caused the security requirements to be inadequately considered when the project was commissioned. This capability gap reflected the limited past experience with cloud service.

This oversight resulted in the security elements not being "baked in" to the product design from the start – the approach recommended in the Government's 2016 Cyber Security Policy – but treated as a bolt-on, adding expense and creating delay.

And, finally, the failure to ensure the application design allowed it to be moved to alternative cloud infrastructure, or back in house, meant that one of the central benefits of cloud computing – flexibility – was compromised in the final outcome. The application in question can now never be moved to a different vendor without great expense. This represents a new manifestation of vendor lock-in issues that ave created high costs and inflexibility for government agencies in the past.

There are, however, other instances where agencies have showed the ability to act with admirable flexibility within the present procurement arrangements.

One agency used the Department of Finance Cloud Panel to identify and engage a group of providers. But it did so under contracts that established the total value of cloud services it could potentially acquire, but left open and flexible the specific services.

The agency then used this flexibility to work with Macquarie to develop a bespoke cloud service that met a specific need to be able to quickly and easily attach security permissions to specific workloads and users, even as they were moved between different cloud environments.

This outcome was achieved within the present procurement environment because of a culture of pragmatism and level of capability within the agency. It put in place arrangements that allowed it limit its costs yet still work flexibly to the mutual advantage of both the agency and vendors.

Panel arrangements are crucial to overcoming inevitable gaps in capability in some agencies – especially smaller agencies. This is even more important as they attempt to assess new and transformative ICT technologies. However, there is room for improvement in the panel arrangements presently in place for ICT services.

The need to meet the sometimes prescriptive procurement rules and processes of government agencies can be a significant barrier to smaller vendors responding to

Government procurement opportunities. It is also important that the rules are as consistent as possible if more vendors are to be brought into the government service supply market.

The Department of Finance has made progress in developing standardised templates in the cloud panel, but there remain areas where the treatment of terms and conditions are inconsistent for no evident reason between one panel and another.

For example, the treatment of liability for consequential losses differs between panel contracts, with the ability to limit risk in some and not in others.

This creates a cost and risk of doing business that represents a disproportionate burden on smaller businesses.

Further, it is important that the rules and arrangements are not unnecessarily confusing or novel or that, too, creates barriers for new entrants in the Government market.

For example, in developing the panel for cloud services and in subsequent RFQs, the Department required applicants to price their IAAS cloud services using amps per hour, rather than the industry standard kilowatt hours, as a measure of the unit cost of capacity acquired.

This is despite the fact that standard practice in the private sector is to price according to kilowatt hours. Departments and agencies even describe the size of their workload being put to market in in kilowatt hours, yet vendors are required to price against a different metric.

The effect of this is to require vendors to the government to develop a pricing methodology that is unique to Federal government clients, again, adding costs and complexity.

This example suggests a simple lack of familiarity with commercial practices in the Department of Finance when it comes to the newly emerging cloud options.

The fact that the Department "reinvented the wheel" instead of reaching out to the market to discover how the private sector described prices might speak to a cultural tendency to maintain a distance from the private sector, even when advice is readily available and would be willingly given.

There are procurement rules that become too rigid over time and result in an unnecessary supply-side barrier for agencies seeking to acquire services in different ways or in new configurations.

For example, agencies have found it difficult to move from owning their computing capacity to acquiring cloud computing capacity because computing resource has traditionally been acquired as a capital item. Agencies can find it is difficult to

convert this capital cost into recurrent spending within the spending rules and their budget allocations.

There is no standard approach by which they can "convert" capital budget to recurrent spending.

This is an example of a procurement process that is not focused on outcomes, but on processes and on defining services and assets to be acquired. This can become a barrier to the adoption of innovative solutions. It remains more straightforward to "do it as it has always been done".

The panel arrangements in relation to price also create uncertainty because they create two-part pricing processes.

Panel participates are required to present standard price offers to be included in panels. But when the Department of Finance goes to market on behalf of an agency with a specific need, it requests a "best and final" process offer from vendors.

The value of requiring vendors to present prices in their panel applications is questionable if they are required to offer and justify alternative prices in the context of an actual business opportunity.

It risks creating an incentive for vendors to inflate benchmark panel prices, knowing they will be pressured to offer a better price when actually faced with an opportunity to do business.

If this occurs, it means agencies trying to make an assessment about the likely cost of an alternative technology or service could be doing so on the basis of inaccurate public prices.

MTG submits that a better alternative would be to require vendors to offer best and final standard service prices as part of the panel process, with the ability for vendors and agencies to negotiate alternative arrangements for non-standard or bespoke services.

MTG would be pleased to discuss these or other issues with the taskforce.

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