



Radio waves at work

EM Solutions Pty Ltd

PO Box 3164, Yeronga Queensland Australia 4104

Street address: 55 Curzon St, Tennyson

Phone: +61 7 **3414 0700**

Fax: +61 7 **3414 0799**

www.emsolutions.com.au

Ref: SC141005

Date: 28 October 2014

Committee Secretary

Joint Standing Committee on Foreign Affairs, Defence and Trade

PO Box 6021

Parliament House

Canberra ACT 2600

Dear Members,

Re: Submission into Parliamentary Inquiry into Government Support for Australian Defence Industry Exports

Following my presentation and the evidence I presented to the Committee in Sydney on 17 October, you requested further comment on two particular questions relating to Australian industry content policy for defence procurement.

You will find my comments attached. I hope they are helpful.

I wish you success in your activity and look forward to your findings.

Yours sincerely,

CEO and Managing Director



Comments on the evaluation of risk

A major part of the evidence I presented revolved around the use of “risk” as the most common reason EM Solutions has been given to justify our elimination from major procurement opportunities.

For example, the risks of technical or commercial failure, resulting in possible delays, and the costs to mitigate it, were used to justify using an established foreign supplier rather than ourselves. While perhaps not a relevant argument in the case of Australian suppliers of labour or commodity products, this line of reasoning particularly hurts high technology companies dependent on developing their own intellectual property. As already pointed out, risk is the flip-side of innovation and is inevitable with small innovation-based companies.

I will not comment on the measurement or evaluation of risk, since this is a complete discipline on its own and experts have spent lifetimes teaching and writing about it. Rather, I wish to comment on the risk evaluation process itself.

In the two case studies I presented at the hearing, EM Solutions was not given the opportunity to talk through and properly address their perceptions of risk with either DMO or a prime contractor until a decision had already been made not to buy from us. We observe that perception of risk varies with the buyer, since EM Solutions is currently supplying products to prime contractors and systems integrators in Europe and Asia, who must either be more tolerant of such risk, or have in place mechanisms to manage their portfolios of risk.

A more informed process to identify risk with DMO and agree measures to mitigate it, as part of a genuine two-way dialog (not a questionnaire!) would be valuable for a company such as EM Solutions. A closer inspection of our historical track record might well prove that some perceived risk elements are unfounded. There may well be steps that EM Solutions can take to be more successful in the future to remove risk. Dialog would also give a party such as EM Solutions the opportunity to highlight the other side of risk avoidance – stifling of innovation, for instance by locking in obsolescence through procurement of equipment that while mature, may no longer be close to state-of-the-art.

The critical issue for us is that risk should not be evaluated at arms-length, unilaterally, and without recourse; it should be done through dialog, inspection, and mutual discovery, with an opportunity for appeal to an independent authority that can better assess overall national benefit.

Comments on how a multi-national prime contractor can be encouraged to include an SME in its solution, without being mandated to do so.

The context here is one where multinational prime contractors win tenders to provide complex systems to the ADF, and where it is not in their interest to change their supply chains to include Australian suppliers of smaller components or subsystems that are part of the overall system they provide. This seems particularly so for “high-risk” subsystems, which are the end product of high tech manufacturers such as EM Solutions.

It is important to state up front that we believe it is reasonable for an SME to be considered only if it can offer a product that is fit for purpose i.e. meets the end-user requirement, and is of lower or comparable cost to (or better value than) the existing solution.



However, in stating this, we should be conscious that evaluating this is never black and white. For example,

(i) The prime contractor might argue that a product is not fit for purpose if it does not fit straight into their system. It is unlikely an alternative solution from an Australian SME will have an off-the-shelf product or subsystem that immediately meets *all* the technical requirements required for integration into the prime's existing system. "Fit for purpose" should not mean "Tailored for purpose". For example, a radio product for a telecommunications system might be fit for purpose i.e. it will satisfy the bandwidth, frequency, range, and mobility requirements of the ADF. However, it might still require special software to be written to enable it to be managed by the prime's own network management system. Such a requirement can often be satisfied relatively easily with some customisation, and should not be grounds for exclusion from consideration.

(ii) The prime contractor might argue that although the cost of an Australian product may be lower, the cost of changing a supply chain may still make the change uneconomic. For example, the added costs of re-certification, quality control, and project management might be used to argue that the change should not be made. On the surface these are valid arguments, but in practice, such costs are likely to be incurred even if an existing offshore supply chain is used. Many of those costs will be already built into the prime contractor's end price, due to the requirements for "tailored product" or scope creep to include small or new requirements that inevitably arise, even in the procurement of off-the-shelf product.

(iii) The prime contractor might argue that the cost of mitigating risk in working with an Australian supplier may make their inclusion in the supply chain uneconomic. This latter argument has been used against EM Solutions to rule it out of consideration for a major supply opportunity recently tendered by DMO. The misuse of "risk" is the nub of the issue and has been considered in the section above.

I have argued for a more activist approach to lower the barriers to entry for Australian SME participation in defence procurement. The concern was raised by the Committee that were the Commonwealth to mandate the inclusion of an Australian supplier in a prime's supply chain, the prime would simply pass the risk back to DMO. In my opinion, this could be managed in the following ways:

(i) DMO has a strong hand to play early in the tender process for procurement. It holds the money, and competitive pressure should be more forcefully used early in the process to achieve the government's desired policy outcomes, including involvement of Australian SMEs, particularly in the acquisition phase and particularly for SMEs that create new intellectual property – the basis of future exports.

(ii) risk can be mitigated by a portfolio approach. Rather than mandate the inclusion of individual SMEs or their products, DMO could mandate a minimum level of Australian IP (intellectual property) content that should be included in the tender, and even assist by suggesting Australian SMEs beforehand that might be involved. The choice of products and SMEs to include in the overall system portfolio, and their management, could remain the choice of the prime contractor.

(iii) this problem is not unique to Australia. If countries such as Canada can mandate local content rules, why can't Australia? It has been our experience that while the US Defence Forces shy away from using a foreign developed product, it is almost a disadvantage in being an Australian supplier to the ADF.

(iv) as noted in my earlier submission, other indirect measures can be used to encourage the inclusion of SMEs in larger systems without mandating them, such as



- quarantining portion of the budget allocated to each tender, where procurement is required from innovative Australian SMEs (particularly during acquisition rather than sustainment);
- supporting field trials of innovative products by local SMEs before and during the tender process to overcome the perception of risk;
- involving Australian SMEs early in the tender evaluation process, for presentation of innovative ideas and submissions so their capabilities can be included and specified in the tender itself – this should for example involve issuing draft specifications for comment and face to face discussion with SMEs, prior to tender release
- formally scoring AIC content as part of the ASDEFCON tender evaluation process
- enforcing AIC criteria more rigorously and in a more targeted way, to give greater preference to local content that demonstrates export potential and innovation, and ensuring it accounts for value generation where new intellectual property is created
- For large ASDEFCON tenders, a two-stage tender process would facilitate teaming Australian SMEs with prime contractors after the prime is selected but before detailed contract negotiations have commenced. DMO still has a strong negotiating position at this stage and the tradeoffs between cost, risk, and value, in the context of broader value creation for the Australian economy, can be explored.