



# Potential of 'LPTA'

## to Drive Further Innovation

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**In response to continued cuts in military spending, the U.S. government has chosen to follow a more cost driven approach to its contract activity over recent years. This practice is commonly referred to as Lowest Price Technically Acceptable (LPTA), and critics of the practice raise concerns that decisions on products are purely based on pricing and don't take any other criteria into account. Some are of the view that it will only encourage military contractors to cut corners to win bids, and that emphasis on maintaining quality solutions by using quality product is lost.**

Although this is indeed a valid concern, it assumes that the engineers involved in specifying are solely cost-driven. However, the more positive aspect to LPTA (and similar philosophies being adopted by other countries) is that it is likely to help push forward technological progression at the component level. With more constraints on the budgets available, contractors will look for suppliers that offer products capable of delivering the specifications needed, while at the same time using their ingenuity to make them more cost-effective. This is the type of product portfolio that Harwin's engineering team have been implementing throughout the business.

Electrical Design Engineers with a fuller understanding of the intentions involved in LPTA realize that compromise on the specification of products does not require compromise on quality or suitability. Many understand it is more appropriate to specify components that represent the best value when it comes to matching the component to the requirements. Nevertheless, keeping the overall investment low and shortening development times are both harsh realities of today's military sector. Engineers will be taking this into account when specifying components. The specification focus can be shifted to select parts based on what is actually needed and not on various possible (but unlikely) eventualities. By writing and adhering to a solid focused specification, they will be able to keep the costs involved

in check and avoid over-engineering. In addition, they should also make themselves aware of new materials and product developments that the more advanced component suppliers are now utilizing.

Harwin's award-winning Gecko offering is a prime example. These plastic-shelled connectivity components provide the global defense industry with off-the-shelf, military-level products that are both straightforward and cost-effective to source, but require very little compromise on either performance or reliability. Their rugged construction ensures that they can cope with extreme temperatures and elevated levels of shock and vibration, but without military-standard unit costs being associated with them. Engineers thus get elevated specs at a more reasonable price. They also enable substantial space and weight savings on equivalent Micro-D connectors - which is something that often proves to be highly advantageous in the drive to lighter or more compact military/avionics designs. Furthermore, they support extended operational lifespans (with over 1,000 mating cycles). Continued development of this range has already seen the addition of secure screw-lok fixings and metal backshells for added durability and shielding.

By identifying the actual functional requirements of a component, rather than merely specifying a MIL standard, components from the commercial sector that fulfill all criteria can bring major cost benefits. LPTA programs can be seen as opportunities for engineers to use the latest and best that the commercial sector can offer.



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