

The following is a submission from Gerald Lynch, [REDACTED] to the Joint Standing Committee on the National Capital and External Territories proposal to enquire into ACT light rail stage two.

*The Joint Standing Committee on the National Capital and External Territories will inquire into and report on the development of stage two of the Australian Capital Territory light rail project, with regard to:*

- 1. the relevant parliamentary approval processes for works within the Parliamentary zone;*
  - 2. the roles of the National Capital Authority and the Australian Government, and the associated approval processes;*
  - 3. possible impacts on the Parliamentary zone and Parliamentary precincts, including any impacts on the heritage values and national importance of the Parliamentary zone and our national capital; and*
  - 4. the identification of matters that may be of concern prior to formal parliamentary or Australian Government consideration of the project; and*
- any other relevant matter the Committee wishes to examine.*

It is rather hard to determine what the Committee proposes to enquire into. The National Capital Authority (NCA) is the Commonwealth body established to oversee the planning and implementation of principles within the Parliamentary zone. Under that mandate the NCA, within the Consolidated National Capital Plan (CNCP), administers the Parliamentary Zone Precinct Code. One objective of that code is to “make access easy and open” and part of the fulfillment of that objective is “to improve public transport”.

The NCA has been in close liaison with the ACT Government over the latter's proposal to improve public transport to and through the Parliamentary Zone by means of construction of a light rail (LR2) enhancement which will run from Civic to Woden through part of the Parliamentary Zone. The NCA has made clear that the objectives of the CNCP must be observed in implementation of the light rail proposal and there is no indication that there is any difference of opinion between it and the ACT Government as far as this is concerned.

The NCA has also made its views known to the ACT on matters relevant to LR2 outside the Parliamentary zone and outside the scope of the committee's remit, particularly in relation to Commonwealth Avenue. The Committee should always be conscious that it is only empowered to look into a small part of a much larger and integrated development. So, if it has particular issues to address, it should do so in relation to the impact of those issues on the whole development and the wider consequences flowing therefrom for the future public transport system of the ACT and the costs of those issues, as well as the impact of such matters on the people of the ACT. It is a Territory-wide system which has been twice democratically approved in general terms by the people of the ACT and it should not be frustrated by sectional concerns unrelated to issues outwith the purview of the committee's remit.

The proposed LR2 is intended to increase frequency of service, standard of service delivery for patrons, enhanced comfort, adherence to accessibility requirements, reduced noise and environmental pollution along its corridor of operation. The only possible adverse impact of any significance on matters of relevance to the Committee is likely to be the use of overhead electricity supply to the LR2 vehicles which are electrically powered and draw supply, typically and most economically, by pantographs on vehicles from an overhead line supplying current at around 750volts DC (OLE systems). There may be

some concern at the visual impact of OLE within the Parliamentary Zone and it is understood the NCA has made its position on this clear to the ACT Government. There are alternative technologies available to designers to allow operation of LR vehicles without OLE supply such as on board storage, magnetic or inductive pickup or switched third rail systems. All have their merits and drawbacks but can be implemented at additional cost to OLE. If the Committee believes it is essential for aesthetic reasons that LR2 operates within the Parliamentary Zone without OLE then the Commonwealth should be prepared to fund this element of the design, the construction of the ground supply facilities or onboard storage systems and adaptation of LR vehicles to operate satisfactorily without OLE. There is no doubt that it can be done technically, but vehicles will operate to a lower level of performance and existing LR1 vehicles will need to be adapted/rebuilt to operate “off wire” in the Parliamentary Zone.

**As this may be a requirement specific to this area, it is only proper that the needs of the Commonwealth should be paid for by the Commonwealth and not by the people of the ACT.** This applies to all the NCA requirements now and in the future, so that any condition mandated by NCA for Commonwealth Avenue or even in later LR stages in Constitution Avenue, for “off wire” operation at higher costs should be subsidised by the Commonwealth at least to the level of extra costs in construction, in operation and in vehicle reconfiguration.

Further, the Committee should consider that there are various proprietary technologies available for “off wire” capability. It would be inappropriate for the NCA or the Committee to identify any particular technology design as desirable or obligatory. The difficulty in this path is that if a specific form of “off wire” operation is designated it may only be available from one manufacturer of LR vehicles and this could lock in the ACT to a specific supplier so preventing any competitive tendering for future LR vehicle supply. It is worth noting that Sydney has adopted a specific ground supply system in George Street for the new LR line in that city and vehicles from other manufacturers cannot operate on that section and are unlikely to be usable under 20 years within it.

OLE need not be intrusive. The supply wire is largely insignificant, but its support elements are more observable. OLE design principles are well known world wide and much industry effort has been put into improving the aesthetic acceptability of overhead catenary. There are many examples of low visual impact OLE designs but perhaps the outstanding example is that in Lyons in France which has incorporated the overhead with street lighting standards using lightweight components to support the supply catenary itself.

It is difficult to understand what is intended by Term 4 of the Committee's Terms of Reference or the concluding “catch all” reference to “any other relevant matters”. Unless the Committee is prepared to consider part-funding LR2 to ensure better quality station construction for passengers within the Parliamentary Zone, it hardly has any reason to intervene in any capacity, when the NCA is the proper vehicle to ensure Commonwealth requirements are met.

LR2 is essentially an improved public transport system to serve the needs of ACT residents and will provide enhanced mobility for people, both visitors and workers, within the Parliamentary Zone as part of its remit. It should be welcomed and encouraged by the Commonwealth for its contribution to reduction of pollutants as it will largely operate on “green” energy and will be free of gaseous and particulate emissions at street level. It will deliver a quality public transport system to workers and visitors within the Parliamentary

Zone which is inadequate at present and connect them seamlessly to centres in Woden and to the north of Lake Burley Griffin. It is an essential part of an eventual ACT-wide transport system which also has the potential to serve the growing needs of cross-border communities in Queanbeyan and can reduce congestion and future road costs if speedily and effectively implemented.

It is not a system of any relevance to the Commonwealth *per se* and the Committee should simply ensure that NCA does what it is appointed to do while ensuring that the Commonwealth accepts its financial obligations to meet any additional costs imposed by its own specific design wishes. And it should conclude its work quickly so that the expertise built up in LR1 construction is not dissipated and has to be re-created at additional cost when further system stages are eventually constructed.