Submission No 57

INFRASTRUCTURE FOR ELECTRIC AND ALTERNATIVE ENERGY SOURCE VEHICLES IN NSW

Organisation: Intellihub Group

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Simplify your energy transition



INTELLIHUB GROUP

SUBMISSION TO INQUIRY INTO INFRASTRUCTURE FOR ELECTRIC AND ALTERNATIVE SOURCE VEHICLES IN NSW

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The Intellihub Group (**Intellihub**) welcomes the opportunity to make a submission to the Legislative Assembly Committee on Transport and Infrastructure's Inquiry into infrastructure for electric and alternative energy source vehicles in NSW.

This submission focusses on the following aspects of the Inquiry's Terms of Reference:

- (a) funding of electric vehicle chargers
- (c) use of existing infrastructure and measures to ensure a competitive market, including 'ring fencing' policies.

Intellibub is an Australian and New Zealand based digital energy management specialist that is simplifying the transition to sustainable energy through our holistic ecosystem of smart devices and services. We deliver innovative metering, data, electric vehicle charging and behind the meter solutions that maximise digital and new energy services.

We currently provide a range of EV charging solutions. Intellihub pioneered kerbside power pole mounted EV charging in Australia with funding support from <u>ARENA</u>, in addition to testing how chargers can be used to provide grid integration services and virtual power plant services. We have installed 50 pole mounted kerbside chargers under this project across 8 local councils within NSW. Following our NSW projects, Intellihub has been awarded \$1.3M funding from the Victorian Government under the ZEVET program to deploy 100 power point mounted charge-points in Melbourne. In addition, we are installing 10 EV Chargers around prominent destinations across Melbourne

We also have majority ownership of a leading Australian EV charging provider <u>EVSE</u>. EVSE has grown to become one of Australia's largest EV charging solutions providers, with an end-to-end solution that bundles hardware, software and installation services. Across Intellihub and EVSE, and following <u>EVSE's recent</u> <u>acquisition</u> of Engie's public charging business, we currently operate 1,500 EV public chargers with over 250 of Australians fastest public DC ports.

Ring-fencing arrangements are critical to enable a competitive EV charging market and deliver the best outcomes for EV drivers and electricity customers

Intellibub is aware of proposals by distribution network services providers (DNSPs) in NSW that existing energy regulatory requirements should be amended so that DNSPs are permitted to offer public EV charging services as a regulated electricity service without complying with the Australian Energy Regulator's (AER) ring-fencing requirements.

We are also aware that the Department of Climate Change, Energy, the Environment and Water (DCCEEW) consulted on a DNSP-led kerbside EV charging proposal in mid 2024 as part of the development of a refreshed EV strategy. Intellihub made a submission to this consultation paper. We note that the consultation paper was only 3 pages long and stakeholders were only given 6 business days to make a submission. We welcome the Committee undertaking a fuller inquiry into these issues and providing an opportunity for more comprehensive submissions and analysis of this important issue.



Intellihub does not support changes to ring-fencing requirements or other regulatory changes that would enable DNSPs to provide public EV charging services through their regulated DNSP businesses. Enabling DNSPs to install, own and maintain kerbside EV chargers will not be in the interests of NSW EV drivers or electricity consumers for the reasons set out in more detail in this submission.

If DNSPs consider that they can provide EV charging services more efficiently than other providers, they are already able to do so through a ring-fenced business on a level-playing field and should not need the unfair advantages and cross-subsidies that would arise from removing ring-fencing restrictions.

Use of existing infrastructure

The only existing DNSP infrastructure that is required for the provision of EV charging services is access to DNSP's power poles to mount EV chargers and the ability to connect the public EV charger to the DNSP's electricity distribution network. Both of these services are already provided by DNSPs in accordance with the National Electricity Rules and there are no barriers in accessing these services that require additional regulatory reforms. EV charging operators pay DNSPs for these services and ring-fencing rules do not create any restrictions or barriers to their provision.

Other than these limited services, there is no need to use other parts of DNSPs' existing infrastructure to provide EV charging services. DNSPs who are proposing that ring-fencing rules are amended to enable them to provide EV charging services as a regulated service appear to be in effect asking that they are permitted to build new infrastructure to provide EV charging services and recover the costs of that infrastructure from all electricity customers in the infrastructure to infrastructure from EV charging fairly with other EV charging operators and recovering their costs solely from EV drivers using those chargers.

Funding and other measures to accelerate the rollout of EV charging infrastructure

We support the Committee's objective to increase the availability of EV charging infrastructure to residents of NSW.

Contestable government funding for a broader rollout of EV charging infrastructure will be a lower cost, more effective and fairer way to meet this objective than any changes to ring-fencing rules or any other forms or preferential treatment or funding for DNSPs to rollout EV chargers.

There are a number of options that would assist an efficient and fair deployment of EV chargers in NSW, including:

- Extending the availability and quantum of grants available to competitive EV charging providers via the NSW Electric vehicle kerbside charging grants program.
- Ensuring that the DNSP establish and enforce, reasonable and consistent rules, procedures, design standards, contracting terms and pricing that that fairly balance the need to protect their own infrastructure with ensuring fair and equitable process to enable other market participants appropriate access (in terms of cost and risk allocation) to facilitate the rollout of public EV charging in a competitive market.



- Subsidising feasibility assessments and infrastructure upgrades for existing apartment buildings by expanding the NSW EV ready buildings grants program – this is likely the biggest area of demand and the biggest pain point for EV drivers in NSW.
- Strengthening minimum standards for EV charging infrastructure in new apartment developments. The current requirements do not go far enough to future proof the electrical infrastructure within apartment buildings.
- Working collaboratively with local councils on developing public EV charging strategies. For example, the NSW government could request that local councils develop public EV charging strategies and periodically report on the availability of public charging stations within their LGAs. The NSW government could also set targets for the deployment of new EV charging infrastructure by LGA.

EV charging is not a natural monopoly and is not suited to a DNSP-led model

The AER's ring-fencing provisions exist for good reasons to protect electricity customers from crosssubsidising other services and to promote investment by ensuring DNSPs cannot misuse their monopoly position in regulated distribution services to unfairly compete in the provision of other competitive services.

Provision of a service by DNSPs has benefits for natural monopoly services where it is more efficient to have a single provider rather than multiple providers of the service. Installing, owning and operating the electricity distribution network is a classic natural monopoly where it would be much more expensive to have multiple distribution networks in a single area so is preferable for the service to be provided by a DNSP with prices regulated by the AER.

Public EV charging is not a natural monopoly that is suited to provision by regulated DNSPs. The only part of this service that has natural monopoly characteristics is access to the DNSP's power poles to mount kerbside EV chargers. That service is already provided by DNSPs as noted above and any EV charging operator can pay the DNSP to use its poles, as can other service providers such as telecommunications companies. The remainder of the public EV charging value chain is well-suited for competitive provision and DNSPs have no advantages that mean they are likely to be able to provide these services more efficiently than other competitive providers.

Instead, there are several reasons to expect that DNSPs will be a poor choice of provider of these services:

- DNSPs have no experience in providing EV charging services. If the Committee wishes to accelerate
 the deployment of public EV charging, it makes little sense to provide an effective monopoly to parties
 who have no experience in providing that service and effectively exclude multiple experienced parties
 who are already offering the service.
- A DNSP-led rollout of EV charging infrastructure will reduce innovation and lock eMobility Service Providers (eMSPs) and customers into a single technology choice and business model. This is a highly risky approach in an area that is as new as EV charging where the technology is evolving rapidly. A competitive rollout is more likely to encourage innovation and testing multiple different technology solutions, with investors taking the risks of selecting the wrong technology. Under a DNSPled rollout, the NSW government or NSW electricity customers will take the risks of higher costs or stranded assets if DNSPs select technology solutions that are superseded.



- Our experience in offering public EV charging services in NSW shows that site selection is critical. Competitive providers have incentives to determine the optimal places to locate public EV chargers that have the highest demand so they can recover their costs. DNSPs will not have these incentives, as we expect that they will seek to use regulated charging arrangements that result in them being paid for their infrastructure regardless of demand. DNSPs will instead have incentives to locate public EV chargers in the places where it is easiest and lowest cost for them, which risks poor outcomes for EV users and risks the government or electricity customers being forced to subsidise ongoing loses.
- NSW DNSPs' efficiency performance to date shows they cannot be expected to deliver least cost charging solutions for NSW customers. The <u>AER's 2023 benchmarking report</u> shows that even for their existing monopoly distribution services, NSW DNSPs are not efficient. The Victorian smart metering rollout also demonstrated how the costs of a regulated DNSP-led solution are likely to far exceed DNSPs' cost estimates and be higher than the costs of a competitive deployment.

Removing ring-fencing would increase costs for all electricity customers, exacerbating energy affordability concerns

Ring-fencing restrictions exist for good reasons to protect customers. The ring-fencing arrangements impose restrictions on the regulated DNSP entity to protect consumers of electricity distribution services and other competitive services by:

- preventing the DNSP from cross-subsidising services to gain an unfair advantage and transfer costs to monopoly electricity customers, e.g. by recovering some of the costs of providing the competitive service from customers of its monopoly distributed and the competitive
- preventing the DNSP from misusing confidential information that it obtains from its regulated distribution business to advantage its competitive business
- preventing the DNSP from discriminating in favour of its competitive business
- requiring the DNSP to provide competitive services through a separate legal entity to make it easier for the AER to monitor and enforce compliance with the above requirements.

The AER can provide waivers to parts of the ring-fencing restrictions if the DNSP can demonstrate that a waiver is justified and would be in the long-term interests of electricity customers. The AER has granted a significant number of ring-fencing <u>waivers</u> to DNSPs, but to date none have been sought or granted in relation to public EV charging services.

The AER's ring-fencing guidelines permit DNSPs to offer competitive services including public EV charging services provided they do so through a ring-fenced related party that operates on an arms-length basis. For example, Ausgrid has a ring-fenced subsidiary Plus ES that provides a number of competitive services including EV charging services. Plus ES has recently announced that it intends to roll-out up to 1,000 kerbside pole-mounted EV chargers in NSW and SA. Ring-fencing does not prevent Plus ES offering these services and no ring-fencing waivers were required. Ring-fencing simply ensures that Ausgrid and Plus ES compete fairly with other businesses and cannot misuse information, discriminate or subsidise the costs of these services through Ausgrid's charges to other electricity customers.



If the AER's ring-fencing protections do not apply to EV charging services, it appears inevitable that all NSW electricity customers will subsidise the provision of DNSP-led EV charging services through their electricity bills, regardless of whether they own an EV or use EV charging services. This will exacerbate existing electricity affordability concerns, particularly for low income and vulnerable customers who are unlikely to be able to afford EVs and are already struggling with rising electricity bills.

DNSPs will incur significant upfront capital investment to procure and install public EV chargers and will require certainty that they will recover those costs plus a return on their capital. Unlike competitive EV charging operators such as EVSE, DNSPs are unlikely to be willing to take stranded asset risk or demand risk on the recovery of their costs. It may be possible for DNSPs to recover some or all of their costs from eMSPs through tendering the rights to operate the public EV chargers for a fixed term, but such an arrangement would be unlikely to provide the revenue recovery certainty that DNSPs seek and if such a model was acceptable to the DNSPs then they could offer it today through a contestable subsidiary without any need for changes to ring-fencing.

If ring-fencing rules do not apply, it is almost certain that some of the costs and risks of providing EV charging services will be transferred to all NSW electricity customers, irrespective of whether those NSW electricity customers drive an EV or even use the public EV chargers. The only reason we can see for DNSPs to want to remove ring-fencing restrictions is to enable them to recover some of the costs from all NSW electricity customers, or transfer some of the demand or asset stranding risks to all NSW electricity customers. Removing ring-fencing would also allow them to engage in more subtle cross-subsidies such as using their staff and equipment that are paid for by all NSW electricity customers through regulated distribution services to provide public EV charging on public EV chargers to try to give themselves an advantage over less well-known businesses. This all results in increased electricity costs for all NSW electricity customers, with a disproportionate cost borne by low-income households.

Allowing DNSPs to offer public EV charging services without ring-fencing will deter competition and investment

Materials that have previously been published by DNSPs and DCCEEW do not explain how proposals to enable DNSPs to provide public EV charging services would be implemented. DCCEEW's consultation paper was limited to kerbside EV charging services, but we are not sure whether the Committee is also considering other forms of public EV charging services.

We assume for the purposes of this submission that any proposals to enable DNSPs to provide public EV charging services would be implemented by a combination of NSW regulatory instruments and changes to the AER's distribution determinations or ring-fencing guidelines to enable the 3 NSW DNSPs to provide EV charging services as a regulated service that was not subject to ring-fencing restrictions. For example, this could potentially occur by amending the ring-fencing guidelines to exclude these services, or by the AER classifying these services as regulated distribution services (ie standard control services or alternative control services) and permitting the DNSPs to recover their costs of providing these services through regulated charges in accordance with their distribution determinations.



Regardless of how any such proposal is implemented, the practical effect would be to grant the NSW DNSPs such a significant advantage over other providers of kerbside EV charging services that the DNSPs would have an effective monopoly for the provision of those services. Even if the proposal did not give the DNSPs a legal monopoly, the ability to use the assets and staff of their regulated business and cross-subsidise the provision of these services with their regulated services means it is highly unlikely that any other business would attempt to compete with the DNSPs. This is likely to result in Intellihub and all other current providers of kerbside charging services exiting the market.

Allowing DNSPs to offer EV charging services without complying with ring-fencing rules would also deter investment in other segments of the EV charging market, even if the changes were limited to kerbside charging services.

Kerbside EV chargers compete with other forms of EV chargers, for example chargers located in private car parks or apartment buildings. Our experience operating in the market is that the greatest area of unmet demand for EV charging in NSW is in these other market segments, especially apartment buildings, rather than kerbside chargers. Enabling DNSPs to rollout kerbside chargers that are subsidised by electricity customers will deter investment in these other parts of the EV charging market as it will reduce the overall size of the EV charging market in NSW and make it difficult to compete with subsidised DNSP kerbside chargers. This would obviously have significant impacts on parties that currently provide those services and on future investment in the broader EV charging market in NSW.

We are happy to provide more detail on any of the issues raised above. If you have any questions regarding this submission, please contact me at

Regards,

Sajeeva Perera General Manager – Legal, Regulatory Affairs and Risk Intellihub