A Knop NS2B EIS Submission

Appendix 1

Figure 1 below is from ARTC's Inland Rail Route History NS2B alignment section. It presents their rationale and MCA data for moving the NS2B alignment from the East (Base Case) as researched and recommended by the Inland Rail Alignment Study 2010 to a new West alignment via Boggabilla.

Fig. 1 Extract from ARTC's Inland Rail M2B Route History 2006 - 2019

North Star to the NSW/QLD Border: east versus west route decision

	East (Base Case)		West	
Distance	65km		73km 8km longer	
Service Offering / Transit time	-		4m 26s longer	
MCA:				
Stakeholder/ community impact	Greater impact on greenfield stakeholders including compromising viability of organic certified business employing 40 people		Wide support for Western alignment	
Flooding	Similar for both options		Similar for both options	
Environmental	Multiple environmental impacts including crossing of Yelarbon desert		Reduced impacts on EPBC* and remnant vegetation, (104ha vs 133ha on eastern route) lower property impacts, reduced visual impact	
MCA Score	0		+1.2	
Construction Cost	$0m (for relativity)		+$29m/+6.5%	
Recommended				✓

Favourable
Neutral
Unfavourable
Highly unfavourable

*EPBC – Environmental Protection and Biodiversity Conservation Act 1999

Figure 2 below is from the Inland Rail Alignment Study 2010, Appendix D. IRAS 2010 reviewed various North Star to Yelarbon options. Unlike the IR Route History document, the information contained in IRAS 2010 is comprehensive, providing description of the methodology and data sources used in undertaking route analysis. The relevant entries listed at Fig. 2 pertinent to NS2B are Codes D02A to D05C inclusive.

In Fig. 2 the length of alignment D05C, the East (Base Case) alignment is 60km. The IR Route History document reports it as 65km, 5 km longer.

The three alignment codes which represent the alternative option via Boggabilla are D02A, D03C & D04D. The route length for the three sections equates to 73km which is the length of the NS2B West route option quoted in the IR Route History document.

Why have ARTC add 5km to the Base Case? I submit the 5km was added to ensure the traffic light metric used by ARTC did not flag red lights on their decision to change the route. When any alignment options contains increased track length > 5 and 10km and transit times > 5 & 10 minutes they are flagged as being detrimental to the IR service offering receiving an amber or red light, conversely if they save time/distance they get a green or neutral light. ARTC altered the Base Case data to ensure their metric didn't contradict their final decision. The real data would trigger red and amber flags on the West route and green flags on the Base Case. These flags would have tipped the metric well in favour of the East Base Case.

Fig. 2 Extract from Inland Rail Alignment Study 2010, Appendix D

Table 5-3 Moree to Brisbane benchmarking exercise

Description	Code	Track class	Existing / New	Gradient	km	Average speed	Est. hrs:min
Camurra–North Star	D01A	3W	Standard gauge (upgrade)	1:100	78	88 km/h	0:53
North Star–Boggabilla	D02A	Derelict (was 3W)	Derelict standard gauge - rebuild	1:100	26	88 km/h	0:17
Boggabilla–Kildonan	D03C	New	Greenfield	1:264	13	88 km/h	0:08
Kildonan–Yelarbon	D04A	Narrow 15.75 tal	Standardise	1:220	34	88 km/h	0:23
North Star–Yelarbon	D05C	New	Greenfield	1:99	60	88 km/h	0:40

Summary of key issues impacting ARTC metric, data sourced from IRAS 2010 Appendix D (Fig. 2 above)

North Star to Yelarbon via Boggabilla (West)

Total Track Length: 73km
Transit Time: 48 minutes

North Star to Yelarbon (East Base Case)

Total Track Length: 60km
Transit Time: 40 minutes

Below is my analysis of how the correct IRAS data would affect ARTC's NS2B decision metric and selection result. I have also provided comment on the unsubstantiated statements presented in the community impact, flooding and environment criteria.

Distance: East (Base Case) 60km – would change from neutral to favourable;

Distance: West 73km – now 13km longer than the base case, this would move the score to next category (>10km) changing from amber to red, highly unfavourable;

Service offering/Transit time: (Base Case) – would change from neutral to favourable;

Service offering/Transit time: (West) – now 8 minutes longer than the base case, this would move the score to next category (>5min) changing from neutral to amber, unfavourable;

Stakeholder/Community impact: The comments and polar differences in the scoring quoted in Fig. 1 above do not accurately reflect actual stakeholder and community views as demonstrated by the notable opposition to the alignment change voiced after its announcement and in Senate inquiry submissions. ARTC would need to provide unequivocal evidence to support their assertions that the East (Base Case) has so much stakeholder opposition that it warrants a red light and the new (West) alignment has the 'wide support' warranting the favourable green light. In the absence of strong corroborative evidence supporting ARTC assertions I submit that the lights be considered neutral or amber on both alignments reflecting the stakeholder opposition and concerns relating to both options.

I am also concerned by the anomalous reference to a 'compromised' certified organic business. For the entire Melbourne to Brisbane alignment no other Route History MCA singles out an individual business for notable mentioned. Why does this business rate a mention when negative impacts on Australia's largest egg producer at Millmerran or the regionally significant convention centre at Peak Crossing get ignored? (NB both organisations have

Senate submission tabled raising serious concerns regarding ARTC's consultation process). This anomaly demonstrates ARTC contempt for procedural fairness and their tendency toward procedural bias by allowing one party special hearing and mention.

Flooding: ARTC report that flood issues are the same for both options. I question this unsubstantiated statement given the fact that the IRAS East (Base Case) was originally chosen because it avoided the substantial flooding issues known to occur to the West. This is backed by stakeholder and community comment which raised concerns regarding flooding issues when the alignment was moved to the West (eg Goondiwindi Council raised high level flooding concerns regarding the new West alignment in their Senate inquiry submission). It is very unlikely that flooding issues are the same for both alignments. The East (Base Case) is much higher in the catchment, above the notable confluence of the Dumaresq and Macintyre Rivers, in an area providing narrower, channel confined crossing opportunities. The West alignment is exposed to much greater catchment area and located in a very complex flood plain environment impacted by flood outflow systems of considerable volume, facts not disclosed by ARTC. At the very least the East would remain neutral (potentially considered favourable). The West would score amber, potentially red.

Environment: ARTC's polar scoring of the environmental issues on the alignment options are unsubstantiated by the data quoted in Fig. 1 above. I submit that the variation between the options would rate the East (Base Case) as amber and West as neutral (or possibly preferred if additional evidence was tabled).

Summary of route selection criteria if correct data was inputted into the Fig. 1 metric.

East (Base Case)		West	
Distance 60km	Green - Favourable	Distance 73km	Red – Highly unfavourable
Service offering / time 40 mins	Green - Favourable	Service offering / time 48 mins	Amber - Unfavourable
Stakeholder / community	Neutral – data inconclusive	Stakeholder / community	Neutral – data inconclusive
Flooding	Neutral	Flooding	Amber – Unfavourable
Environmental	Amber - Unfavourable	Environmental	Neutral
MCA score	Neutral	MCA score	Amber – Unfavourable
Construction cost	Neutral	Construction cost	Amber – Unfavourable
Recommended	Green - Favourable		

It is clearly evident in the table above that ARTC's data falsification and unqualified claims resulted in a massive alteration to the scoring sending the route West on a much longer, more expensive alignment which has raised community consternation and compromised the IR service offering. I submit ARTC have not met the NS2B SEARs EIS Item 2 requirements. ARTC must redo the entire selection process and provide qualified and quantified evidence to support any statements covering flooding, community opinion, environment or any other criteria used to define the corridor preference.