



Government of **Western Australia**
Department of **Treasury**

Western Australia's Submission to the
**Commonwealth Grants Commission's
2014 Update – Treatment of Iron Ore Fines
Discussion Paper CGC 2013-02-S**

September 2013



Key Points

- Options for assessing iron ore fines in the 2012-13 data year should be evaluated according to the following criteria:
 - minimising grant design inefficiency (i.e. the extent to which Western Australia's policy decisions affect its grant);
 - the accuracy of the equalisation outcome, according to a benchmark of an individual mineral by mineral assessment;
 - avoiding unnecessary change to the existing method;
 - consistency with the likely Terms of Reference directive that, with regard to the removal of iron ore fines royalty rate concessions in 2010, the classification of iron ore fines should not move between mineral royalty rate groups in between method reviews; and
 - the availability of data to implement the assessment and to share the details with other States.
- Based on these evaluation criteria, the most appropriate option would be leaving iron fines in the 'low rate' group.
 - If for some reason this proves unacceptable to the CGC, the most appropriate 'reform' option is a three-group assessment comprising current 'low rate' minerals excluding iron ore, all iron ore (both lump and fines) in a separate group, and current 'high rate' minerals excluding iron ore.
 - This three-group option was not covered by the Discussion Paper, but performs better than the CGC's proposed reform options in terms of both the policy influence and equalisation accuracy criteria.
- The other options covered by the Discussion Paper are unacceptable as they redistribute more than 100% of the additional iron ore fines royalty revenue that Western Australia has raised. They are also (if the 2010 iron ore fines rate increase is excluded) less accurate than leaving iron ore fines in the 'low rate' group.
- Reclassifying iron ore fines to the 'high rate' group should not be contemplated as it is by far the worst option against both the policy influence and equalisation accuracy criteria. It is also inconsistent with the GST Distribution Review recommendation and 2015 method review terms of reference for a new mining assessment to be put in place to fix problems with the current assessment.
- We agree that there should be no backcasting of any changes in the 2012-13 assessments (should they occur) into earlier data years, consistent with the usual convention of no backcasting of State policy changes.
- The CGC should consult further if it intends changing the treatment of iron ore fines, including so that Western Australia has warning of a significant budgetary impact.

Introduction

In its 2010 Review, the Commonwealth Grants Commission (CGC) introduced a method of assessing onshore mining revenue raising capacity in two groups:¹

- a 'high rate' group for minerals with a national average royalty rate above 5% – comprising export coal, lump iron ore, petroleum and bauxite; and
- a 'low rate' group for mineral with a national average royalty rate below 5% – comprising all other minerals, including iron ore fines.

In 2010, Western Australia decided to align the 3.75% iron ore fines rate in relevant State Agreements with the (then) 5.625% iron ore fines rate in the *Mining Act 1978*, so that all producers paid a 5.625% rate.

This could have resulted in the CGC reclassifying iron ore fines to 'high rate', which would have cost Western Australia more in GST revenue grants than the additional royalty revenue raised.

In considering this matter in its 2011 Update, the CGC used a proxy for a mineral by mineral assessment as a benchmark for the most appropriate equalisation outcome. Leaving iron ore fines in the 'low rate' group gave a closer result to this benchmark than reclassifying iron ore fines to 'high rate', so the CGC concluded that iron ore fines should not be reclassified.

In any event, the CGC was given a terms of reference that instructed it to not reclassify iron ore fines as a result of Western Australia's 2010 State Agreements royalty rate increase. This same instruction was included in the terms of reference for the subsequent two updates, and we assume that it will be included in the 2014 Update terms of reference.

Western Australia has since further increased its iron ore fines royalty rate to 6.5% in 2012-13 (and 7.5% for 2013-14 onwards, matching the iron ore lump royalty rate).

Data for 2012-13 will enter the CGC's three year average for the first time in the 2014 Update. The CGC is therefore reconsidering the treatment of iron ore fines, and has released a Staff Discussion Paper² to which this submission responds.

Both the Discussion Paper and this submission assume that the 2014 Update terms of reference will be similar to recent years.

¹ The CGC's assessments also include a third group for minerals subject to royalty sharing arrangements with the Commonwealth, predominantly comprising North West Shelf petroleum (which is offshore). This submission exclusively addresses the assessment of minerals currently covered by the two 'onshore' groups.

² *New Issues for the 2014 Update – Treatment of Iron Ore Fines*, Staff Discussion Paper CGC 2013-02-S, June 2013

Evaluation Criteria for Assessing Iron Ore Fines in 2012-13

Grant design inefficiency

An important feature of the CGC's assessments is that a State's policies should not have too large an impact on its assessments.³ When assessments are significantly policy influenced, they are described as having grant design inefficiency.

The CGC's existing 'low rate'/'high rate' grouping has resulted in the anomalous situation where Western Australia's increases in its iron ore fines royalty rate would cost the State (in reduced GST grants) well over 100% of the additional iron ore royalty revenue, if iron ore fines were reclassified from 'low rate' to 'high rate' by the CGC.⁴

Even in the absence of a reclassification, there is significant grant design inefficiency in any mining revenue assessment, due to Western Australia's very high value of mineral production compared to other States. This can in principle be avoided by incorporating the mining revenue assessment into a global revenue assessment,⁵ but this would be beyond the scope of the 2014 Update.

We believe it is essential to minimise grant design inefficiency. Grant design inefficiency is fundamentally unfair as it is largely avoidable.

Grant design inefficiency is also fundamentally inefficient. It does not matter that Western Australia has already increased its iron ore fines royalty rate to 6.5%. If the CGC were to tolerate, even on a backward-looking basis, large grant impacts from an individual State's policies, it would send a signal to States to avoid future policy improvements that may have a detrimental impact on their GST grant shares.

It also does not matter that the 2012-13 data year will only contribute one third of the average for the 2014 Update method, after which the 2015 Review methods will be implemented. It cannot be assumed that the 2015 Review methods will offset any excessive grant design inefficiency in the 2014 Update.

³ Commonwealth Grants Commission, *Report on GST Revenue Sharing Relativities — 2010 Review*, Vol.1, page 36 (paragraph 48)

⁴ This includes both the royalty revenue raised from both the 2010 removal of concessional rates and the 2012-13 increase to 6.5%. The GST loss includes both the impact from reclassification and the impact from increasing the national average royalty rate.

⁵ As discussed in Western Australia's July 2013 submission to the 2015 Review.

Accuracy of the equalisation outcome

In its 2011 Update Report, the CGC considered whether or not to reclassify iron ore fines to its 'high rate' group, and decided not to do so. It based this decision on the results of a proxy for a mineral by mineral assessment, which it considered to be a good measure of the most accurate equalisation result if policy neutrality were not an issue.⁶ In its June 2013 Discussion Paper, the CGC again used a proxy mineral by mineral assessment as a benchmark.

We agree that an individual mineral by mineral assessment is a good benchmark for an appropriate equalisation outcome within the current implementation framework for HFE.⁷

It reflects 'what States do' for each mineral, having regard to circumstances that vary from mineral to mineral, including:

- the minimum return or 'price' that should be received for the sale of the mineral by the community to the producer;
- the degree of processing of the mineral by the producer downstream of the mine head⁸ before the royalty is levied;
- the general profitability of producing the mineral;
- the impact on the viability of more marginal operations; and
- the impact on incentives for expansion of production.

In addition, a mineral by mineral assessment also captures variations from mineral to mineral of the impact on the present 'value of production' revenue base of past decisions by State governments in areas such as regulatory regimes, infrastructure provision and the trade off (through the choice of royalty rates) between exploiting minerals immediately as opposed to ensuring an adequate price for the community for these finite resources in the long term.

Avoiding unnecessary method change

In an annual update, the assessment methods are meant to be consistent with the previous update, to the extent possible in light of latest circumstances.

Therefore, it would be undesirable for the CGC to change the assessment if the existing assessment can still be justified.

⁶ CGC 2011 Update Report, page 42, paragraphs 19-20.

⁷ We also believe that discounting of the assessment is warranted (as discussed in our July 2013 submission to the 2015 Review), but accept that this is outside the scope of the 2014 Update.

⁸ Such processing could be limited to crushing and screening the ore, or extend to 'concentrating' the ore or refining the ore to near-pure metal. The 'mine head' is fundamentally different from the 'mine gate' concept identified in some previous CGC reports. Substantial processing may occur between the mine head and what might be considered the mine gate (the usual point of valuation of the product, captured in value of production data).

Also, the 2014 Update is being undertaken in the context of the short 2015 Review. The terms of reference for this Review reflect the GST Distribution Review recommendation that a new mining assessment should be developed that avoids “excessively large GST share effects, such as when a commodity moves between groups”.⁹ It would be undesirable to implement a method change in the 2014 Update that is not in keeping with this recommendation.

Consistency with terms of reference

The CGC is required to comply with its terms of reference.

With regard to a decision to alter the treatment of iron ore fines, the previous terms of reference instruction (if repeated in this Update) is relevant:

As per previous Terms of Reference the Commission should ensure that, with regard to the removal of iron ore fines royalty rate concessions in 2010, the classification of iron ore fines should not move between mineral royalty rate groups in between methodology reviews.¹⁰

In this context, we consider that this requires the CGC to exclude the revenue that arises from Western Australia’s 2010 State Agreements iron ore fines royalty rate increase when the CGC considers the impact of Western Australia’s iron ore fines royalty rate reaching 6.5% in 2012-13.

Data availability

For the CGC to be able to quantify an assessment, the States must be able to provide the value of production and royalty revenue for each group in that assessment.

However, although not ideal, the CGC can make estimates if some States can only provide more aggregated data, especially in cases where the exact split is likely to not be material. This is potentially the case for other States’ iron ore fines, as Western Australia has over 97% of the national iron ore production.

A further issue is that confidentiality restrictions may mean that the CGC cannot share fully disaggregated data with other States. For purposes of transparency, especially as the mining revenue assessment is very significant, it would be highly desirable for all States to be able to see the data at the level of each group of minerals in the assessment.

⁹ GST Distribution Review – Final Report, Recommendation 7.2, page 16

¹⁰ CGC 2013 Update terms of reference, clause 10.

Evaluation of Assessment Options for 2012-13

Assessment Options

In effect, the CGC's June 2013 Discussion Paper presents the following four options for assessing iron ore fines:

- leave iron ore fines as 'low rate';
- reclassify iron ore fines to 'high rate'¹¹;
- assess iron ore fines separately in a new 'medium rate' group; and
- assess half of iron ore fines as 'low rate' and half as 'high rate'.

Curiously, although the Discussion Paper uses a proxy for a mineral by mineral assessment as a benchmark, it does not put this forward as an option. Given that the CGC has already established this as its benchmark in the 2011 Update, we believe that it should be considered as an option:

- assess three mineral groups, comprising total iron ore, total coal, and all other minerals.

We also consider that a further option has merit (we used this as a proxy for a mineral by mineral assessment in our July 2013 submission to the 2015 Review):

- assess three mineral groups, comprising current 'low rate' minerals excluding iron ore, total iron ore, and current 'high rate' minerals excluding iron ore.

We assess the equalisation merits of these six options against the closest proxy to a mineral by mineral assessment that we can achieve with available data:

- assess nine mineral groups, comprising iron ore fines, lump iron ore, export coal, domestic coal, petroleum, bauxite, diamonds, nickel, and all other minerals.¹²

This gives seven options which we evaluate against the criteria of grant design inefficiency, appropriate equalisation outcome, avoiding unnecessary method change, consistency with the terms of reference, and data availability.

¹¹ The Discussion Paper suggests that any decision to reclassify iron ore fines to 'high rate' would depend upon whether or not it gives a result closer to an individual mineral by mineral assessment than leaving iron ore fines 'low rate'.

¹² Diamonds and nickel are essentially produced only in Western Australia. Ideally, gold would also be disaggregated, given its relatively low royalty rate, but we do not have gold royalty revenue data for other States.

Grant design inefficiency

As discussed earlier, it is essential that grant design inefficiency be minimised.

Table 1 compares estimated onshore mining royalty needs under each option with the estimated needs that would occur if we had not changed iron ore fines royalty rates in 2010 and 2012. It also shows what percentage of the additional iron ore fines royalty revenue (from these changes in iron ore fines royalty rates) is lost under each option.

The results have been ordered by increasing loss of the additional iron ore fines royalty revenue.

Table 1

GRANT DESIGN INEFFICIENCY OF ALTERNATIVE ASSESSMENT METHODS 2012-13 DATA YEAR ^(a)			
Assessment method	WA needs	Difference from base case	Loss of additional royalty revenue ^(b)
	\$m	\$m	
Base case - without \$674m fines policy change ^(c) - fines 'low rate'	-2,892		
1. Fines 'low rate'	-3,308	-416	62%
2. Nine mineral groups	-3,512	-620	92%
3. 'Low rate', iron ore and 'high rate'	-3,531	-639	95%
4. Iron ore, coal and other	-3,565	-673	100%
5. Fines half 'low rate', half 'high rate'	-3,588	-695	103%
6. Fines 'medium rate'	-3,644	-752	112%
7. Fines 'high rate'	-3,910	-1,017	151%

Source: Western Australian Treasury estimates.

(a) Projections using Western Australia's draft 2014 Update mining data return; data from the CGC's 2013 Update online assessment system (some data for other States had to be imputed due to confidentiality restrictions); and 2013 Budget estimates for New South Wales and Queensland.

(b) Reduction in 2012-13 needs as a proportion of the additional 2012-13 royalty revenue. In practice, this would be a net present value impact, as the 2012-13 data year flowed through the CGC's three-year average.

(c) Total impact of policy changes to iron ore fines royalty rates applying from 1 July 2010 and 1 July 2012.

Accuracy of the equalisation outcome

As discussed earlier, an appropriate benchmark for the most accurate equalisation outcome in the context of the current implementation framework for HFE is given by a mineral by mineral assessment.

Table 2 compares estimated needs under each option with estimated needs under our closest proxy to a mineral by mineral benchmark (the nine-group assessment). We have preserved the ordering of options used in Table 1.

Table 2

EQUALISATION OUTCOME OF ALTERNATIVE ASSESSMENT METHODS 2012-13 DATA YEAR ^(a)			
Assessment method	WA needs	Difference from benchmark (Option 2)	
	\$m	\$m	%
1. Fines 'low rate'	-3,308	+204	5.8%
2. Nine mineral groups	-3,512	-	-
3. 'Low rate', iron ore and 'high rate'	-3,531	-19	0.5%
4. Iron ore, coal and other	-3,565	-53	1.5%
5. Fines half 'low rate', half 'high rate'	-3,588	-76	2.2%
6. Fines 'medium rate'	-3,644	-132	3.8%
7. Fines 'high rate'	-3,910	-397	11.3%

Source: Western Australian Treasury estimates

(a) Projections using Western Australia's draft 2014 Update mining data return; data from the CGC's 2013 Update online assessment system (some data for other States had to be imputed due to confidentiality restrictions); and 2013 Budget estimates for New South Wales and Queensland.

Avoiding unnecessary method change

As noted above, it would be undesirable for the CGC to change the assessment if the existing assessment can still be justified.

Table 2 indicates that the existing assessment, with iron ore fines classified as 'low rate', still performs relatively well against the mineral by mineral assessment benchmark (a \$204 million or 5.8% deviation from the benchmark needs assessment).

It performs much better than reclassifying fines to 'high rate' (a \$397 million or 11.3% deviation from the benchmark needs assessment).

Given the large redistribution from reclassifying fines to 'high rate', as shown in Table 1, this option would also be inconsistent with the intent of the 2015 Review terms of reference, so would be undesirable to implement in the 2014 Update.

Consistency with terms of reference

As noted above, the CGC is required to comply with its terms of reference, which we assume will continue to include an instruction that, with regard to the removal of iron ore fines royalty rate concessions in 2010, the classification of iron ore fines should not move between mineral royalty rate groups in between method reviews.

We interpret this as requiring the CGC to exclude the revenue that arises from the removal of State Agreement iron ore fines royalty rate concessions in 2010 when it considers the impact of Western Australia's increased iron ore fines royalty rate of 6.5% in 2012-13.

We estimate that the removal of State Agreement iron ore fines royalty rate concessions in 2010 is worth \$310 million in 2012-13. Tables 3 and 4 show the grant design inefficiency and equalisation outcome analysis (from Tables 1 and 2 and) recalculated to exclude this revenue.

The most significant differences from the earlier tables are:

- Table 3 shows an even stronger case to retain iron ore fines in the 'low rate' category to avoid high levels of grant design inefficiency; and
- Table 4 shows better accuracy for leaving fines 'low rate' (3.9% deviation from benchmark, compared with 5.8% in Table 2), and a worse result for reclassifying fines to 'high rate' (15.8% deviation from benchmark, compared with 11.3% in Table 2). Contrary to Table 2, the CGC's options of putting fines in its own 'medium rate' category or splitting fines between 'low rate' and 'high rate' no longer improve the equalisation outcome (compared to leaving fines 'low rate').

Table 3

GRANT DESIGN INEFFICIENCY OF ALTERNATIVE ASSESSMENT METHODS EXCLUDING 2010 ROYALTY RATE POLICY CHANGE 2012-13 DATA YEAR ^(a)			
Assessment method	WA needs	Difference from base case	Loss of additional royalty revenue ^(b)
	\$m	\$m	
Base case - without \$364m fines policy change ^(c) - fines 'low rate'	-3,084		
1. Fines 'low rate'	-3,308	-224	62%
2. Nine mineral groups	-3,512	-428	118%
3. 'Low rate', iron ore and 'high rate'	-3,531	-448	123%
4. Iron ore, coal and other	-3,565	-482	132%
5. Fines half 'low rate', half 'high rate'	-3,588	-504	138%
6. Fines 'medium rate'	-3,644	-561	154%
7. Fines 'high rate'	-3,910	-826	227%

Source: Western Australian Treasury estimates

(a) Projections using Western Australia's draft 2014 Update mining data return; data from the CGC's 2013 Update online assessment system (some data for other States had to be imputed due to confidentiality restrictions); and 2013 Budget estimates for New South Wales and Queensland.

(b) Reduction in 2012-13 needs as a proportion of the additional 2012-13 royalty revenue. In practice, this would be a net present value impact, as the 2012-13 data year flowed through the CGC's three-year average.

(c) Impact of the iron ore fines rate increase applying from 1 July 2012.

Table 4

EQUALISATION OUTCOME OF ALTERNATIVE ASSESSMENT METHODS EXCLUDING 2010 ROYALTY RATE POLICY CHANGE 2012-13 DATA YEAR ^(a)			
Assessment method	WA needs	Difference from benchmark (Option 2)	
	\$m	\$m	%
1. Fines 'low rate'	-3,117	+127	3.9%
2. Nine mineral groups	-3,243	-	-
3. 'Low rate', iron ore and 'high rate'	-3,263	-20	0.6%
4. Iron ore, coal and other	-3,297	-54	1.7%
5. Fines half 'low rate', half 'high rate'	-3,446	-202	6.2%
6. Fines 'medium rate'	-3,376	-132	4.1%
7. Fines 'high rate'	-3,755	-512	15.8%

Source: Western Australian Treasury estimates

(a) Projections using Western Australia's draft 2014 Update mining data return; data from the CGC's 2013 Update online assessment system (some data for other States had to be imputed due to confidentiality restrictions); and 2013 Budget estimates for New South Wales and Queensland.

Data availability

It is likely that at least some States would not be able to provide the necessary data (e.g. due to confidentiality issues) for either an individual mineral by mineral assessment or the nine-group proxy that we have used. (Western Australia could provide the data for the nine-group proxy, but some of this data could not be shared with other States.)

The other options have the same or similar data requirements to the existing assessment, so we would expect that the necessary data would be available.

However, the Discussion Paper queries whether States will be able to provide the CGC with data on iron ore fines royalty revenue and value of production, separately from other minerals.

- Western Australia will be able to continue to provide this data to the CGC. The CGC is aware of some confidentially restrictions on Western Australian data that require the CGC to mask some data before it is shared with other States. However, this masking should be possible under any of the options discussed in this submission except for the nine group assessment. Some other States may wish to keep their fines data confidential.

Assessing total iron ore in its own category would avoid any requirement for iron ore fines data to be separated from lump iron ore data.

Conclusion

Table 5 (on the following page) displays the seven options against our five evaluation criteria.

Bringing our analyses together, we conclude the following.

- Leaving iron ore fines as 'low rate' (Option 1) has by far the least grant design inefficiency, is reasonably accurate, and avoids unnecessary change. It performs even better relative to other options when the assumed specific instruction on iron ore fines in the terms of reference is taken into account. It also should give no problems with data availability.
- If, however, the CGC were to place most importance on equalisation accuracy, then it could choose the nine-group assessment (Option 2) or a three-group assessment comprising 'low rate' excluding iron ore, total iron ore, and 'high rate' excluding iron ore (Option 3). These options are the most accurate and have the next lowest grant design inefficiency.
 - However, the nine-group assessment is likely to be ruled out due to data unavailability.
- The extreme grant design inefficiency would rule out the other options, as even without taking account of the assumed specific instruction in the terms of reference, the loss of GST revenue matches or exceeds the revenue raised from the royalty rate policy changes. These options also give less accurate equalisation results than Options 2 and 3. Option 7 (fines reclassified as 'high rate') is much less accurate than Option 1 (leaving fines 'low rate').
 - Taking into account the assumed specific instruction in the terms of reference, the extreme grant design inefficiency of Options 4-7 becomes even worse, and these options also become even less accurate. Options 5, 6 and 7 are all less accurate than Option 1.
- Reclassifying iron ore fines to 'high rate' gives by far the worst grant design inefficiency, and by far the poorest equalisation outcome. It performs even worse when the assumed specific instruction in the terms of reference is taken into account.

Table 5

SUMMARY EVALUATION OF ALTERNATIVE ASSESSMENT METHODS							
Assessment method	Grant design inefficiency	Accuracy of equalisation	Avoid unnecessary change	Terms of reference			Data availability
				Grant design inefficiency	Accuracy of equalisation	Avoid unnecessary change	
				Loss of additional royalty revenue ^(a)	Deviation from benchmark ^(a)		
1. Fines 'low rate'	62%	5.8%	yes	62%	3.9%	yes	yes
2. Nine mineral groups	92%	-	no	118%	-	no	no
3. 'Low rate', iron ore and 'high rate'	95%	0.5%	no	123%	0.6%	no	yes
4. Iron ore, coal and other	100%	1.5%	no	132%	1.7%	no	yes
5. Fines half 'low rate', half 'high rate'	103%	2.2%	no	138%	6.2%	no	yes
6. Fines 'medium rate'	112%	3.8%	no	154%	4.1%	no	no
7. Fines 'high rate'	151%	11.3%	no	227%	15.8%	no	yes

Source: Western Australian Treasury estimates.

(a) Projections using Western Australia's draft 2014 Update mining data return; data from the CGC's 2013 Update online assessment system (some data for other States had to be imputed due to confidentiality restrictions); and 2013 Budget estimates for New South Wales and Queensland.

Other Matters

Backcasting

We strongly support the Discussion Paper conclusion that the treatment of iron ore fines for the 2012-13 data year should not be backcast to earlier data years.

Any change to the treatment of iron ore fines would only be to reflect the increase in Western Australia's iron ore fines royalty rate to 6.5%, which only occurred in 2012-13.

The CGC does not backcast other State policy changes. For example, it has never backcast royalty exemptions provided by various States at different times.

Any backcasting of 2012-13 circumstances would over equalise, as the 2012-13 circumstances would then appear six times in the CGC's three-year average (for three years in the 2014 Update, two years in the 2015 Review and one year in the 2016 Update).

Consultation

As shown by Table 2, the treatment of iron ore fines will have a substantial impact on Western Australia's budget.

This is in the context of very difficult budgetary circumstances, including the recent loss of the State's AAA credit rating.

Therefore, if as a result of States' submissions, the CGC decides to change the existing treatment of iron ore fines, we consider it would be appropriate for the CGC to further consult with the States. We also seek early advice of the CGC's conclusions to provide budget certainty – ideally the 2014 Update Report should be on a “no surprises” basis.