Submission on the DTCS FAD Discussion Paper – Primary Prices

September 2014

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1 INTRODUCTION

The Nextgen Group (Nextgen) welcomes the opportunity to make this submission to the ACCC on its July 2014 Domestic Transmission Capacity Service (DTCS) FAD, Primary Prices Discussion Paper.

In recent times the level of competition in Australia's domestic transmission markets has — in the main — increased, as evidenced by the ACCC's recent decision in the DTCS Service Declaration which saw deregulation extended to an additional 112 metropolitan ESA's and eight regional routes despite the adoption of a more stringent competition methodology. While this is a positive outcome, certain bottlenecks continue to persist within the local transmission market to the detriment of both competition and the long term interest of end users (LTIE). These bottlenecks primarily arise in relation to tail-end services and those segments of the market where competition is limited or non-existent. Against this backdrop the current FAD process will be important in shaping competitive dynamics within the transmission sector over the period to 2019.

Nextgen recognises that the use of a benchmarking framework is, for practical reasons, the most appropriate approach for the setting of regulated transmission prices to apply over the course of the next FAD. Due to the applied nature of this undertaking, and the wide range of potential inputs including assumptions, we submit that a level of caution — and indeed iteration — is required in order for benchmarking to be successfully deployed. Specific areas we nominate for particular attention include the treatment of outliers, demand, distance and discounts.

Nextgen also notes that in considering the interplay which exists between competitive dynamics (including the absence of these) and price outcomes, the ACCC now has the benefit of access to a potentially rich source of information in the form of the Infrastructure Reporting record keeping rule (RKR). This information, in conjunction with time-series type price information, has the capacity to offer unparalleled insight into the relationship between new fibre builds, potentially a proxy for market entry (and by extension the number of market participants), and overall price outcomes.

In addition to the area of benefit identified above, the availability of infrastructure data under the RKR may also support reconsideration of the current approach to the categorisation of DTCS routes. To the extent which any revisitation of the route categorisation framework results in a more granular picture of competitive dynamics being obtained, the ability to set regulated prices which promote the LTIE and retain incentives for ongoing infrastructure investment may be improved.

One other area where specific attention is required is the approach to tail-end services. Nextgen submits that this area continues to be an enduring bottleneck, reinforcing the case for the unbundling of these services and the adoption of a price structure which is appropriately reflective of the underlying costs incurred.

2 RESPONSE TO QUESTIONS

Question	Response
1. Does the domestic benchmarking approach continue to be an efficient and appropriate methodology for setting regulated DTCS prices? Please provide detailed reasons.	Nextgen understands that a domestic benchmarking approach is preferred to a cost-based approach for the purposes of setting prices for the regulated DTCS due to various considerations including cost, timeliness and overall practicality. As noted in the Discussion Paper though, domestic benchmarking approaches have a number of limitations. In order for the domestic benchmarking approach to be considered an efficient and appropriate methodology, these limitations need to be recognised and provided for. To this end, some iteration of the benchmarking analysis may also be required. A key issue with any benchmarking approach is the appropriateness of the assumptions which are employed to support application. These assumptions can extend to the overall construct, the way in which raw data is filtered, the explanatory variables which are selected and any practical compromises which are made in relation to these. *The overall construct* Page 10 of the Discussion Paper references the earlier 2012 DTCS FAD process, and in relation to the selection of a domestic benchmarking includes the statement that: *"This approach considered that prices in competitive areas and on competitive routes were reflective of the costs of supplying efficient services. It therefore relied on pricing information obtained from transmission providers for services provided in the market to form the basis for prices and price structures on non-competitive routes."* This sentiment reduces to a view that prices in competitive areas reflect costs, so these prices must also be reflective of costs in non-competitive areas. Nextgen submits that this is an overly simplistic view of the relationship between prices and costs, and undue adherence to it risks the incidence of regulatory error. Weaknesses of the 'prices must reflect costs' sentiment include: • The absence of any provision for the number of participants within a 'market'. Participant numbers vary across the broader DTCS market and are a key consideration underpinning declaration (where it exists). The issue here is that in any given market prices reflect — to some extent — the number of participants, with the level of price competition typically correlated with participant numbers;

- Little regard for demand side considerations. Demand side considerations influence the prices within a given market, the number of market participants and the pace of the cost recovery task common to all infrastructure investments. If demand considerations are not appropriately provided in a benchmarking exercise there is a risk that the corresponding outputs will not support cost recovery over time, potentially compromising both service availability and new investment decisions; and
- The absence of any provision for profit or rate of return, which is a common feature of many regulatory frameworks.

On account of the points above, Nextgen submits that that the use of some reasonableness is required when it comes to applying the 'prices must reflect costs' sentiment in a benchmarking exercise.

Data filtering and the treatment of explanatory variables

The approach to data filtering and the treatment of various explanatory variables is central to the application of a benchmarking approach. Without appropriate care and consideration, there is a risk that each of these areas may introduce an element of bias to the empirical analysis.

The table below summarises key matters relating to data filtering and the treatment of various explanatory variables where we believe caution is required, along with an initial assessment of associated risks and the extent to which these can be managed in an applied setting.

Area	*Key risks*	*Capacity to provide for/manage*
Data filtering, outliers	Genuine data points are excluded, altering the 'mean' of the remaining data set — in practice this is more likely to be an incorrect downward shift, as opposed to an incorrect upward short. Furthermore, the exclusion of data points perceived as being outliers may also obscure the incidence of predatory pricing behaviour, especially if the ACCC is to focus on price trends over a given period as opposed to the prices applicable at a given point in time.	Moderate – scenario analysis could be undertaken with and without inclusion of identified outliers. Cross-checks between specific price points, perceived as potential outliers, and information provided under the infrastructure reporting RKR may also assist the task of data filtering — the point here is that some perceived outliers could be revealed to be reflective of an absence of competitive dynamics.
Distance	Distance has previously been found to be a key explanatory variable, but the use of radial distance as the measure entails some understatement as to the true distance of associated transmission infrastructure, leading to underestimation of costs (and therefore prices).	Limited, as the use of radial distance is the most pragmatic approach given the difficulties of measuring true distance on a route by route basis.

	<table><tr><td>Demand</td><td>Difficult to capture in the benchmarking analysis, and intertwined with other variables such as the classification of route type, but also highly relevant to price setting. The risk is setting prices which are below the level required to support cost recovery, given demand conditions in a regulated area.</td><td>Limited in respect of raw data, as there is a general disconnect between the demand conditions in competitive and non-competitive segments of the DTCS market.</td></tr><tr><td>Discounts</td><td>Price discounts may be availed in some circumstances, but these are not always clearly recorded on internal systems. This means that raw price data may understate the true price conditions within the market.</td><td>Limited if the availing of discounts cannot be clearly identified.</td></tr></table> Nextgen would welcome comment from the ACCC on the extent to which the practical considerations identified above are seen as issues for the benchmarking analysis, and how the emergence of potential biases can be avoided. Thus in summary, the proposed domestic benchmarking approach appears to: a) be an **efficient** way of setting prices for regulated DTCS services, noting the time and resource intensive nature of cost-based approaches; and b) have the potential to be an **appropriate** way of setting prices for regulated DTCS services, with this being contingent on the approach taken to data filtering and key explanatory variables, along with the use of some reasonableness in terms of applying the 'prices must reflect costs' sentiment. A further consideration is the extent to which information available to the ACCC under the infrastructure reporting RKR can complement and inform the application of a benchmarking framework.
9. What level of engagement by industry or independent experts would be necessary/appropriate for analysis of the pricing data in establishing the regression model for benchmarking DTCS prices?	Nextgen agrees that engagement with stakeholders will assist with refinement of the regression model and the eventual application of its outputs to determine final prices, noting the actual level of engagement is likely to be a function of the process adopted by the ACCC and natural 'check-in' points within this. The use of a collaborative approach between relevant experts around the analysis of raw data, and the application of a regression model to this, is appropriate. Such an approach, however, should not mask any areas of divergent views. Indeed, where any divergences of view arise the nature and implications of these should be canvassed with relevant stakeholders in the interests of finding an appropriate resolution.
10. What specific confidentiality safeguards are required to ensure that relevant experts have appropriate access to raw pricing data to	As the industry data which is to be provided for the purposes of regression analysis is highly commercial and sensitive in nature, it is appropriate for specific confidentiality safeguards to be adopted. Common provisions within confidentiality undertakings — which could be adopted for current purposes —

assist the ACCC?	include: • Acknowledgement as to the specific purposes for which access to raw data is provided; • Acknowledgement that the confidentiality of the raw data provided is to be protected, and this includes the avoidance of disclosure to anyone who has not signed the associated undertaking, a prohibition on copying or reproduction and physical safeguarding where appropriate; • Acknowledgement that each provider of raw data retains the ownership of that data; • Acknowledgement that the raw data is to be destroyed or returned to the ACCC at the conclusion of the DTCS FAD process; and • Acknowledgement that the undertaking is governed by legislation, with the specific jurisdiction being a function of where a given data provider is based. Additional, specific safeguards which the ACCC may also wish to consider include: • Restrictions on the disclosure of any given data providers identity, potentially effected by the use of de-identifiers on the raw data in question; and • Restrictions on any usage which would enable the identity of data providers to be derived.
11. What changes to the 2012 DTCS FAD regression model should the ACCC consider in building the 2014 regression model to calculate benchmark prices for the 2015 DTCS FAD?	In relation to the 2014 regression model Nextgen submits that the ACCC should have particular regard for: • re-examining the statistical significance of all observable variables associated with the provision of transmission services, including the number of providers in any given competitive area; • the approach to outliers — in particular consideration should be given to running regressions with and without any identified outliers, to establish if more granular consideration as to the distribution of raw price points is required; • the treatment of key explanatory variables where practical, applied considerations require the use of assumptions — as outlined in response to question (1), the variables where Nextgen considers caution is required include distance, demand (if it is retained) and discounts; and • the potential merits of adopting a route type matrix approach in preference to the existing route classification framework – the issues here (elaborated upon in response to question (25)) essentially relate to the capacity for such an approach to support more transparent and cost-reflective pricing in the least competitive parts of the market. One further matter which the ACCC may also wish to have regard for is the extent to which information provided under the infrastructure reporting RKR can be leveraged to complement the consideration of raw pricing data. In particular, the establishment of new fibre infrastructure may in some instances result in

	significant changes to the prices which are willingly availed to the market. In addition to illuminating the explanatory power of infrastructure competition, such an analysis may also provide granular insight into the relationship between prices and the number of participants in any given part of the market.
12. Which variables should the regression analysis focus on? Which variables should the regression analysis place less emphasis on and which should it disregard? Are there any additional variables that the ACCC should take into account in the model? Please provide reasoning.	Variables which the regression analysis should focus on include: • Data rate (i.e. capacity); • Distance; • Protection; • Network interface; and • Number of participants. In relation to the last suggested variable, number of participants, this is put forward on the basis that prices will frequently vary according to the number of participants. As such, some form of control or provision for the number of participants should be provided for in the regression analysis. Given the threshold embedded in the ACCC's competition methodology for the purposes of making a declaration is the presence of three of the major four providers it is arguably this market outcome which the ACCC should be trying to replicate via the benchmarking exercise. In order to determine where the emphasis should be placed, the ACCC should re-examine the statistical significance of the variables identified above once the collection of raw pricing data is complete.
13. Should the ACCC focus on prices negotiated since the 2012 DTCS FAD in establishing pricing benchmarks or should the ACCC only focus on prices negotiated in 2014?	Nextgen submits that focusing on prices negotiated since 2012 may provide the ACCC with a richer insight into price outcomes (and the drivers of these) than a focus on prices negotiated in 2014 alone. Whether nor not this is the case depends on the data collected and the ability to match it with information provided under the Infrastructure Reporting RKR. Nextgen submits that, if possible, a particular area of focus should be the changes in price that are observed on a given route when new infrastructure (i.e. fibre) is commissioned. It is in this type of setting where time-series data has a greater value than panel data alone, and this sentiment could be borne in mind in the context of the forthcoming data request.
14. Should the ACCC reconsider the approach to selecting the benchmarked price point to use to set regulated prices? If so, which approach would be more appropriate and why?	As it is not possible to undertake sanity checks until the initial results are available, Nextgen is not yet in a position to comment on this matter.

15. Are there any other issues that the ACCC should consider when developing the model?	No response.
16. Is an approach that accounted for expected changes in price over time (that is, based on analysis of pricing data from 2011 to 2014 and projected forward into the next FAD period) appropriate for the next FAD?	Given the dynamism of transmission markets Nextgen expects that prices will continue to change over time. Instead of factoring expected changes into the next FAD ex ante, Nextgen submits that the ACCC should consider a re-pricing process at (or close to) the mid-point of the next FAD. This approach offers the advantage of capturing actual as opposed to expected outcomes, noting that the market dynamics (and especially provider consolidation) which prevailed during the last FAD may not be repeated during the course of the next FAD.
17. Alternatively, should the ACCC consider periodic re-pricing during the next FAD? If so, why? How frequently should the ACCC consider re-pricing and should it be automatic or a full review?	Nextgen supports the proposal for the consideration of a re-pricing exercise during the course of the next FAD, and sees this as a preferable approach to factoring in expected price changes ex ante. In terms of timing, a re-pricing process could be considered at — or close to — the mid-point of the next FAD. Nextgen would welcome further details on how a re-pricing process would be effected (i.e. would it require comprehensive updating of the forthcoming benchmarking exercise?).
18. Should the pricing of services over the SDH interface be considered separately from Ethernet services?	Nextgen submits that many SDH and Ethernet services are priced similarly, so separate consideration of pricing may not be required. This proposition could potentially be verified by the ACCC through the forthcoming data collection exercise.
19. Should the ACCC maintain the approach to incorporate a variable for 'protection' in the regression model?	Nextgen supports continuation of the earlier approach, whereby a variable for protection was included in the regression analysis, noting that protection has previously been found to be statistically significant.
20. What is the minimum form of protection required for a DTCS service?	Protection can be provided for in various ways (i.e. electronically, via separate paths or customer management), and different providers have different capabilities in relation to this service attribute. On this basis the minimum form of protection is what a given carrier can provide. For the purposes of benchmarking, consistency in the treatment of protection would appear to be the key issue for consideration.
21. Is quality of service sufficiently reflected in the 2012 DTCS FAD regression model?	Yes, quality of service was sufficiently reflected in the 2012 DTCS FAD regression model.

22. If so, should the ACCC maintain the same approach in the next FAD? What are the benefits and costs of maintaining the same approach?	Nextgen supports continuation of the earlier approach, whereby 'quality of service' was included as a separate explanatory variable and prices were based on the service attributes of a provider with the highest quality of service. This issue with this approach is that not all providers are capable of meeting each quality of service attribute to a high level, but this in turn underlies a degree of product differentiation and which can enable commercial negotiations around terms and conditions to occur. In considering its approach to quality of service, the ACCC may wish to have regard to positions which were advanced in the earlier FAD process and offers subsequently availed to the market by different participants.
23. If not, how should quality of service be incorporated into the regression model?	No response.
24. Are the route categories of inter-capital, metropolitan and regional relevant for the next FAD?	One issue with respect to the current route categories — especially metropolitan and regional — is that they have little granularity with respect to the interplay between competitive dynamics, the absence of these (i.e. monopoly routes) and price outcomes. To the extent which route categories are an input to the benchmarking analysis, this would be an issue which draws into question the relevance of the current categorisation framework. As per the earlier suggestion for the ACCC to consider utilising information provided under the infrastructure reporting RKR, the establishment of new fibre infrastructure — which goes to the number of participants in a given part of the market — may well be a factor with considerable explanatory power when it comes to price outcomes. With this proposition in mind, there could be merit in considering a route classification framework which captures the interplay between competitive dynamics and price outcomes more clearly than what is currently the case.
25. Should the ACCC consider adopting a route type matrix approach for pricing in the next FAD?	Nextgen recognises that a route type matrix approach could offer benefits in terms of greater granularity about the interplay between competitive dynamics (or otherwise) in a given area and price outcomes, which could in turn support improved regulatory price setting activity. To this end, consideration may also need to be given to the inclusion of a zoning overlay which took account of participant numbers. If the ACCC is to consider adopting a route type matrix approach, Nextgen would support the ACCC leading an exploration of the associated practical implications.
26. Are there any alternative approaches to the existing route categories or Telstra route type matrix that balance transparency and	No response.

simplicity with a higher level of cost reflectivity?	
27. Should the ACCC continue with its approach to the distance variable in the regression analysis?	The Discussion Paper notes that the ACCC, in the 2012 DTCS FAD, used the radial distance between the A-end and B-end locations as its measure of distance. Nextgen appreciates that the radial distance approach has the advantage of being readily calculated from publicly available resources, with the downside being the possibility of some understatement as to the true distance. For practical reasons a continuation of the current approach is likely to be the best way of providing for distance, however — as noted earlier — the associated propensity to understate true distance (and cost) should be borne in mind the both the application of a benchmarking framework and the subsequent selection of a price point.
28. Should the ACCC consider using a route type matrix in deriving DTCS pricing from the regression model?	In relation to the proposition that the ACCC use a route type matrix approach for the derivation of DTCS pricing from the regression model, it is not clear that this would constitute an improvement on the propensity for radial measures of distance to understate actual path kilometres (and thus actual cost) as outlined above. This issue, however, can be accommodated within a regression framework and would also appear to be secondary to the overall level of granularity about competitive dynamics (or otherwise) which the route classification framework enables. This in turn could enhance the ACCC's ability to set regulated prices which promote the LTIE and retain incentives for ongoing infrastructure investment.
29. What range of capacities should the ACCC price?	Nextgen supports the sentiment that the FAD should seek to price the capacities which are the most commonly sold in today's transmission markets. As such ACCC — for metropolitan and regional routes — should focus on pricing capacities between 1G and 10G.
30. Should the range of capacities for which the FAD prices apply be reviewed during the term of the next FAD?	If the ACCC price capacities (on metropolitan and regional routes) between 1G and 10G as suggested above, Nextgen expects there would be no need to review this during the term of the next FAD. If, however, evidence emerges during the forthcoming regulatory period that a significant volume of services are being sold at capacities outside the FAD a review of the FAD's scope could be warranted.
31. To what extent should the regression analysis focus on contract length?	Given the DTCS service declaration pertains to services availed on 12 month contracts, contract length would — prima facie — not appear to be a significant variable for the regression analysis to focus on. If the analysis is to focus on contract length it would seemingly need to provide for price discounts which can be a feature of longer term/multi-year contracts.

32. Should the ACCC continue to price the DTCS for a contract period of 12 months in the next FAD? If not, what term period should be considered and what are the costs and benefits of an alternative approach?	Nextgen supports the proposal to continue to price the DTCS for a contract period of 12 months in the next FAD.
33. How should the ACCC take into consideration the effect of term and/or whole of business discounts in setting DTCS prices in the next FAD?	In relation to contract term, Nextgen would support consideration being given to ways for providing for this in the regression analysis. The incidence of 'whole of business' discounts is likely to be more challenging for the regression analysis, as (a) they not always be recorded on internal systems and (b) they could have a uniform or national form, giving rise to some incidence of 'unders and overs'.[1] To some extent raw price data points associated with 'whole of business' discounts may be picked up in the initial filtering of outliers — whether this is right or wrong is not clear ex ante, and for this reason some scenario analysis with and without identified outliers may be required.
34. Which of the discounts, which are made available as part of commercial negotiations, should be taken into account in the regression analysis?	As above, Nextgen supports the ACCC focusing on the two identified, common sources of discount in relation to the DTCS — longer contract terms (i.e. multiyear) and/or whole of business deals. We note that the former of these will only be relevant if the ACCC collects price data pertaining to longer contract terms as part of its data request.
35. Should the regression analysis consider the level of demand (reflected by some measure such as a combination of population density and services in operation) as a variable in the analysis?	Nextgen would support efforts to provide for demand as a variable in the regression analysis, including the possible use of proxies. In our view the level of demand on a particular transmission route can be critical for understanding both the general pricing environment for transmission services and price differences between routes which otherwise appear to have similar characteristics (e.g. regional transmission routes).
36. Should some other account of demand be included in the regression analysis?	The ACCC may wish to provide for the number of providers on a given route, noting that demand is likely to be positively correlated with this variable. We anticipate that the inclusion of a provider count variable may illustrate that lower levels of participation reflect lower levels of demand, and on account of this prices which are (a) amenable to cost recovery over time and (b) concordant with some level of incentive for market entry / new infrastructure investment.

[1] That is, all services are availed at a given national price, which in aggregate equates to a discount but in the context of a single given route may be over or under the standard, non-discounted price.

	Further illumination as to the influence of provider numbers on price outcomes may be availed through reference to (or cross checks with) information provided under the infrastructure RKR.
37. Should the pricing of tail-end services as a stand-alone product be revised to reflect the market practice of bundling	Nextgen would support a revision of the way in which tail-end services are priced. Our particular concern is that the pricing of tail end services frequently appears to have little relation to the underlying costs, and on a per kilometre (km) basis can be a magnitude of order above the prices observable in other parts of the market. By way of example a regional, 100 Mbps service over a distance of 1000 km could be priced at $190,000 p.a. while a similar regional, 100 Mbps service over a distance of 5 km is priced at $66,000 p.a. — the inference here is that services on the first 995 km are worth ~$190 per km, but those over the last 5km are worth $13,000 per km. This type of scenario is clearly a constraint on competitive dynamics, and should be a focus of the ACCC's attention in the FAD process.
38. Should pricing on deregulated NBN POI routes be considered separately in undertaking the regression analysis for the next FAD?	Nextgen sees no reason at the current point in time separate consideration of the pricing on deregulated NBN POI routes in the regression analysis for the next FAD.
39. Should the 2015 DTCS FAD maintain an uplift on pricing to Tasmania to reflect the higher costs associated with the route? If so, does 40% remain appropriate?	No response.
40. What is an appropriate time period for the next FAD?	Nextgen supports the FAD having a time period which is consistent with the revised DTCS service declaration. As the service description expires on 31 March 2019, this suggests a time period for the forthcoming FAD of four years and three months (as the current FAD expires on 31 December 2014).
41. Are there any circumstances that warrant a difference in the expiry dates of the access determination and the DTCS declaration?	Ex ante we are not aware of any circumstances that would warrant a difference in the expiry dates of the access determination and the DTCS declaration, but if there were evidence of market practices deviating significantly from either the access determination of service declaration a revisitation of expiry dates (and/or pricing provisions) could be warranted.
42. If price terms of the DTCS are reviewed during the course of the FAD term, what would be an appropriate period in which such a review should take place?	In Nextgen's view any move to revisit the FAD price terms should only be triggered by evidence of market developments which are considerably divergent from the access determination and/or DTCS declaration. While time factors could be a driver of any such divergence, we do not consider that the passage of time itself should trigger a revisitation of the FAD (other than actual expiration of the FAD).

3 CONTACT DETAILS

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