



PUBLIC VERSION

1 UBS Pricing Update

This note provides an update of the UBS price and some comments on retail price discrimination.

1.1 Need to update price

The initial price set in Decision 568 is now obsolete. As TNZ notes¹, there have been significant changes in the retail broadband market since December. In particular, in April TNZ made several changes to the retail prices which formed the basis of the initial price determined in Decision 568.

The Decision for Telstra-Clear provides for changes in the retail market to flow-through to the Bitstream (UBS) access price. But that Decision applies only to Telstra-Clear. Consequently, the initial price emerging from this new application needs to reflect current retail prices.

¹ TNZ letter of 27 March, para 18(b)

1.2 The December price

The UBS model used in Decision 568 is set-out below.

Table 8: Residential Xtra Jetstream Services

Plan Name	Speed (down/up)	Data Cap (GB)	Retail Price (excl GST) excl tolls	Excess (\$/Mb)	ISP component (excl GST)	Standalone retail price (excl ISP)
Go	256/128	1	\$44.40	Throttled	\$8.89	\$35.51
Discover	1M/128	1	\$48.84	Throttled	\$8.89	\$39.95
Explorer	256/128	3	\$53.29	Throttled	\$8.89	\$44.40
Adventure	2M/128	10	\$62.18	Throttled	\$8.89	\$53.29
Navigate	2M/128	10	\$62.18	\$0.02	\$8.89	\$53.29

Source: Determination 568, Table 8

Table 9: Calculation of the Monthly Adjusted Retail Price

Residential Jetstream		Go	Discover	Explorer	Adventure	Navigate
Jetstream		\$35.51	\$39.95	\$44.40	\$53.29	\$53.29
ISP		\$8.89	\$8.89	\$8.89	\$8.89	\$8.89
Standalone Prices	Tolls	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Total standalone price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Tolls discount		\$8.89	\$8.89	\$8.89	\$8.89	\$8.89
Bundled price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Bundled as % total standalone		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Imputed Jetstream Price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI

Source: Determination 568, Table 9

Table 12: Residential Jetstream Plans

	Go	Discover	Explorer	Adventure	Navigate
Imputed price	[] TNZRI	[] TNZRI	[] TNZRI	[] TNZRI	[] TNZRI
Data Cap (GB)	1	1	3	10	10
Regression					
Slope	[] TNZRI				
Constant	[] TNZRI				
Discount	16%	Discount for avoided costs			
Constant after discount	\$27.86	plus GST			

1.3 The new (April) price

Despite TNZ’s introduction and withdrawal of some residential Xtra Jetstream plans, it is not difficult to apply the same method used in Decision 568 to current prices to determine a new initial UBS price.

The Commission’s approach is based on plans with an uplink of 128Kbps and then strips-away costs and functions not associated with the provision of the regulated service. Using the 128Kbps plans, the revised UBS price is calculated as \$22.70 plus GST.

Table 8: Residential Xtra Jetstream Services

Excludes GST @ 12.50%

Plan Name	Speed (down/up)	Data Cap (GB)	Retail Price (excl GST)	Excess (\$/Mb)	ISP component (excl GST)	Standalone retail price (excl ISP)
Go	2M/128	1	\$44.40	Throttled	\$8.89	\$35.51
Discover						
Explorer	3.5M/128	5	\$53.29	Throttled	\$8.89	\$44.40
Adventure	3.5M/128	10	\$62.18	Throttled	\$8.89	\$53.29
Navigate						
Basic	256/128	0.2	\$35.51	\$0.02	\$8.89	\$26.62

Source: Determination 568, Table 8 updated by Consultant

Table 9: Calculation of the Monthly Adjusted Retail Price

Residential Jetstream		Basic	Go	Explorer	Adventure
	Jetstream	\$26.62	\$35.51	\$44.40	\$53.29
	ISP	\$8.89	\$35.51	\$8.89	\$8.89
Standalone Prices	Tolls	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Total standalone price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Tolls discount		\$8.89	\$8.89	\$8.89	\$8.89
Bundled price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Bundled as % total standalone		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Imputed Jetstream Price		[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI

Source: Determination 568, Table 9 updated by Consultant

Table 12: Residential Jetstream Plans

	Basic	Go	Explorer	Adventure
Imputed price	[]TNZRI	[]TNZRI	[]TNZRI	[]TNZRI
Data Cap (GB)	0.2	1	5	10

Regression

Slope	[]TNZRI
Constant	[]TNZRI
Discount	16%
Constant after discount	\$22.70

Note that in the interests of expediting the application, the access seekers are prepared to accept the 16 percent discount for avoided costs that forms part of Decision 568. This also obviates the need for any new benchmarking study².

² TNZ letter 27 March, paras 9 and 18(a)

2 Retail Price Discrimination

A major part of the debate leading to Decision 568 was whether the determination of a uniform access price for the UBS would undermine incentives to price discriminate in the retail space (a desirable outcome as cost recovery is then accomplished by taking higher margins from users with inelastic demand).

This issue has to be seen in the context of sections 18 and 19 of the Telecommunications Act which require the Commission to consider how any “act or omission” on its part might impact competition for the long-term benefit of end-users and the “efficiencies” that might follow.


2.1 Evidence of price discrimination


During the debates leading to Decision 568, ihug’s broadband prices were singled-out by TNZ as an example of allegedly inefficient pricing on the basis that the highest speed possible (then 2Mbps, now 3.5Mbps) was made available across all ihug’s residential ADSL plans. As the Commission concluded, price discrimination is still evident across ihug’s plans (Determination para 317).


Currently, the price points on ihug’s ADSL plans mirror TNZ’s exactly. TNZ’s prices on Go, Explorer, Adventure, Pro and Pro-Advanced plans are the same as ihug’s Starter (except with 3.5Mbps download versus 2Mbps on Go), Light, Medium, Power and Extreme plans (all compared inclusive of toll service at April).


Similar pricing structures can be observed across ISPs as shown in the table below,

Residential Plans at April 2006

Telecom Plan name	Downloading	Uploading	Data cap	TCNZ With Tolls incl GST	TCNZ Without Tolls incl GST
					
Basic	256Kbps	128Kbps	200 \$	29.95 \$	39.95
Go	2Mbps	128Kbps	1000 \$	39.95 \$	49.95
Explorer	3.5Mbps	128Kbps	5000 \$	49.95 \$	59.95
Adventure	3.5Mbps	128Kbps	10000 \$	59.95 \$	69.95
Pro	3.5Mbps	512Kbps	10000 \$	79.95 \$	89.95
Pro Advanced	3.5Mbps	512Kbps	20000 \$	99.95 \$	109.95
Pro Ultra	3.5Mbps	512Kbps	40000 \$	149.95 \$	159.95

IHUG Plan name	Downloading	Uploading	Data cap PEAK 8am - 12pm	IHUG With Tolls incl GST	IHUG Without Tolls incl GST
					
Pay as you go	3.5Mbps	128Kbps	500 \$	29.95 \$	39.95
Starter	3.5Mbps	128Kbps	1000 \$	39.95 \$	49.95
Light	3.5Mbps	128Kbps	5000 \$	49.95 \$	59.95
Medium	3.5Mbps	128Kbps	10000 \$	59.95 \$	69.95
Heavy	3.5Mbps	128Kbps	20000 \$	79.95 \$	89.95
Power	3.5Mbps	512Kbps	10000 \$	79.95 \$	89.95
Extreme	3.5Mbps	512Kbps	20000 \$	99.95 \$	109.95

Orcon Plan name	Downloading	Uploading	Data cap	ORCON With Tolls incl GST	ORCON Without Tolls incl GST
					
Surfer Starter	256Kbps	128Kbps	2000 \$	29.95 \$	39.95
Surfer Light	2Mbps	128Kbps	4000 \$	39.95 \$	49.95
Surfer Medium	3.5Mbps	128Kbps	10000 \$	49.95 \$	59.95
Pro Surfer	3.5Mbps	512Kbps	4000 \$	69.95 \$	79.95
Advanced 60	3.5Mbps	512Kbps	60000 \$	149.95 \$	159.95
Advanced 100	3.5Mbps	512Kbps	100000 \$	199.95 \$	209.95
Advanced 200	3.5Mbps	512Kbps	200000 \$	299.95 \$	309.95

Slingshot Plan name	Downloading	Uploading	Data cap	Slingshot With Tolls incl GST	Slingshot Without Tolls incl GST
					
Express 3GB	256Kbps	128Kbps	3000	29.95	39.95
Extreme 5GB	2Mbps	128Kbps	5000	39.95	49.95
Sprint 10GB	3.5Mbps	128Kbps	10000	49.95	59.95

It is also interesting to note that iinet, ihug's parent company which is also the third largest ISP in Australia, has been offering high-speed ADSL2+ services for some time with retail price discrimination that does not constrain the maximum download speed (see <http://www.iinet.net.au/products/broadband/>).

2.3 Economics of retail price discrimination

The economic theory of price discrimination was discussed at length in the proceedings and subsequent Determination in December. So, we know that retail price discrimination improves economic welfare. But, how do we know that a service provider faced with a uniform access price will practice retail price discrimination?

First, as a thought-experiment, it seems that likely that if access-seekers were able to offer unconstrained download speeds, they would. Where higher speeds are offered the experience is that this is very attractive to customers.

Second, it would not make any commercial sense to offer a single retail plan as this would sacrifice profits. ISPs "price down the demand curve" with segment pricing. To offer an average price might attract heavy users while "leaving money on the table" (ie not extracting what these customers were willing to pay) and would lose customers not prepared to pay this average price (and who might have been persuaded to trade-up later).

Third, the data cap seems a sensible basis for price discrimination because it is where the incremental costs are incurred – faster speeds tend to lead to more down-load and that incurs more transmission costs (including transit fees under internet charging arrangements).

Fourth, the ISPs only have to compete with the industry umbrella prices set by TNZ. The fact that ISPs have similar price points as TNZ is no surprise. This effectively uses TNZ's assumptions about customer preferences to mirror price points.

It makes commercial sense to price discriminate at the retail level, as the Commission concluded.

J de Ridder
12 April, 2006

Biographical Note:

John de Ridder is a telecommunications economist who has played several roles in Telstra's transition from government monopoly to a partially privatised communications company subject to full competition:

- As Chief Economist in Corporate Finance he influenced the environment for competition with numerous studies on international price benchmarking, natural monopoly and universal service. These include the world's first costing of the universal service obligation where he led the Telstra team.
- As the first Commercial Manager of Telecom's Interconnect Unit he helped negotiate the commercial framework for interconnection with the Regulator (AUSTEL) and then the first comprehensive interconnect agreement with the new entrant (Optus).
- As Manager Pricing Strategy in Telstra Corporate Marketing he was directly involved in all aspects of retail pricing from the start of competition in fixed and mobile networks. This role included managing price caps, leading a pricing strategy study which set the direction for the pricing of Telstra's fixed, mobile and broadband services and optimising retail and wholesale prices across the company.
- As Manager Data Pricing in Telstra Wholesale he priced broadband access and data products to other service providers and provided internal advice on key regulatory issues.

John has also worked for economic and management consulting firms in the UK (DRI/McGraw-Hill) and Australia (IBIS) as well as in the planning departments of major corporations in both countries (Shell and ICI). He is now assisting corporations and government agencies (OECD and APEC) in countries grappling with competition issues in telecommunications. He is also the author of the fortnightly column "Economuse" in the influential Australian newsletter, "Exchange".