

Description:

Unbundled bitstream service (UBS) is an asymmetric digital subscriber line (ADSL) enabled service that gives internet providers access to and interconnection with the part of Telecom's fixed public data network (PDN) that connects a customer's premises to a suitable collection and handover point.

UBS was originally intended to provide a low-grade "best-effort" internet access service, and thus the original regulated definition of UBS had a maximum upstream throughput rate of 128 kbps for customers' data traffic and a downstream throughput rate of not less 32 kbps, with an average of not less than 256 kbps.

In the proposed second generation UBS regulations, as considered by Parliament during the second half of 2006, these constrictions are removed in order to be able to deliver real time services.

The initial pricing for regulated UBS was based on the retail price minus a discount benchmarked against discounts in comparable countries. The final regulated pricing would be the retail price minus a discount comprising avoided costs. However, any commercial pricing agreement would replace this.

UBS is not a retail product – service providers must add additional components in order to be able to offer it to customers as a broadband product.

Background:

The Telecommunications Act 2001 instigated the appointment of the Telecommunications Commissioner, who among other things was required to investigate whether or not access to the unbundled elements of Telecom's local loop network should be regulated.

September 2003	The Commission issued a draft recommendation that the Government should adopt LLU (<i>Please see ISPANZ LLU Position Paper</i>).
December 2003	The Commission did an about-face, recommending that the Government regulate access to UBS instead of LLU.
May 2004	The Minister of Communications announced his decision to accept the Commission's recommendation to regulate UBS instead of LLU.
September 2004	Telecom launched retail 1 and 2 Mbps flat-rate Jetstream ahead of its UBS launch.
October 2004	Telecom proactively launched a commercial residential and business 256 kbps UBS product.
November 2004	Both TelstraClear and ihug applied to the Commission for a determination regulating improved UBS specification, after negotiations with Telecom failed.

December 2004	ihug withdrew its application after negotiating satisfactory terms with Telecom for 1 and 2 Mbps UBS.
March 2005	Telecom launched residential 1 and 2 Mbps UBS products.
July 2005	Telecom launched business 1 and 2 Mbps UBS products.
November 2005	Telecom commenced litigation against the Commission, challenging the pricing methodology used in the draft TelstraClear determination.
December 2005	The Commission issued the final TelstraClear UBS determination, offering a single business and residential product, with unconstrained downlink speed; but with the uplink speed remaining at 128 kbps. Telecom was given until mid-June to implement the regulated UBS; with litigation to be resolved first.
January 2006	Telecom and TelstraClear agreed to a commercial UBS product, downgraded from the regulated UBS, but supposedly available earlier (along with a cash settlement). The key change was a downgrade to 3.5 Mbps, at a more expensive price.
March 2006	Telecom offered an improved version of the TelstraClear commercial UBS deal to the rest of the industry, including a 3.5 Mbps/512 kbps product. However this was still an inferior offering to the regulated UBS and both ihug and CallPlus applied to the Commission for a repeat of the TelstraClear UBS determination, after negotiations with Telecom for a further improved commercial UBS failed.
April 2006	Telecom launched wholesale 3.5 Mbps UBS with both 128 kbps and 512 kbps uplink speeds, at the same time as their equivalent retail offering.
May 2006	Government announced planned legislative changes including the revision of the regulated UBS service to remove the 128 kbps upstream constraint.
June 2006	The Commission issued the final ihug/CallPlus UBS determination, offering the expected single business and residential product, with unconstrained downlink speed; but with the uplink speed remaining at 128 kbps. Telecom was given until late October to implement the regulated UBS. This regulated UBS is expected to suffer from service quality issues, with noticeable impact on the quality of real-time services, during times of heavy use.
July 2006	Telecom announced that it would voluntarily launch an unconstrained/unconstrained UBS product at the same time as regulated UBS.
August 2006	Telecom confirmed a commercial UBS line-up of 256 kbps and 2 Mbps alongside the two unconstrained UBS products.
September 2006	Telecom announced all-full-speed WBS and retail broadband line-up for October, at below regulated UBS cost. Ihug, CallPlus and Orcon appealed to the Commission to deal with this price-squeeze.

Issues:

Time Delays: It took a year to get the first commercial UBS and a further year to get the initial determination for regulated UBS, which was then shelved by TelstraClear. The implementation of regulated UBS has had to wait a further eight months, as has a commercial UBS service that is unconstrained in both directions.

Commercial Viability: UBS products have not been commercially viable for resellers. In contrast with the improvements in the product over time, the UBS pricing has actually deteriorated relative to retail, to the point where from October 2006 it is actually priced above retail. In addition, the nature of UBS does not provide resellers with great enough opportunity to differentiate between their products. This is due in part to Telecom's insistence that UBS products are only available when Telecom's retail phone service is also purchased (*please see ISPANZ Naked DSL Position Paper*); as well as the requirement to use Telecom's out-dated ADSL and ATM technology rather than allowing competing service providers to deploy current ADSL2+, and Ethernet technology. Note that Telecom uses lower-cost Ethernet connectivity itself.

Product Limitations: In order for UBS to be viable, the following product limitations must be satisfactorily addressed:

- Wholesale price does not provide an acceptable margin relative to Telecom's retail price.
- Unconstrained uplink is an extra-cost option over the standard 128 kbps uplink product.
- Latency is too high for real time services such as VoIP
- There is a significant speed reduction in busy times due to under-dimensioned backhaul from the DSLAM
- UBS services are not provided on the same basis that Telecom provides broadband technology to its own ISP Xtra.

End-user and Country Impact: In its current form, UBS does not adequately promote competition for the long term benefit of end-users of telecommunications services in New Zealand (as stated in the Telecommunications Act, 2001).

Position:

The Government must follow through with its strengthening of the regulatory approach through the Telecommunications Amendment Bill, including the amendments to the UBS regulated service, that remove the 128 kbps upstream constraint and provide for real-time service capability. The current regime is clearly not working for New Zealand and the approach that UBS should be a low-grade "best-effort" internet access service is completely inappropriate.

New Zealand needs a satisfactory UBS product, truly unconstrained and with improved service levels as follows:

- Unconstrained downlink and uplink speed
- Minimal latency to allow for real time services such as VoIP

- Appropriate dimensioning of the backhaul from the DSLAM to ensure minimal speed reduction in busy times
- Ethernet delivery to resellers, with the option of interconnection co-located at Telecom's USAPs (Unbundled Service Aggregation Points)
- A single wholesale price with a margin that allows for profitable resale in competition with Telecom's retail prices.

As New Zealand progresses along the broadband roadmap (*please see [ISPANZ Broadband Roadmap Position Paper](#)*), further regulatory improvements, such as LLU, will not replace UBS because smaller service providers will still rely on wholesaling services. As such, UBS remains a critical component of effective broadband competition.

Following the broadband roadmap, which is only possible with regulatory support, will create an environment whereby competition occurs at a number of levels from multiple competitors. As a result:

- Our poor international ranking for broadband uptake will improve
- New Zealand businesses will be more competitive in the international market
- The average New Zealander will be able to benefit from lower prices and better services
- New Zealand as a country will reap the significant economic advantages of a broadband enabled society.

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About ISPANZ:

ISPANZ is a non profit, industry group that represents most Internet Service Providers operating in New Zealand. Our membership includes all the major ISPs outside those of Telecom and TelstraClear; plus a broad range of medium and small ISPs. We exist to promote a fair and fully competitive Internet marketplace where our members can deliver the full benefits of the Internet to the New Zealand public and our economy. Our primary goals are to:

- Improve New Zealand's poor International ranking for broadband uptake,
- Enable New Zealand businesses to become more competitive internationally through use of Internet enabled technology,
- Improve Internet pricing and services for ordinary New Zealanders,
- Enable New Zealand to reap significant economic benefits as it becomes a broadband enabled society.

For more information please visit ispanz.org.nz