

Outlook

2002

Welcome to the Autumn 2002 edition of Outlook, Teligen's newsletter covering case studies, reports and items of interest for the telecommunications industry worldwide.

Teligen's focus remains on the world of tariffing and related activities.

Specifically we focus on meeting our clients' needs in the following areas:

- Tariffing
- Tariff Baskets
- Pricing Consultancy
- Competition Consultancy
- Regulation Consultancy

Now part of the \$120m organisation: Harris Interactive, a top twenty worldwide market research company, we offer market research services to technology companies worldwide.

We hope you enjoy this edition of Outlook and find inspiration that helps with your own business challenges. We welcome your comments and queries.

Contact Us

For more information:

Contact: Marek Vaygelt
Tel: +44 (0) 1628 689 755
Email: Marekv@teligen.com

To find out more about our Digital Mobile Baskets or our ADSL Provision articles:

Contact: Alex Lambert
Tel: +44 (0) 20 8263 5443
Email: alexl@teligen.com

To find out more about our Tariff Diary article:

Contact: Bernadette Finn
Tel: +44 (0) 20 8263 5442
Email: bernadettef@teligen.com

To find out more about our EU Tariff Monitoring Study article:

Contact: Lynn Thomas
Tel: +44 (0) 20 8263 5449
Email: lynnt@teligen.com

To find out more about our Tariff Monitoring, Recent Reports, T-World or ICD article:

Contact: Garry Reynolds
Tel: +44 (0) 20 8263 5406
Email: garryr@teligen.com

New OECD/Teligen Digital Mobile Baskets Launched

As part of its T-Basket product line, Teligen has recently released a new set of OECD digital mobile baskets that significantly enhance the scope of this state of the art global price comparison of telecoms services.

The OECD (Organisation for Economic Co-operation and Development) Price Performance Baskets have been offered as a commercial product by Teligen since August 1995, the results of which are used by service providers, governments and media worldwide. Teligen has developed the new methodologies in consultation with operators and regulators, and these have been officially adopted by the OECD. This current version has been in planning for 12 months and has been improved in line with structural market changes.

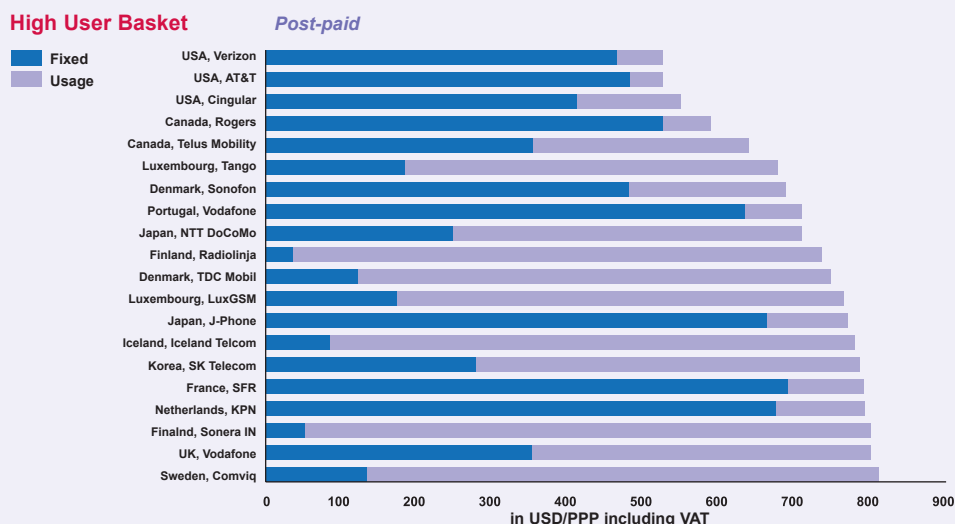
Specific improvements include:

- Multiple operator coverage for each of the 30 OECD member countries
- A range of price plans included in the comparison for every operator, with the basket functions filtering out the cheapest options for each basket
- Up-to-date usage profiles based on recent call pattern information across the range of OECD markets
- New features included, such as SMS and off-net mobile calling

Included in the new baskets are all the components that constitute the overall cost of ownership including:

- Fixed charges, including registration or connection charges, and monthly subscription costs
- National call volumes including calls to fixed lines, and on- and off-net mobile
- Bundles of free minutes or call value
- SMS usage, included as an integral part of wireless communication

An example of the type of comparison that the new baskets are capable of can be seen below, where the cheapest 20 operators from the OECD data set are compared for a "high volume user" over a year:



Tariff Rebalancing For An Incumbent European Operator

Teligen has recently assisted an incumbent telecoms operator faced with impending competition to rebalance its rates

What is Tariff Rebalancing?

Tariff rebalancing is one of the key steps along the road to telecoms liberalisation and competition. Rebalancing means moving rates for different services towards their underlying costs.

Traditionally, a monopoly operator has its rates out of line with costs.

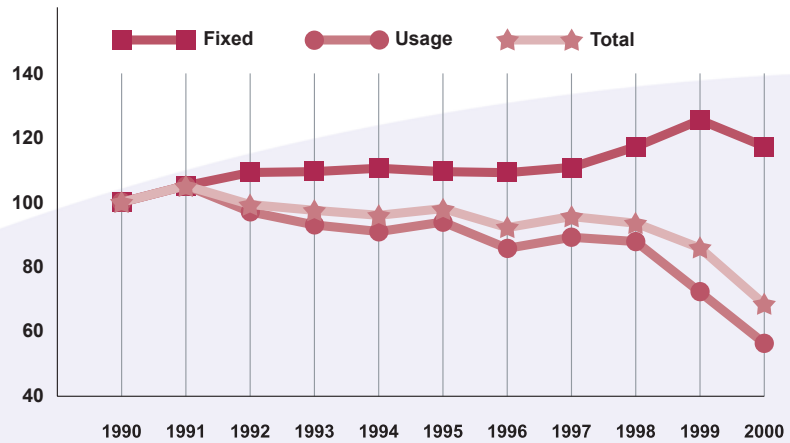
Connection and access charges are often set well below cost to promote universal access. Usage charges, especially for long distance and international calls, are set far above cost to generate excess revenue to finance the money losing access services

How do unbalanced rates affect the development of competition?

No company will want to enter the local access market with rates below cost. As for the long-distance markets, "cream skimming" will occur as entrants attack the most lucrative segments where the incumbent's rates are well above cost. This weakens the incumbent's financial position by forcing it to cut long-distance rates.

Rebalancing benefits the consumer. As shown in the chart, over the last 12 years in the OECD countries, tariff rebalancing has lead to an overall

Business



reduction in telecom service costs as decreases in usage charges have outweighed increases in access rates.

Price Caps

Price caps is the preferred means for a regulator to manage the transition from monopoly to competition. Price caps is preferable to "rate of return" regulation as it provides incentives for the incumbent to improve productivity and reduce costs.

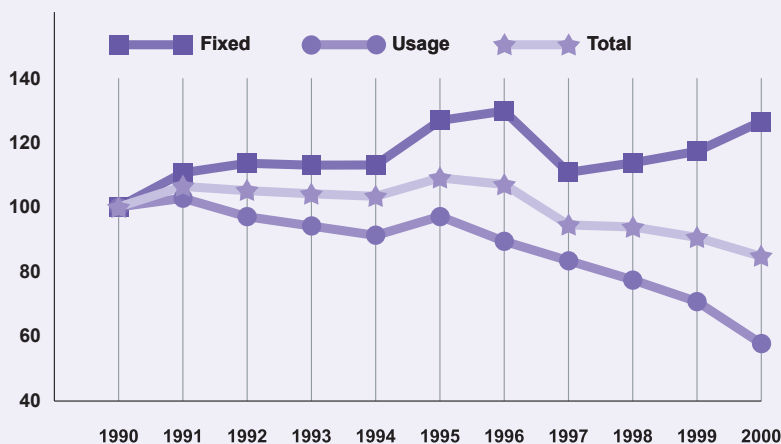
In our example, a price cap regime using a basket approach was in effect until last year. A revenue-weighted average of proposed tariff changes was permitted to increase by the inflation rate plus an X-factor. The basket approach allowed the incumbent to increase some rates and lower others as long as the overall basket changes met

the price cap restriction i.e. to rebalance tariffs. The unusual X-factor was a positive as compared to the negative "productivity offsets" imposed on the incumbents in most countries with price cap regimes. The X-factor was meant to compensate for the ending of government subsidies with privatisation.

Circumstances changed with the enactment by the government of an emergency law designed to fight inflation. The law restricts increase on individual service rates, thus allows no possibility of tariff rebalancing in real (inflation adjusted) terms.

Now with competition looming, the incumbent is caught in a situation where its rates are out of line with costs but it cannot rebalance them. Teligen has studied and commented on this situation in detail and provided the operator with advice on how to commence with tariff rebalancing under current law and future regulation.

Residential



ADSL Provision In Europe

Teligen are currently undertaking a multi-phase study into the development of Internet Access Pricing, on behalf of the European Commission, as part of their eEurope Benchmarking Initiative.

ADSL technology is fast becoming popular as an economical way of having high speed Internet access. For residential users the ADSL service offers a variety of speeds (bitrates), and the advantage that no special lines need to be installed. A regular telephone line can serve as the basis for the service.

The European market is characterised by significant variations in bitrates offered by operators. The matrix below shows these variations, offered by the incumbent operator to residential subscribers by country. Please note that other service providers may offer alternative bitrates. Each bitrate shown relates to the upload and download speed of the service. For Greece no commercial service is offered as yet.

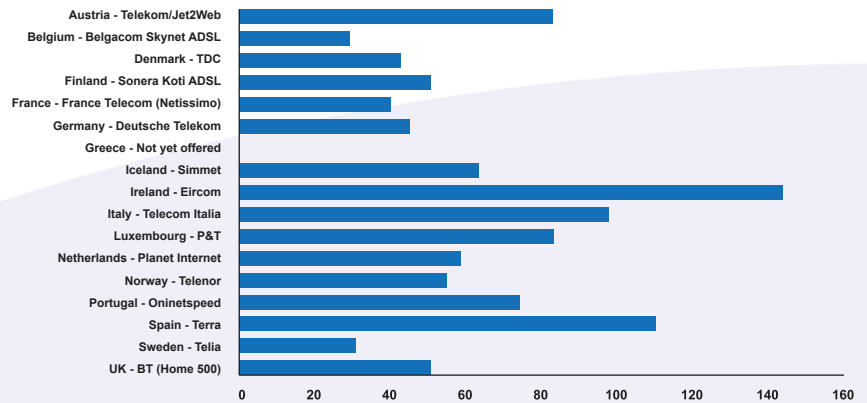
Control over the local extensions to the end user is key to deliver such services, and hence the incumbent operators usually control the rollout of ADSL. Only when the incumbent operator offers ADSL for resale, or alternative local networks or co-location arrangements exist, can this service be offered by other providers, for example Internet Service Providers.

ADSL Service Provider Information

Country	Provider	Bitrates												
		64/256	64/512	128/256	128/320	128/512	128/750	128/1024	256/256	256/512	256/1024	512/512	512/1024	512/2048
Austria	Telekom/Jet2Web		■											
Belgium	Belgacom Skynet ADSL						■	■						
Denmark	Tele Danmark			■		■					■			■
Finland	Sonera Koti ADSL								■			■	■	■
France	France Telecom (Netissimo)					■					■			
Germany	Deutsche Telekom						■							
Greece	No service offered													
Iceland	Simnet			■						■				
Ireland	Eircom					■								
Italy	Telecom Italia			■										
Luxembourg	P&T	■	■					■						
Netherlands	Planet Internet					■						■		
Norway	Telenor				■			■				■		
Portugal	Oninetspeed	■									■			
Spain	Terra			■		■								
Sweden	Telia											■		
UK	BT (Home 500)										■			

ADSL Normalised Price Data

Price per 1 Mbit in Euros/month



Normalised Price Comparison:

The graph shows the normalised price per Megabit of ADSL usage for each respective service provider. As a wide range of bitrates is offered by the providers, a normalised price has to be produced to allow for direct price comparisons. The calculated price for one Mbit/s of bitrate has been chosen as a measure. This price is produced by:

- Adding the upload and download bitrates to get a total bitrate (e.g. 64 kbit/s upload and 256 kbit/s download gives a total bitrate of 320 kbit/s);
- The monthly rental is divided by the calculated total bitrate, and multiplied with 1024 to give the price per one Mbit/s;

The implications of this normalisation are:

- As the monthly price per unit (i.e. per kbit/s) will normally decrease with increasing bitrate,

the offerings with higher total bitrates will be favoured. Providers offering only “low speeds” will fall behind in the comparison;

- The prices shown are not actual prices paid by the customer. Tracing the calculations back to the origin requires information about the actual bitrates involved;

This method, however, does produce comparable price points for these widely different offerings across the countries in the comparison. Please remember that cheaper services may be offered in each country by other service providers.

Prices used were valid May 2002, and are shown in Euros excluding VAT. Prices used in the comparison are for the ADSL service only. ISP service charges are included. Telephone line charges would need to be applied in addition.

EU Tariff Monitoring Study

This continuous study was commissioned from Teligen by the EC Information Society DG in 1999.

It is an extensive report, produced annually, comprising dynamic spreadsheets and written studies based upon changes and shifts in pricing of telecommunications services provided by the EU incumbents.

Prices monitored include:

- PSTN (installation, rental and local, national and intra-EU call charges and fixed to mobile per minute charges);
- ISDN (installation and rental for both basic and Primary rate access.
- Leased line
- Mobile (national and intra-EU)
- ISP and ADSL

The report provides full commentary on changes and provides reasons for them, examining the market each year and in the context of its recent history.

All working data and background formula and studies are held by Teligen but the reports (1999, 2000, 2001, 2002) are held by the EC Information Society DG and are in the public domain.

Website: <http://europa.eu.int/ISPO/infosoc/telecompolicy>

Teligen

Published by Teligen
Watermans Park
High Street, Brentford, TW8 0BB
United Kingdom
Tel +44 (0) 20 8263 5200
Fax +44 (0) 20 8263 5222
www.Teligen.com

© 2002, Teligen. All rights reserved.

Teligen Tariff Diary

Notes and Queries From the Tariff Team

Keeping up to date with 200,000 individual tariffs from over 100 carriers in 60+ countries is no easy task, but here at Teligen it's what we do best. For those of you who don't know, our tariff database includes national and international tariffs for the main fixed and mobile services – voice and data. We contact people from all corners of the globe to bring our subscribers the most up to date information we can find.

Latin American Developments

We endeavour to improve our coverage and the quality of the data at all times, not an easy task when you think of how often tariffs change. We have recently made some new additions to the research team, which will enable us to keep up with all the tariff changes, and also give us the opportunity to research new countries and carriers. Our new colleagues bring to us, in addition to their expertise, Spanish and Portuguese language skills. They are currently working to establish new contacts and to further improve our coverage of Latin American markets. Watch out for forthcoming additions including tariffs from Chile, Peru and Columbia.

Eastern Europe

We have seen many changes in Eastern European markets this year, as countries gear up for market liberalisation. Consequently we have prioritised updating the reference and tariff sections on many of the Eastern European and Baltic countries to reflect these changes.

FAQs

We intend to run a special feature in each edition of "Outlook" that answers tariff or service questions our subscribers may have. Here is a recent example answered by the team:

Q. While monitoring PSTN and Mobile tariffs, I have recently come across the term "Call Allowance". What does it mean?

A. An increasing number of network operators are offering incentives to encourage customers onto their network. The call allowance is a typical example and is usually built into the fixed charge, based either on a number of units or an amount. Any calls within and up to this allowance per charge period will be free, while calls beyond the allowance are charged at normal rates.

The Teligen tariff team are very keen to receive customer feedback and to answer any tariff queries you may have.

