

## RTÉNL PROPOSED SCHEDULE OF TARIFFS FOR DIGITAL TERRESTRIAL TELEVISION SERVICES

RTÉNL tariffs for National Digital Terrestrial Television (DTT) Broadcast services will be calculated on the basis of :

Using the methodology in Appendix 1 the following is calculated

1. Operating costs plus a margin incurred to service each MUX
2. A charge based on capital costs allocated to each MUX.

Given the number of variables in the model (see list below) it would be very difficult to calculate a definitive price for a prospective entrant to the market without agreeing in advance the engineering requirements of the entrant, (many hundreds of possible prices may be necessary). In addition there are also users outside of the DTT market who enter and leave, costs to be allocated to broadcast services fall and rise accordingly as the utilisation of the facilities changes.

Variables that will influence the tariff for a given customer are listed below.

Common factors affecting all customer tariffs:

- Total Capital Investment by RTÉNL.
- Assumed asset life of transmission assets.
- Total level of budgeted operating costs.
- Rate of return on operating costs.
- Total usage of the network.
- Proportion of operating costs chargeable to non-broadcasting customers.
- Relative cost of operation of each transmission site within the network.

Specific factors affecting individual customer tariffs:

- Number of sites occupied.
- The size of each site occupied.
- Total number of customers on each site.
- Nature of service, Television, Radio, FM, or LW.
- Space occupied on each tower or mast.
- Total space occupied by all broadcast customers on relevant tower or mast.
- Power consumption.
- Power charges as levied by suppliers.
- Investment required for expansion of service.
- Rate of return on capital required for expansion of service.

## APPENDIX 1

The charge for each customer will be dependant on their usage of the network as defined e.g. by space occupied on the mast or tower, as a result of the output of the model.

In instances where detailed mast occupancy information is not available a ratio of 2:2:1 Digital MUX: Analogue TV: Radio is used.

Tariffs will be calculated annually in advance using budgeted operating costs for the year to which the tariff will apply and a return on capital investment as defined below.

### 1. OPERATING COSTS

Operating costs are allocated to all network customers based on their usage of the network. Allocation to broadcast customers is carried out using the tariff model which has been developed for RTENL specifically for the purpose.

Only costs relevant to the national broadcast business are included in the calculations per the Tariff Model.

Costs relating to non-broadcast business are deducted from total budgeted costs to be used in the tariff model.

Operating costs relating to non-broadcast customers are calculated by using records of maintenance time spent on broadcast and non-broadcast business. Currently the figure is 23.3% of total operating costs.

All depreciation charges are deducted from total budgeted costs to be used in the model.

All relevant operating costs are then allocated to each broadcast customer using the most appropriate method available.

For certain costs this necessitates a two stage process, costs are first allocated to a transmission site and then to the broadcast customer.

## COSTS ALLOCATED DIRECTLY TO BROADCAST CUSTOMERS

### Power:

Power costs are charged on the basis of actual power used by each customer site by site.

For the long wave sites, where only one service operates, actual power costs for the site are fully allocated to the relevant service.

### Capital Projects Team:

All costs associated with the RTÉNL capital projects team are allocated based on the level of capital investment allocated to each broadcast customer.

## COSTS ALLOCATED USING TWO STAGE PROCESS

### Rent and Rates:

Rent and rates are charged to each site on an actual basis.

All sites are divided into three tiers as determined by the power output of the site. The weighting of costs to be allocated to each site is then determined, tier by tier, using, as a base, the time spent by maintenance staff working on sites within each tier.

### Regional operational costs:

Regional costs are allocated to sites within a given region on the three-tier basis described above.

### Central administration costs:

Central administration costs are allocated across all sites nationally on the three-tier basis

Costs thus allocated to transmission sites are further allocated to broadcast customers on the basis usage of the network.

Having fully allocated all operating costs across all broadcast customers the tariff per customer is calculated using total allocated cost plus a margin. Margin currently achieved is 15%.

## 2. CAPITAL COSTS

### Return on Capital Investment

For the purposes of the tariff calculation the full replacement cost of the network as at Jan 2004 is the Capital Investment. Capital Investment has been identified on a site by site basis.

Total Capital Investment by RTENL in the transmission network is allocated to all customers.

In the case of capital investment 20% of cost is calculated as relating to non-broadcast customers based on usage of common infrastructure, (towers, masts and buildings).

The balance of the Capital Investment is then allocated to each broadcast customer based on the amount of space occupied on the tower or mast.

The capital charge is then calculated using a set rate of return on capital investment allocated.

Currently the rate of return is 7%.

No additional charge is made in respect of any capital expenditure required to maintain the current transmission network infrastructure.

Return on capital investment required for expansion of service:

In instances when a customer wishes to expand their level of coverage, the associated capital investment required to be made by RTENL will be allocated directly to that customer.

A rate of return on this incremental capital investment is set so as to provide a payback for the initial investment to RTENL over the anticipated useful life of the new assets. Currently this rate is 6.67% which represents recovery of the actual cost over a life of fifteen years. This rate is applied to all capital expenditure on DTT assets.

Given the above methodology it is clear that the calculation of a tariff is dependent on the exact configuration of each broadcast customers network requirements.

## Digital Tariff Calculations

In planning for the construction and commissioning of a DTT network RTÉNL have sought to envisage a number of likely configurations which may occur at various points in the development of the network.

It should be noted that these tariffs are indicative. The final tariffs which may be agreed will vary and will be dependent on the network configuration in total and as required by each MUX operator and will be a function of the variables as detailed above.

### Configurations Currently Costed

<p><b>Option 1, DTT With Analogue TV on air</b>  <b>4 MUX, 13 sites c. 77% population coverage</b></p>	<p><b>(Q2 2009)</b></p>
<p><b>Option 2, DTT With Analogue TV on air</b>  <b>4 MUX, 44 sites c. 90% population coverage</b>  All significant urban areas covered</p>	<p><b>(Q3 2010)</b></p>
<p><b>Option 3, DTT With Analogue TV on air</b>  <b>4 MUX,</b>  1 PSB MUX – Full national coverage  3 Commercial MUX, 44 sites,</p>	<p><b>(Q4 2012)</b></p>
<p><b>Option 4, DTT</b>  <b>6 MUX,</b>  PSB MUX 1&amp; 2 – Full national coverage  4 Commercial MUX: Minimum 44 sites</p>	<p><b>(Q1 2013)</b></p>

c. 188 sites  
c. 95%+ population coverage  
c. 93% population coverage

c. 188 sites,  
c. 95%+ population coverage  
c. 93% population coverage

The indicative tariffs for a PSB MUX and a commercial MUX for each of these configurations is set out in the table below.

These tariffs are based on the following assumptions:

Tariffs are for the specific network configurations described. Any variation in coverage required by any MUX operator will have a knock-on effect on tariffs for all MUX operators.

All tariffs are quoted on the basis of a fully managed service.

Tariffs include transmission, distribution and multiplexing

PSB MUX will bear the cost of network enhancements specifically required to ensure optimum coverage from each site.

Tariffs for each PSB MUX will be equal to the extent that the level of service provided is equal.

Tariffs for each commercial MUX will be equal to the extent that the level of service provided is equal.

All tariffs are budgetary and are subject to change,

In particular tariffs are dependent on the satisfactory outcome of ongoing tender processes for supply and installation of DTT and related equipment.

All tariffs are dependent on the successful completion of the DTT network build

Reasonable allowance has been made for inclement weather and other foreseeable risks.

All tariffs are quoted on the basis of current prices and will be subject to inflation in the period between now and final roll-out.

Summary Sample Indicative Digital Tariffs					All figures €uro '000				
	Pre Analogue TV Switch-off				Post Analogue TV Switch-off				
	Four Mux One PSB Three Comm.		Four Mux One PSB Three Comm.		Four Mux One PSB Three Comm.		Six Mux Two PSB Four Comm.		
<b>Number of sites covered by each</b>									
Commercial	13		44		44			44	
PSB	13		44		188			188	
<b>Digital Mux Tariffs</b>									
Public Service; Tariff per Mux	4,077		4,550		5,779			5,734	
Commercial; Tariff Per Mux	2,998		3,471		3,471			3,375	