

**Response to Ofcom's consultation
Strategic Review of Telecommunications
Phase 2**

Question 16

Mobile Termination

at

Retail Charges

**Submitted by
Arno Wirzenius**

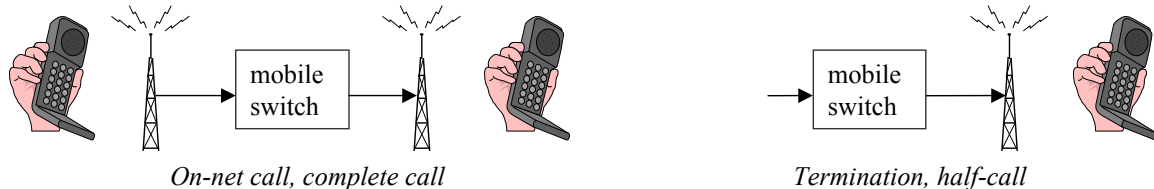
General

The purpose of this response is to present an alternative model for mobile termination charges, using mobile retail on-net prices as a basis instead of cost calculations.

The response is a direct answer to Question 16 on page 98 in the Ofcom Phase 2 consultation document.

Description

When the first telephone networks were interconnected in the late 19th century, it is likely that retail call prices were used for interconnection. Later on special termination charges were developed, lower than retail prices for complete calls. This simple concept could be used for mobile termination in the 21st century, in particular for termination from fixed networks and from incoming international gateways.



An on-net mobile call uses two base stations, termination (as well as origination) uses one. Origination and termination could even be called half-calls, as they are not complete calls. The base stations are the most expensive part of mobile calls. Thus the underlying cost of a half-call, origination or termination, is lower than the cost of a complete on-net call. Sector cost experts state that the cost of terminating a call may be of the order of 70 - 75% of the cost for a similar on-net call.

If a fixed operator or an incoming international gateway operator has the right to terminate a call on a mobile network using normal termination and on-net retail call charges, the fixed operator would not pay below cost, if on-net calls are sold at or above cost. Generally, it may be difficult to find a reason why wholesale charges should be higher than retail charges for essentially the same product.

The above discussion would result in the following pricing rule:

An operator with the right to terminate a call on a mobile network may, on his own choice, pay any of the following charges for terminating that call:

- the operator's termination charge;
- any retail charge for a similar on-net call that the operator offers to customers; or
- [75]% of a peak time on-net call charge that the operator offers to customers.

Should the mobile operator consider its underlying cost for termination higher than [75]% of a peak time on-net call charge, he may file a request with the regulator reasoning that claim.

The 75% rule is based on the assumption that the utilisation of the mobile network is highest at peak time, and costs are most relevant for such calls. At other times the mobile operator may offer calls at lower prices, even below cost, in order to utilise idle resources and level network load. The figure 75% may need to be adjusted after experience of this rule of pricing call termination.

The general rule may require some elaboration in detail.

Outcome

The rule would convert the present separate monopoly termination market into a part of the on-net call market, which is considered the most competitive mobile call market. Furthermore, the rule, if successful, would remove the need of regulatory intervention in most cases of mobile termination.

The rule would maintain pricing freedom and automatically adapt to the competitive pricing changes on the market, without the need of regulatory action.

Retail prices are already in wide use for unofficial termination using so called GSM Gateways, which often results in technically inferior call quality. The proposed rule would make these GSM gateways redundant and thus improve call quality.

Sources

The model is also presented on pages 20 - 23 of a study called [Mobile Pricing and Interconnection Regimes](#) prepared for the Finnish Ministry of Transport and Communications, available on www.mintc.fi.

Retail charges were used in Finland in a similar form as a basis for pricing fixed termination, without the need for any kind of regulatory involvement. Following an EU intervention to harmonise interconnection in member countries, the model was abandoned, termination and retail prices increased, and regulatory intervention was needed.

Finally

I hope that the above pricing model, and the related study pointed out above, would provide food for thought in this area. Similar pricing rules may be applied to other termination cases, e.g. for VoIP.

Submitted by
Mr. Arno Wirzenius
Managing Director
Teleplanning A. Wirzenius Ltd.
arno.w@iki.fi
www.iki.fi/arnow/