Introduction

This document provides Europe Economics’ view on the Public Consultation on copper local-loop costing methods published by Autorite de Regulation des Telecommunications (ART) in April 2005.

The description of the current and future situation relating to the local-loop, and the criteria laid out by ART to evaluate reasoning and description in the document will be taken as given. The Consultation Document considers current cost and historic cost accounting as the options for costing and pricing the local-loop. We would like to introduce another option to the table, namely Infrastructure Renewals Accounting. Indeed, we will argue that using the description and criteria presented in the Consultation Document, infrastructure renewals accounting can fare well in comparison to the other options, and therefore should at least be given serious consideration.

Background

ART states in the Consultation Document that the local loop is and will remain an essential facility, and that infrastructure competition by new facilities is an unlikely and economically unreasonable concept. In fact there is an increasing consensus among European NRA’s on this issue. For instance, the idea that facility based competition is not an option in the market for local loop provision is stated also in the two consultation documents recently issued by OFCOM (“Valuing copper access, 2004” and “Valuing copper access, part 2, 2005”). Further, ART decision 02-275 concluded that at the moment there are no alternative infrastructure solutions capable of nationwide delivery of the same services.

ART therefore concludes that “it is imperative to maintain the local copper loop in good working condition”, and France telecom has to be given incentives to do so, and remunerated for doing so.

Criteria for assessment

ART describes several criteria to assess different costing options for capital expenditure. In particular, they are to:

- encourage economic efficiency;
- allow for network replacement;
- safeguard consumer interests;
- respect the principle of non-discrimination;
- ensure tariff consistency between France Telecom offers;
be relevant and therefore be linked in particular to actual investments; and
allow realistic implementation.

Alternatives considered by ART

ART considers several methodologies to valuate the capital costs of the copper loop, namely historic cost accounting (HCA), current cost accounting (CCA), tilted annuities and successive-step replacement cost method. Two general constraints for the tariff are described, in addition to the criteria above.

- The tariff structure must provide sufficient return for France Telecom to maintain copper access network in good working order, indication being that prices have to be above short-run marginal costs.
- Tariff structure must also be sufficiently low to allow development of effective competition in downstream markets.

Overall, the document finds in favour of using CCA methods. To us, however, this does not seem consistent with the discussion of the nature of the local loop as an essential facility, the physical nature of a majority of the assets in the local loop (civic works and copper pairs), or the nature of the activities and costs incurred in “maintaining the copper loop in good working condition”. There are other methodologies that achieve the criteria, and provide for lower prices to benefit end-users. We discuss this further below.

CCA

The general basic rationale behind the use of CCA methodologies is that they can most effectively mimic what an entrant’s or a competitor’s costs would be, if it were to build and operate network equivalent to that of the incumbent. CCA methods can send the correct “make or buy” signals to prospective entrants when considering their entry strategy, as stated on page 12 of the Consultation Document. The local-loop, however, is described as an essential facility, unlikely to be replaced in the near future. ART indeed goes on to argue that, due to the characteristic of the local loop as an essential facility, perhaps this “approach needs to be put into perspective if not discarded”.

Further, as ART describes on page 11, “the copper pairs local loop infrastructure in a mature state”. This means that current cost valuation of the asset base is not necessarily relevant for it, as it will not be replaced in reality for a long and uncertain time to come. Indeed also on page 11, ART considers “investment [to be] related to replacing existing infrastructure” and so France Telecom should be encouraged to “invest efficiently in network maintenance”.

HCA

If facility based competition is not likely to develop in the next years, the main aim of the regulator could be to encourage competition downstream in the retail market, ensuring non discrimination between the retail arm of the incumbent and the entrants and setting the lowest price for the
copper loop consistent with the incumbent recovering its investment, in order to remove any monopoly rent enjoyed by the incumbent's infrastructure arm.

Indeed, a low price for the copper loop could be achievable through the use of historic cost accounting (HCA) in the presence of increasing asset prices. This would mean a lower price for the copper loop, which coupled with effective non-discriminatory measures between the retail arm of the incumbent and the entrants, would translate to substantial benefits for end-users.

Further, ART acknowledges that for some types of assets (those with a long and uncertain lifespan with little likelihood to be replaced), HCA could indeed be the preferred accounting methodology, as there appears not to be any strong reason to take asset price movements into account if they are not to be replaced. To us it seems that a vast majority of the local-loop assets – the copper pair and the civic works needed to install copper cable – are of just that description; of long and uncertain lifespan with little likelihood to be replaced.

ART discusses the limitations and drawbacks of HCA in several points in the Consultation Document and overall seems to discard HCA.

At page 22, it is argued that HCA does not “provide a specific cost for a specific operator” and that it thus seems illogical “for alternative operators to support the uncertainties linked to an investment strategy controlled by the incumbent”. However, it could be argued that what matters for competition in the downstream market is the factual existence of non-discrimination: the fact that alternative operators have to rely on the investment strategy of the incumbent should not be a major concern, provided non discrimination is enforced.

ART then argues that HCA “does not necessarily ensure financial requirements in the future” and indeed does not even allow taking into consideration lack of investment in the past or renewed heavy investment cycles, which instead would be tackled by CCA and economic methodologies. Furthermore, HCA determines a discontinuity in the company books when the asset is replaced since it does not take asset price changes and technical progress into account.

HCA is said (for the general case) to comply poorly with the principle of economic efficiency and consumer benefits in the long run. ART argues that economic efficiency means that tariff must take into account the best practice currently available (in terms of asset prices and technology) and that HCA should be discarded as it does not satisfy this requirement. Furthermore, ART argues that HCA does not comply with the consumer benefits principle as, in the long run, it does not ensure asset replacement.

**Infrastructure Renewals Accounting**

Given the problems with pure HCA and CCA methodologies, we would like to propose infrastructure renewals accounting as an alternative to estimating reasonable costs and setting prices for the local loop. We will argue that this method is consistent with the nature of the network and service provided, can maximise consumer benefit through low local loop prices and retail competition, while satisfying the criteria laid out in the ART Consultation Document.
Description

Infrastructure renewals accounting offers an alternative way to define the annual charge for capital depreciation. It differs from other methods in that the infrastructure asset network is considered a single system to be operated and maintained to perpetuity, rather than a collection of individual assets with independent asset lives and maintenance requirements. It is based on the assumption that the system of infrastructure assets has reached a “steady state” with very long and hard to determine asset lives.

Infrastructure assets with these characteristics, such as trenches and pipes for water distribution networks, pose a problem for traditional accounting methods because the useful life required in depreciation calculations is difficult to assess. In addition, rather than being replaced, they might be repaired or have renewal work done on them on a regular basis. Infrastructure renewals accounting provides a way to cost these assets on an annual basis.

The approach requires the determination of the infrastructure renewals charge (IRC), which is the annual charge against profits, calculated as the average forecasted infrastructure renewals expenditure (IRE) over several years. The expenditure must cover the maintenance of current and future services of the entire system of infrastructure assets, and therefore includes both depreciation and expenditure on repairs.

The calculation of IRC might not be straightforward, however, and a variety of approaches to it can be taken. Though some guidance can be taken from historical repair costs and activities, determining the IRC will require an estimate of future expected maintenance costs. Maintenance would include any capitalized work done and assets replaced. In that sense, infrastructure renewals method could be thought of as employing current costs, even though the concept is very different from CCA and should not be confused with it.

Infrastructure renewals accounting will typically result in much lower prices than using current cost valued asset base. It does not give consideration of what the price would be in a competitive market, and does not send efficient “build or buy” signals. Rather, it concedes that the assets in question constitute an essential facility network that is natural monopoly, unlikely to face competition in the future, and aims to remunerate the operator for efficient renewal investment while not allowing for monopoly margins.

Evaluation of applicability

As identified in the Consultation Document, the vast majority of assets in the local loop consist of the actual copper pairs (and the civic works needed to install these). These copper pairs have long and uncertain time span, and, as acknowledged also in the Consultation Document, are not likely to be replaced in the near future by the incumbent, nor by an entrant with the same or alternate technology. This seems to be very much a situation the infrastructure renewals accounting approach was devised for.

Briefly evaluating the approach against the criteria set out in the Consultation Document, it can be noted that:
In determining the IRC, the regulator has an opportunity to allow for only efficient renewals investment, using best estimates of the current and future component prices. The approach therefore can be in line with the principle of economic efficiency.

By its very nature, infrastructure renewals accounting will allow for network replacement and be linked to actual investment expenditure occurring on the network.

Of the approaches considered, infrastructure renewals accounting is perhaps the most likely to result in the lowest possible charges, while allowing for efficient investment and service improvement to take place. This will not facilitate competition on the network level. However, it determines potentially low wholesale prices and, therefore, it works well towards safeguarding consumer interests.

It can also be consistent with the principle of non-discrimination. In general, non-discrimination would be verified by making sure that the incumbent contracts to all retail providers with same prices and conditions for similar wholesale services provided.

Implementation of infrastructure renewals accounting can also be realistic. It has already been implemented, for example, in the UK water industry.

In summary, the infrastructure renewals method seems compatible with the nature of the local loop, can maximise benefits to consumers, and does well against the general criteria laid out in the ART Consultation Document. Following the discussion in this document, it is not a radical change in direction, but could be viewed as bringing together the benefits of current and historic cost approaches in a way that satisfies all the criteria for costing and pricing methods laid out in the consultation. Hence, we consider important that this method should not be overlooked when assessing costing and pricing methodologies for the local-loop.

If the infrastructure renewals method is implemented, however, a note of caution should be added regarding the relevant timeframe to be considered. A short timeframe (or a non-committal one) might affect the credibility of the overall approach: if, for example, in three years down the line the methodology approach to costing the local loop is bound to change again, then the incumbent might not be put in a position to fully recover its maintenance costs. It might therefore be considered appropriate to back-date the starting year for the application of this approach to the date of privatisation and determine the IRC retrospectively for the first few years.