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Pricing Irish 3G Licences

Beauty contests, fixed spectrum fees and competition

In December 2001, after two years of controversy, the Irish Government finally decided to allocate 3G mobile licenses by "beauty contest" with fixed licence fees. Here, we examine the way Irish licences are to be awarded, and unravel the "logic" behind the effort to foster more competition.

Background

The Office of the Director of Telecommunications Regulation (ODTR) made clear in late 1999 that it wanted the 3G licensing procedure to promote competition rather than maximise government revenues. This view was not, for obvious reasons, shared by the Department of Finance, which eyed the huge sums generated by UK and German 3G auctions. In the end the ODTR prevailed (www.odtr.ie/docs/odtr0196.doc).

3G licences will be awarded by "comparative competition" or beauty contest. The licence fees have been set at levels considerably below the sums implied by the UK and German auctions, with the licensing criteria focusing on factors designed to enhance service quality and foster competition. These include coverage/speed of rollout, quality of service, promotion of competition, performance guarantees, and, for licence "A", mandatory access for Mobile Virtual Network Operators (MVNOs).

The spectrum access fee

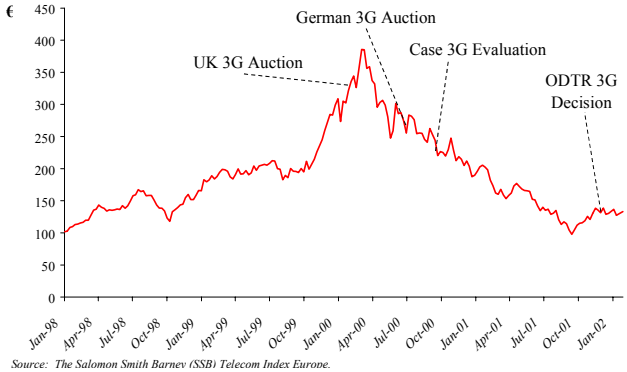
Four 3G licences will be available - one "A" and three "B" licenses, each with 2 x 15 MHz paired and 5 MHz unpaired spectrum. The spectrum access fee for each licence will be fixed and paid in instalments over its 20 year duration. Using a 9% discount rate, the net present value works out at €27.4m for the "A" licence and €73.8m for each "B" licence; giving an average spectrum access fee of €62.2m. This will be paid as an initial fee of about half the discounted value (€12.7m for licence "A" and €44.4m for "B") with the balance in years 6 to 15 and 4 to 15 for licence "A" and "B" respectively.

Different conditions have been attached to the two classes of licence. The three "B" licensees will be required to serve at least 33% of Irish population by the end of June 2006 and 53% by the end of June 2008. The "A" licence holder will have stricter rollout conditions - 53% coverage by the end of 2005 and 80% by the end of 2007. The winner of the "A" licence will also have to provide MVNO access and may be granted additional spectrum to enable this, if justified. Access is to be priced at "retail minus X". The bidder who offers a higher X - lower access charge – increases its chances of success. This has a 20% weighting in the decision criteria.

Valuation of Irish 3G

The price to be charged for 3G licenses was highly contentious. One approach would have been to adjust the value for the Irish licence, using average per capita valuations derived from past 3G auctions. This is unsatisfactory since it would have overpriced spectrum because of network effects that result in higher than proportionate prices paid for spectrum in larger countries. It would also have failed to take account of differences in income, population density, and competitive and regulatory conditions. In October 2000 Case Associates estimated the value of 3G licenses based on econometric analysis to adjust for some of these factors. This gave an average price between €54m to €126m for each licence, with Case concluding that the lower of these was most appropriate. Case's estimate is broadly in line with €62.2m average spectrum fee fixed by the ODTR. However, since our valuation market conditions have considerably worsened. According to the Solomon Smith Barney European Telecom Index listed European telecom shares have fallen a further 42% over this period, suggesting that the Irish spectrum fees may still be excessive.

3G licence fees and the decline in telecom share prices



Source: The Salomon Smith Barney (SSB) Telecom Index Europe.

The price of coverage and access

The spectrum fee for licence "A" is €46.4m or over 66% less than for licence "B". This large discount is presumably designed to compensate for the greater coverage and mandatory MVNO access obligations.

However, the logic behind this large differential appears weak.

First, extending network coverage to a further 27% of Irish population will be expensive given the low population density of rural Ireland. However, it is not clear that such a requirement is needed even to achieve the social goal of universal mobile broadband service in Ireland. First, the requirement is excessive given that these marginal areas will be served by 2.5G broadband services (GPRS). Second, it has been the experience in most mobile markets that operators not providing national coverage are at a competitive disadvantage. Thus, regardless of the licence condition, mobile operators have strong commercial reasons to offer and compete on the basis of providing national (and international) coverage. The more onerous rollout requirement is unlikely, therefore, to be restricted to the "A" license.

License "A" also carries a mandatory MVNO access obligation which accounts for part of the discounted spectrum fee. The ODTR is clearly of the view that operators would refuse access to MVNOs or else impose an excessive access price. The discount is thus seen as providing the "A" licence holder with a financial incentive (compensation) to offer cheap(er) access to MVNOs. Further, the inclusion of lower access charges as one of the criteria for awarding the licence ensures that the "subsidy" gets passed onto the MVNOs. This turns the Irish procedure into a type of "Chadwick auction" for "A", where bidding takes place in terms of the lowest price an applicant is prepared to offer the service to its customers; in this case MVNO access seekers.

There are a number of difficulties with this attempt to promote service competition using licence fee adjustments. First, given the high level of network competition, there is no reason to believe that MVNOs would be denied access if this were efficient. In the absence of collusion, each mobile operator would have an incentive to provide access fearing the others would. If an operator declined to offer access while its competitors did, it would face the prospect of declining market share and revenues, without offsetting access revenues. Given that commercially negotiated access arrangements are increasing, there appears only a weak competitive justification for the subsidy.

Second, it is not clear who will be the principal recipients of the subsidy. Those bidding for the "A" licence will be the licence conditions to transform the part of the €46.4m not accounted for by extra rollout costs into a cheaper access price. This will initially encourage MVNO entry, higher MVNO profits, and increased service competition. If the access price is too low, the number of service operators will be excessive and the cost structure of the industry will rise. This, together with muted retail price competition among service providers, may result in the end user not benefiting much. Alternatively, if service competition does lead to vigorous retail price competition, then the competitive position of the "B" licence holders is drawn into question. This would in turn distort competition between operators, and may reduce long run sustainable competition.

Conclusions

The Irish approach has rightly emphasised competition in the award of 3G. However, given that the 3G licensing process will make one additional operator licence available, the incremental competitive impact of the conditions attached to the "A" licence would seem marginal, and at worst distortive. This is especially so when a number of NRAs (Oftel in the UK and AGCOM in Italy) have decided against mandating MVNO access because of its limited impact on consumer prices, and the adverse effects on investment and innovation.

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