

# THE IRISH 3G LICENSING PROCESS

A Paper for Esat Digifone

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## 1. INTRODUCTION AND SUMMARY

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DotEcon Ltd has been asked by Esat Digifone to consider whether the proposals made by the ODTR for the licensing of 3G spectrum in Ireland (ODTR Consultation Document 00/52) are likely to be effective in achieving reasonable public policy goals.

### *Conflation of licensing objectives with regulatory implementation*

We conclude that significant problems arise from the ODTR's proposed approach of using the licensing process to achieve goals that would be more reasonably be addressed through separate and self-standing regulatory measures. Conflating spectrum licensing with the pursuit of major regulatory objectives risks compromising the fairness, transparency and efficiency of the licensing process and at the same time fails to achieve effective regulation.

### *This approach is unparalleled within the EU*

Other EU states have generally not sought to achieve such broad regulatory objectives through spectrum licensing. To the extent that measures such as mobile number portability or access obligations (of various types) have been implemented, this has generally been achieved through a separate process of public consultation and implemented through licence modifications, using the NRA's legal powers as appropriate.

In a small number of cases undertakings on 3G-2G roaming have been a requirement for participation for existing operators in 3G licensing process. However, this has generally meant signing up to a reasonably clear requirement specified by the NRA, rather than competing with the other operators on the extent of the undertakings given. This contrasts with the ODTR's proposals where (a) there does not yet appear to be any bright-line requirements for pre-qualification and (b) regulatory undertakings that surpass the minimum required for pre-qualification may be used as selection criteria in the competition between operators.

*Significant problems can be expected to arise from this approach*

There are very good reasons for keeping separate the pursuit of regulatory objectives and the 3G licensing process. Conflating spectrum licensing and significant regulatory intervention risks ultimately failing to achieve *both* efficient spectrum allocation and good regulation. There are four main problems, which we consider in detail in subsequent sections:

- *Inefficient selection of licensees*

If the licensing process aims to achieve regulatory objectives, then the award of licences will not be determined solely by the 3G service propositions offered by applicants. Those operators with the best propositions for 3G services may no longer win the comparative assessment.

- *Fairness to entrants vs. retrospective regulation of existing operators*

Effective implementation of the proposed regulatory measures in respect of 2G services may be drastically curtailed unless all existing 2G licensees are awarded 3G licences. In other words, the selection process is biased in favour of licensing existing operators, and thus raises a very fundamental objection on grounds of equality of treatment;

- *Distortion of the 3G marketplace*

The market for 3G services may become seriously distorted as a result of variations in the access undertakings given by 3G licensees. Rather than having uniform and consistent regulatory principles (e.g. for the determination of access prices), 3G licensees will have given their own undertakings on access. Forcing these undertakings to be part of a competition between potential licensees may not only result in significantly different access conditions offered by different operators, but may also lead to winners offering access at prices that are sub-optimal, eroding facilities-based competition in the long-run.

- *Inflexible regulation*

3G licensees will become bound by the undertakings they make in their applications, which we assume will be reflected in the licences they are issued. This makes it very difficult for the ODTR to modify any regulatory measures introduced through 3G licensing even where such modifications would be required as market conditions and regulatory best practice change. As a result, access regulation may become ossified.

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## 2. INEFFICIENT SELECTION OF LICENSEES

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Unlike any other EU 3G licensing process to date, the ODTR's proposals closely intertwine the granting of 3G licence with achieving a basket of significant regulatory objectives, including full mobile number portability, 3G-2G roaming and third party access to mobile networks. The ODTR proposes to introduce measures that are ostensibly regulatory in nature by requiring applicants for 3G licences to give undertakings as part of the comparative assessment. Although details of how the comparative assessment process will work have yet to be announced, it is proposed that these undertakings could be used as selection criteria in two ways:

- a) certain undertakings may be required to meet pre-qualification conditions, though we do not know at present whether there will be a clearly articulated, bright-line standard that must be met; and
- b) these and further undertakings may be used as the basis for a comparative assessment of those applicants who pre-qualify. Weight may be given to the extent by which the minimum requirements of the pre-qualification conditions are exceeded.

### 2.1. THE PRE-QUALIFICATION PHASE

The Consultation Document proposes that the selection criteria for pre-qualification "may include, inter alia:

- minimum financial and technical capability criteria;
- minimum coverage and roll out criteria;
- agreement to permit network access, including roaming, upon reasonable terms and, in the event of disputes on this issue, to comply with dispute resolution by the ODTR and abide by findings of the office;
- agreement to implement full mobile number portability."<sup>1</sup>

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<sup>1</sup> Section 5.2.2 of the Consultation Document.

At this stage there is little indication beyond this quotation about how the selection criteria will operate. Moreover, there is no suggestion that the ODTR is proposing to use a bright-line standard for pre-qualification, by which we mean a clearly defined minimum set of criteria which, if met or exceeded, give applicants a high degree of certainty of pre-qualifying.<sup>2</sup>

If pre-qualification criteria are only imperfectly known to bidders, this must raise a significant risk that an otherwise strong bidder could be excluded as a result of failing to offer sufficiently far-reaching undertakings with respect to access or a timetable for full mobile number portability. Therefore, fuzzy pre-qualification criteria risk potentially inefficient allocation of 3G spectrum by adding unnecessary randomness to the selection process.

Whilst the lack of a bright-line standard may be excused at this stage, there are significant concerns that the ODTR will not have a strong incentive to define such a standard at a later date if it wishes to use the licensing process to pursue the implementation of measures that are ultimately regulatory in nature. By leaving the selection criteria imprecise and fuzzy, the ODTR can give strong bidders (both existing operators and entrants who might consider themselves strongly placed to win a licence) substantial incentives to exceed the minimum standards required for pre-qualification for fear of not surpassing an imprecisely defined threshold.

This situation should be contrasted with one in which appropriate regulation on access and full mobile number portability are pursued separately to the licensing process. In this case, it is possible to design sharp selection criteria aimed purely at selecting the best 3G business case whilst in parallel building appropriate regulatory instruments to implement uniformly whatever access obligations are judged appropriate. This removes the danger that an applicant is not selected purely as a result of not meeting loosely defined pre-qualification criteria.

## **2.2. PRE-QUALIFICATION CRITERIA IN OTHER EU STATES**

The pre-qualification criteria proposed by the ODTR are much more comprehensive than those that have been used in other EU licensing processes. These vary from country to country, but have often included checks on financial strength, technical competence and probity. With the exception of 3G-2G roaming, pre-qualification criteria have not been used as a means of implementing unrelated regulatory objectives (such as full mobile number portability or the provision of access).

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<sup>2</sup> For example, such a bright-line standard might be a proposed wording of a licence condition.

In a limited number of cases (e.g. Spain and Austria) existing 2G operators have been required to give undertakings to allow 3G entrants to roam on their 2G networks in case they won a 3G licence.<sup>3</sup> However, these 3G-2G roaming requirements have been clearly defined by the NRA, and applicants would not have explicitly benefited from offering more far-reaching undertakings at the pre-qualification stage. In particular, in no case that we are aware of have applicants been expected to design their own undertakings with these being used as the basis of a comparative assessment.

### 2.3. THE COMPARATIVE EVALUATION

The proposed selection criteria include both criteria related to the nature of 3G services offered to customers and those related to undertakings on issues like access and full mobile number portability. Although the details of the evaluation procedures are at present unknown, these various selection criteria will need to be traded-off to some degree. In practice, this means that in conducting the selection the ODTR will need to consider the extent to which a stronger business case for 3G services should be weighed against lesser commitments on access or full mobile number portability.

Again, this raises the possibility that the applicants with the best business cases for 3G services who could yield greatest benefit for customers are not selected in favour of applicants with weak plans for 3G, but who are prepared to offer more substantial undertakings on access or other issues. Whilst it is right that the ODTR takes into account general objectives of such as ensuring development of, and competition in, the market for 3G services, it is not necessary for the ODTR to *compromise* efficient allocation of spectrum in order to use the 3G licensing process to achieve these other objectives. In particular, in the same way as other NRAs, the ODTR could address full mobile number portability and mobile access as separate issues, intervening as justified.

### 2.4. THE BUNDLING OF GSM AND 3G LICENCES

The *specific design* of the licensing process raises some further concerns about whether licensees will be awarded as efficiently as possible. In this regard, it is unclear what the rationale is for bundling one GSM licence with a 3G licence for a new entrant. Given

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<sup>3</sup> 3G-2G roaming was set as a condition for participation by existing 2G operators. However, the legality of this requirement was contested by One-2-One. Legal action was terminated only when BTCellnet and Vodafone gave voluntary undertakings to allow 3G-2G roaming. At no point did the UK Courts find in favour of the Radiocommunications Agency's attempt to impose 3G-2G roaming through the licensing process.

that 3G-2G roaming is in any case required, there is no obvious efficiency benefit from requiring that one and the same party operates 3G and GSM networks.

It is quite possible to envisage circumstances in which allocation may not be fully efficient as a result of bundling GSM and 3G licences. It is quite possible that one potential entrant could have a strong plan for GSM, but not for 3G and another entrant a strong plan for 3G, but not for GSM. By restricting these licences to be held by one and the same party, the ODTR has severely curtailed its ability to optimise the use of available spectrum.

Furthermore, the current proposals for the comparative assessment exercise do not describe any procedures for allocating the GSM licence in the event that more than one 3G entrant is successful. Although this eventuality is not necessarily likely, it does raise another possible concern about the relative treatment of entrants and existing operators. Not only is the failure to formulate rules to deal with more than one entrant winning a licence a potentially arbitrary constraint on the licensing process, but it also gives rise to possible grounds for complaint by unsuccessful applicants. This in turn could lead to protracted litigation and significant delays in the introduction of 3G services in Ireland to the detriment of customers and operators.

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### 3. FAIRNESS TO ENTRANTS VS. REGULATION OF EXISTING OPERATORS

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The current 3G licensing proposals appear also to be aimed at extracting concessions from existing 2G operators in respect of their existing businesses, for example in respect of 3G-2G roaming, access more generally and full mobile number portability. However, to achieve such a result it is clearly necessary for 2G operators to win 3G licences in order for undertakings offered in their applications to take effect. In this regard, using 3G licensing to implement full mobile number portability is particularly concerning as its full economic impact (whatever this might be) can only be realised if *all* existing 2G operators win 3G licences.

This raises a very fundamental objection to the proposed approach of using 3G licensing to obtain an outcome in respect of obligations on 2G operators that are regulatory in nature. In order to achieve its regulatory agenda, the ODTR needs to grant existing operators further licences. Thus, using the licensing process as a means of achieving regulatory goals generates significant incentives for favouring incumbents over new entrants. Put simply, licensing an additional entrant may mean not 'regulating' an existing player and thus sacrificing the benefits such regulation is expected to generate.

In contrast, if there is separation of 3G licensing and regulatory aims, this issue does not arise. In this case, licences would be granted purely on the grounds of 3G business cases and not in order to achieve a parallel regulatory agenda. Self-standing regulatory

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intervention separate from the licensing process can then be pursued as appropriate without the constraint of needing to award a 3G licence in order to implement a specific measure.

This systematic bias against entrants has a number of important implications:

- Given that we may expect a systematic incentive to favour one class of applicant at the expense of another, this rises the question of whether the process is non-discriminatory, which we understand to be one of the central concerns of the Licensing Directive;
- If the process is potentially discriminatory and thus non-compliant with the Licensing Directive, there may be grounds for an unsuccessful entrant to mount a legal challenge. This could substantially delay the roll-out of the 3G services to the detriment of customers;
- Although the ODTR's regulatory goals may be intended to strengthen the competitive position of entrants, in practice incorporating these into the 3G licensing process could perversely *discourage* participation by new entrants. Entrants may perceive the process to be stacked against them as a result of the ODTR's need to grant 3G licences to existing operators to achieve its regulatory objectives.

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#### 4. DISTORTION OF THE 3G MARKETPLACE

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The ODTR's current proposals appear to suggest that applicants may wish to offer far-reaching undertakings on access (both to existing 2G and to potential 3G networks). In particular:

- although the details of the selection criteria are not at present clear, the ODTR appears to be seeking undertakings from applicants on all forms of access; and
- these undertakings will not only be used as minimum requirements for pre-qualification, but will be compared across applicants.

Using access undertakings as the basis of comparative assessment (rather than just as pre-qualification criteria) means that those who make the most substantial undertakings on access will win licences. There is no reason why all successful applicants should be expected to have offered similar undertakings. Therefore, non-facilities based operators who later make use of the access undertaking made by 3G licensees are likely to find a variety of offers and terms available.

This raises the worrying possibility of a "winner's curse" in which a licensee wins as a result of an unrealistic assessment of the effects resulting from the obligations it is

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offering. For example, the winner may have offered to provide access to a 2G or 3G network at prices much below cost. As the value of 3G licences and the cost of various access undertakings are both highly uncertain and the selection process tends to pick those who have made unrealistically optimistic assessments of the obligations they are giving, such a situation is perfectly conceivable. In essence, this is analogous to the problem that can arise in auctions (particularly sealed bids) where bidders, having little idea about the value of a licence, can find that they have won as a result of having been over-optimistic in assessing value.

However, in an auction, if a bidder overpays as a result of winner's curse, this is largely a private matter for that bidder itself (although there could be public policy concerns if this weakens the viability of the bidder). In contrast, in the competition on access undertakings that the ODTR wishes to set up, winner's curse is *not* just an issue for those who suffer it, but rather for *all* market participants and for the efficient functioning of the market for 3G services.

For example, suppose that an applicant wins a licence by virtue of having offered access to its network at uneconomic terms, say much below incremental cost of the services offered. If this offer is available to non-facilities based entrants, competition would force the prices of some services artificially low, since such entrants would in effect be subsidised. This would affect all operators in the market.

This observation is worrying as it demonstrates that the competition process that the ODTR is proposing may, due to its very structure, lead to uneconomic access offers being given by successful applicants. If one operator offers access at overly favourable conditions (which are unsustainable in the long run), it will attract the majority of the demand for access, leaving other operators starved of access revenues and in competition with entrants who can offer unrealistically low retail prices.

In the long run, pricing access at below its true opportunity cost gives rise to very substantial inefficiencies and welfare losses since:

- incentives for investment in facilities-based competition are undermined by artificially low access prices;
- allow inefficient operators (such as service providers and possible MVNOs) to enter the market due to the effective subsidy on access, causing considerable welfare losses.; and
- incentives for existing operators to invest in new services and capacity are undermined by inefficiently low returns.

Furthermore, this issue is likely to have an impact on the valuation of licences, since the value of a licence to an applicant may be depressed by the risk of other applicants making unrealistic access offers.

These problems would not arise if the ODTR:

- separated licensing and regulatory goals and procedures; and
- to the extent that any regulatory objective is implemented through the licensing process, limited this to existing operators giving assent to a pre-defined obligation on 3G-2G roaming.

Using standard regulatory instruments (rather than implementing access regulation by means of 3G licensing) avoids all of the problems listed above, since uniform principles for the determination of access prices would apply to all operators. These principles generally try to set economically efficient access prices that take account of investment incentives and so avoid unfairly subsidising non-facilities based entrants.

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## 5. SUB-OPTIMAL AND INFLEXIBLE REGULATION

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Using 3G licensing to achieve objectives more properly achieved by means of separate regulatory intervention not only distorts the licensing process, but also is also an ineffective means of implementing regulation. Effective regulation does not consist of extracting maximum concessions from individual operators, but may require consistency in application across all operators. Operators should compete *within* a sufficiently well-defined, transparent and fair regulatory framework rather than competing *by* designing and offering their own regulatory concessions. The latter case may seriously distort rather than promote competition in the market, as we have discussed with regard to distorted access prices.

Moreover, implementing regulatory obligations by means of the one-off 3G allocation process does not give the Director a mechanism for modifications of these obligations at a later date; no consistent framework or mechanism for on-going regulation would have been established. Therefore, using the 3G licensing process as a means of implementing regulatory objectives would appear an extremely poor substitute to establishing a properly structured, self-standing regulatory framework for mobile telephony.

In particular, the loss of regulatory flexibility that would be entailed by implementing fundamental regulation of the mobile sector (in particular, access) through the 3G licensing process would have considerable costs. First, the mobile sector is highly dynamic and there would be little opportunity to respond to changing market conditions. Second, there are significant developments afoot at the EU-level as a result of the 1999 Review that are likely to require modification of national regulatory regimes within the next few years. In particular, the 1999 Review foresees the winding back of regulation as markets develop. It is difficult to see how appropriate sunset clauses for access regulation linked to market development could be implemented if the ODTR pursued a strategy of extracting concessions from prospective 3G licensees through the licensing procedure rather than defining regulatory obligations in a proper way.