Time to pin down the fallacies in yet another idea for how we should award third generation (3G) mobile phone licenses.

This one is called reverse auctioning and is the pet of the director-general of the Office of the Telecommunications Authority (Ofta), Anthony Wong Sik-kei.

The idea is that instead of awarding these licences to the highest bidder we will get the contenders first to commit themselves to the sorts of networks they will build and then hold an auction in which they bid ever lower for the fees they will charge their customers. Lowest bid wins.

Mr Wong believes this system will ensure that network operators do not make windfall profits from their use of a public asset in the radio spectrum and will serve to promote high tech communications in Hong Kong by keeping usage fees down.

Superficially it looks like a good idea but it has the great failing that you only have to peel back the top layer of superficiality and immediately you run into intractable difficulties.

First of all, unless the competing proposals are identical there is no way that a bid for any of them can be matched against a bid for another. Do it this way and all you will do is invite legal challenges that will delay the roll-out of 3G services for years.

Secondly, these will be continuing services. How can bidding for ongoing usage fees possibly take account of unknown cost inflation in coming years or of technological changes that could affect pricing? If network operators are not in court immediately with complaints of unfairness they will certainly be in a year or two.

Thirdly, you can count on it that at least one network operator will bid too low on usage fees and go bust as a result.

This is, of course, also a danger if we hold a normal auction and sell the licences to the highest bidder. Someone will bid too much, be unable to cover his costs and go bust.

But there is a crucial difference between these two. In a normal auction we would not restrict usage fees. If a network operator goes bust his shareholders and bankers will absorb the hit of his having paid too much at auction and a new operator can take over on terms that give him a better chance.

He will still have freedom of pricing and this will be a superb incentive to get the network up and running. There will be no delay in roll-out of services and the general public will not suffer.

But with a reverse auction no-one will want a bust network. It went bust because its usage fees were too low and those fees cannot be raised. It will be a loser no matter what you do with it and therefore it will not be rolled out.

Ah yes, you say, but then perhaps we can allow these fees to be raised.

Indeed we can but let bidders at the initial reverse auction have only the whiff of a hint that usage fees can later be raised and they will all bid impossibly low usage fees, knowing that they can get relief later. We would make reverse auctions an instant self-mockery.

Consider also what would happen under a reverse auction system when we reach network capacity in 3G.

We could have two people wanting to use a network when only one can be accommodated. How do we choose between them?

The only fair way would be to do it by price. Let those who need it most pay the most and let the public purse have the excess they have paid so that others can get at least some roundabout compensation for not having been able to use the network.

It cannot be done on a reverse auction system. Usage fees will be fixed.

Reverse auction simply does not stand the test of even a little thought in this matter. The only winner of a reverse auction system will be Ofta itself. Administering the system will make it a bigger bureaucracy then ever.