

## Public Telecoms 2.0: The Return of the state

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The time has come to engage in a new discussion on the role of the state in the next generation of electronic communications. For almost a generation now the dominant approach has been that of deregulation, privatisation, competition and free trade. It was believed that in time the role of the state as owner or regulator of communications infrastructure would wither away.

This approach, whose impetus came especially from universities, took hold in American public policy, and spread around the globe. In time, it became the governing orthodoxy.

Today, with data in hand, and with new technologies emerging, the question is, “has the old approach worked?” And “what next?”

Of course, all forms of networks, from mobile to broadband internet have progressed spectacularly. But these gains are not necessarily attributable to policy changes. After all, similar changes are observable in countries such as China, where the state has a pervasive role in telecommunications. The main driver of change is the underlying technology, part of which is progressing at the exponential rate of Moore’s law.

Privatisation has unquestionably energised most incumbent telecom organisations and helped increase their efficiency. Yet privatisation has also led, after an early challenge by new entrants, to a re-assertion of market dominance by the old telecom incumbents. Independent mobile communications are a partial but declining exception.

The result has been an industry structure dominated by big incumbents, surrounded by a number of energetic but small rivals whose survival is largely based on protection by the regulator, and who are mostly using the infrastructure of the incumbent and re-configuring it. One could attribute this dominance to some globally pervasive conspiracy among incumbents and captured regulators. Or, more credibly, one could attribute it to some fundamental workings of network industries, in which economies of scale and network effects combine to give advantages to the largest of firms.

The result has been an increasing regulation of access to these networks, with issues such as unbundling, pricing, structural separation, and access rules among the areas for regulation.

These dynamics are even more at work in the case of ‘new generation’ networks. Fiber-optics-based networks with their huge transmission capacity and enormous economies of scale are at the heart of these new communication networks. In some countries like the US, Korea, or the Netherlands, cable TV provides a second infrastructure and changes the dynamics of the network. But in most of the world, broadband communications mostly ride on a single infrastructure.

Like it or not, several trends bring back the state:

### **Video over the internet**

While the economies of scale of distribution networks are rising, those of content are dropping. Thousands of independent producers and tens of millions of users are generating content. All seek unhampered and affordable access to the networks. When these producers and consumers of content face a network with substantial market power, the arguments of non-discriminatory cheap access, known as “net neutrality”, start to resonate politically. This results in regulatory rules on access, quality, and pricing.

### **Local and community efforts**

Around the world, local governments are taking ‘sub-sovereign’ initiatives to provide communications connectivity to their citizens. The new generation networks generate local public benefits, such as increased high-tech employment, that are not captured by the network operator. The result is a role for public investment in such infrastructure. This is especially true for developing countries.

### **Wheeler-dealer capitalism**

Inevitably, private firms follow the patterns of the wider private investment environment. Recently, several national telecom operators have been acquired by fairly anonymous private equity investor partnerships, based on heavy debt loads. This raises the question whether such an ownership model, while useful for many industries, is also appropriate for major national infrastructure providers with a much larger public role.

### **The loss of national productive capacity**

The US and Europe have lost important high-tech industrial capabilities to Asian countries. This trend has gone beyond the loss of manufacturing jobs and now includes R&D and white collar jobs, causing alarm in political and policy circles. Traditionally, the telecom sector has been used as a keystone of national high-tech development efforts, and this role is likely to be revived in some countries.

### **Pathologies over the network**

Inevitably, the increasing capabilities of electronic communication attract shady or controversial uses. Just as inevitably, countries will use laws or regulations to shift some of the burden of policing and blocking such usage onto network operators.

### **The persistence of traditional societal goals**

As the importance of communications grows, so do concerns about how to deal with those people and regions on the wrong side of the 'digital divide'. In many countries, the network operators will be mandated to play a significant role in bridging this gap.

### **The growing importance of wireless**

Whether in mobile or fixed line, the importance of wireless transmission keeps growing, and with it the role of the state in setting the terms for access to slices of spectrum.

All this will lead inevitably to a revision of the present orthodoxy about the role of the state. The notion of a withering away of the governmental role will itself wither away. This is not because it was wrong; at the time, it fit its purpose and was an improvement over the stifling role of the state in the past. In the 1970s, new entrants could be emerged for the first time, due to the developments of low-cost microwave transmission technology (the 'M' in MCI). But everything comes in cycles, and now, as the underlying technology changes once more, so must policy responses.

What seems to be emerging now is a communications system with a central network provider, surrounded by smaller infrastructure and applications providers. The central provider, by dint of its size and significance, will increasingly be treated as a form of utility. This role will lead to calls for policies that resemble the demands traditionally made of public utilities, such as that it provide: universal service, interconnection, and structural separation, as well as supporting industrial policy etc. The signs for such a shift are everywhere, and we must connect the dots to recognise the broader dynamics.

Yet this phase also will not last. It too will prove in time to be technologically obsolete and organisationally inefficient. And then, a new cycle to deregulation will begin again.