

For the purpose of this article ISP here refers to all internet service providers including mobile internet through mobile phone connections.

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In today's world, connectedness is everything. We work, study, play, socialize and live on the internet. The prevalent nature and its essentialness, so to say, of the internet, in today's world has been highlighted and emphasized by the imposed lockdowns, not only in this country but elsewhere in more developed countries. It is understood by the many as a basic right and has been, fortuitously declared as a basic right by the new Minister of Environment, Climate Change and Technology.

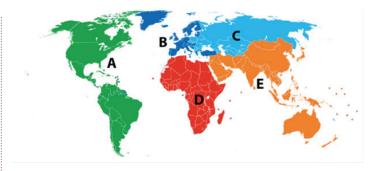
In today's digital age, Affordability, Accessibility and Reliability (AAR if you will) plays a critical role in determining public discourse, and the ability of citizens' to participate in affairs of the state, as all governments continue to insist that is exactly what they want. In the days of ancient Athens the public (in reality a very selected few) gathered in the Acropolis to decide on the affairs of the state. Today our twitter feed and social media help influence, shape and form policy decisions.

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Importance of the RF spectrum

The radio waves comprising the Electromagnetic spectrum is the natural resource that makes modern communication and communication development possible. The portion of electromagnetic frequency spectrum usable for communication remain is limited-between 30 Hz and 300 GHz) and this limited natural resource is what is known as the Radio Frequency (RF). For any country, the RF spectrum is a national asset and access to the asset, for commercial purposes are controlled and regulated. The RF spectrum is the highway, and it is access to that highway, the costs attached to it, that determine the commercial viability of ISPs. The highway that is used by the digital 1s and 0s is the Radio Frequency (RF) spectrum and it is the ownership and the access to the radio frequency spectrum that allow Internet Service Providers (ISP) to sell data, make money and enrich their shareholders. The quality of that service to a large extent, determines the quality of life today.

The International Telecommunications Union is the responsible UN agency for information and communication technologies and allocates global radio spectrum. For administrative purposes, the ITU has divided the world into 5 administrative areas in which distribution in Maldives belongs to area E including our neighbors in the SAARC region as well as developed giants in the telecom world including Singapore, Australia, Japan and China.



Studies by the International Telecommunication Union have shown that a 10% increase in mobile voice or broadband penetration increases a country's national income by in excess of 1%. This means that the efficiency in the use of the limited RF spectrum has national consequences at the GDP and per While different countries, at capita income. different stages of their maturity into the digital age, have exercised different models in determining access to ISP's, today most of them manage the access in a manner that offer revenue to the state in albeit different forms. In India and Sri Lanka, our closest neighbors today, RF access to ISP's are allowed through a managed auction. Other developed countries too, like Singapore South Korea and Japan, have been allowing access to highway through managed auctions as of late.

ISPs compete for the limited RF spectrum because it is the quality and cost of that access that determine their services and therefore, what they are able to provide to their customers. Regardless of the model used by different countries, one factor is common

across all models and hybrids used by different countries in allowing access to the digital highway. The nation, the country benefits from selling that access. It is a limited resource. There is great demand for accessibility to that resource and for private enterprise there is much profit to be made depending on the nature of the access to the RF spectrum.

World Bank in a 2008 Policy Research Working
Paper titled 'Managing the Radio Spectrum:
Framework for Reform in Developing Countries'
stated that

The radio spectrum is a major component of the infrastructure that underpins the information society. Spectrum management, however, has not kept up with major changes in technology, business practice, and economic policy that have taken place worldwide during the last two decades. For many years traditional government administration of the spectrum worked reasonably well, but more recently it has led to growing technical and economic inefficiencies as well as obstacles to technological innovation.

That was the basis of the World Bank Policy Report Research in 2008. The report went on to conclude that

Moving spectrum management closer to markets and users is long overdue. Spectrum management is, in a sense, the last frontier of the telecommunications sector reforms that the World Bank and other development organizations have been promoting and supporting for two decades. Whereas state monopolies have by now largely given way to private-led, increasingly competitive market structures, the spectrum, a key resource, remains firmly in the hands of governments. Well-managed spectrum has become critical for developing mobile services, broadcasting, and broadband access. Incumbents and new entrants increasingly resort to wireless technologies to modernize and expand their facilities. Only tinkering at the margin with existing spectrum management practice is no longer sufficient.

We, in the Maldives, until to-date, have only imposed an administrative charge for RF spectrum allocated to ISPs. While memory serves to remind me that there was, some time back, a bidding for spectrum allocation. Few bidders apparently participated with bids in excess of MVR 1,000,000. However, this is today, largely anecdotal and no reference to the same is available.

Basic Economics, and numerous examples warn us of the dangers of freeriders on a Public Good. Any Public Good. Be it vehicle access to the crowded congested roads of Male', the stock of tunas in the Indian Ocean and yes even to the digital highway.

Unfettered access to all, especially free access leads to exploitation by the few and a deficit of access to the many. The RF spectrum allowed for each ISP and the costs associated to the same determines, for a large extent the bandwidth of the provider, the potential for expansion, geographic coverage

Basic Economics, and numerous examples warn us of the dangers of freeriders on a Public Good. ... Be it vehicle access to the crowded congested roads of Male', the stock of tunas in the Indian Ocean and yes even to the digital highway. Unfettered access to all, especially free access leads to exploitation by the few and a deficit of access to the many.

ISPs are businesses. In 1776, Adam Smith wrote that 'it is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love.' Like all businesses ISPs too, perform best under competition. Perhaps, it is time, that here in the Maldives, like the rest of the developed world too, to get our ISPs to compete for access to digital highway and pay a fair market price for that access to the nation for whom that asset belong.

The counter argument that this will only result

in higher charges by ISPs are, today a tired and exhausted. Given competition, rates will always fail, especially in the tech sector where Moore's Law operate in so many formats. Therefore, the question, may again be posed. Are we allowing our ISPs to take our free ride? Can we allow for more competition and indeed get better services with lower charges?

