**Resume** : The presentation of Mr. Marcelo Saldanha claims that to improve connectivity, must exist dialogue mechanisms for political decision-making between government and society. Without this premise guaranteed any broadband policy, such as digital cities, e-government services and even national broadband plans, once built only focused on economic interests, tend to be useless or ineffective in the point of view of compliance of its social function.

Proactively the author suggests that policies encouraging free and social communication initiatives, such as Community Internet Providers, radios, televisions and telephones integrated into larger policies such as digital cities and even national broadband programs as an alternative to universal access to information, ensuring the connection of the next 4 billion people within a scenario where internet is not seen only as a product shelf, thus strengthening the guarantee of communication right for everyone.

New contribution in English, that is made in the platform of IGF

 **How would you define the issue “Connecting the Next Billion”?**

Is it possible connect everyone on the planet? If so, this will not be done only with the market efforts - it was already clear even in developing countries. The industry is increasingly vertical, denying recognition of the social function of these rights. So you need to think outside the box and look for synergies so that even the market get out of stagnation and start to innovate in order to add value to existing services now linked to ICTs. That said, there must be more integration between government and society in finding collaborative solutions, ensuring broad participation in management processes.

Another point is to deepen the development of ICTs in market sectors which today are also hostages of the current business models of large telecom companies. This development should be given to ensure the construction and administration of networks in a shared manner. For this, we have three important steps: regulatory flexibility, especially in digital technologies that do not use scarce resources such as spectrum; promotion of public policies and non-profit community initiatives to expanding access beyond the market dynamics; and the creation of broad mechanisms for debate and participation on such actions, on a multi stakeholder level.

 **Have you observed any regional or national specificities regarding connectivity (e.g. Internet industry development)?**

There are attempts to improve the production and consumption of domestic equipment, but with insufficient investments in ST&I and R&D and beyond the pressure of the international market, is complex advance ICT with domestic equipment that can not compete with foreigners, then, one thing can not stop the other. The idea is to facilitate the entry of better quality and price products, trying to ensure technology transfer to the domestic market and gradually go on increasing the potential of the domestic industry to domestic competition and perhaps outside.

Another issue is the little advancement of public policies and the total lack of synchronization between the government bodies. An example is the program "digital cities" and the public policies of digital inclusion, outside the national broadband plan and the role of Telebras revitalization as the protagonist of this plan. That is, it is necessary that the government or Congress forward a bill for planning these policies, so as to consolidate State policies. An alternative that was created in 2014 was the PL 7319/2014 which deals with the use of federal funds of telecom, based on the orderly implementation of broadband policies and digital inclusion, however, is needed to rescue its progress independently the legislature.

The incredible thing is that the government does not seem to see, more effectively, which increased access generates more socio-economic impact than a simple offer of broadband services (fixed + mobile), which represents less than 1% of GDP , as the internet economy creates more than 8% impact on GDP in Brazil today. In the current telecom scenario will not exist smart cities, e-govs, i-govs and t-govs without an infrastructure that is focused on the public interest and in fulfilling its social function; and in the lack of market understanding this, the State must seek paths to ensuring access to essential services to society.

Another important point to note in the Brazilian context are the regional / geographical and socioeconomic characteristics of the population. We have a country of continental size, regions that do not have electricity, much of the population with difficult access to education. These are important barriers to connectivity of the country as a whole and can be addressed with policies that analyze each case, taking knowledge and technology, but so that the people of each region to take ownership of the form they deem necessary. On the issue of the country's size, it is important to invest in wireless connectivity technologies, for the cabling of certain areas may infeasible the project.

With regard to equipments, we have to start focusing on the development of firmware for devices already on the market, for the sake of harnessing parts and decrease costs through free software. In this regard, it can start with the firmware with OpenWRT based developments (https://openwrt.org/) that has evolved a lot in this aspect. That way, you can further decrease the costs for accessibility of ICTs in low-income and mostly excluded communities.

 **Do you know of existing policy measures, and private sector or civil society initiatives addressing connectivity? If yes, was the policy a government policy, industry policy (either collective best practice or corporate policy), technical policy, or did i**

Yes, there are several initiatives in Brazil to seek increased access ICT, but as said, all disconnected without ordering, efficient planning and continuity to seek the resolution of problems. Digital City is one that should be one of the priority programs, because it is first square mile networks and follow a total mismatch without proper advertising and encouraging participation. In parallel and in a much more fluid dynamics, we have the internet signal sharing actions, now made by citizens who simply want access to the service for lack of existence of this in your locality, but also best price and quality.

According to research made by Data Popular in 2013, 7 million Brazilians share internet signal with neighbors (http://glo.bo/1FPdAY9). On the planet there is a movement of free networks which can be seen some initiatives in our portal: http://www.redeslivres.org.br/mundo/. In Brazil, since 2008 more pointedly we created a methodology for community providers in partnership with universities and other focused institutions in the field and create an environment to discuss regulatory flexibility and funding for such initiatives, broadening the debate beyond the access to internet in a broader context such as access to information by other technologies such as TV, radio and community telephony.

In the north of the country, in the Amazon region, hundreds of forest peoples (Indians, rubber tappers, etc.) communicate autonomously using radio transceivers that typically operate on short-wave bands (typically between 6 to 8 MHz), however, no public policy exists in order to regulate these emissions, encourage them and scan them. Digital links operating in the band shortwave can be a low cost alternative to digital communication in regions without communications infrastructure.

 **In your opinion, what worked well in the development of the policy, and what impediments were encountered?**

When it comes to broadband policies and digital inclusion, especially at the end, ie in the first square mile the main thing is to ensure shared management, if possible 100% Communitary where other actors are partakers be it in assistance or giving support through sustainable business models, such as the link selling wholesale market. In seeking these synergies, we see clearly - if they play aside greed of the market wanting to control everything, as well as governments - a way to build networks with shared use where the fibers can be used for all purposes more efficiently and the spectrum to be used more rationally and not competitively, as it is through the study ASA / LSA system.

The impediment, of course, is the lack of a better regulatory environment to allow such initiatives outside the scope of markets; lack of laws that plan and ordering policies and finally promotion and support to construction of infrastructure with use and shared management. It is noteworthy that community providers are an intrinsic part of digital cities and support to smart cities.

Brazil is the country with the largest number of community radio stations in the world (> 5000), with more than 26,000 grant proceedings are pending in MiniCom.

The basic infrastructure of a RadCom has a tower between 15 to 30m height, what it is ideal for the installation of equipment for mobile telephony and WiFi for provision of internet / telephone services at a low cost and with the support of community and benefit the community radio which can obtain its sustainability with the help of these services. The impediment in this case is the same as explained above this paragraph.

 **What was the experience with implementation?**

Digital cities, so far very poor due to lack of integration of debates in the society where again we see the government's modus operandi in wanting to implement all the top-down style rather than the bottom-up-in-between model . The same goes for almost all ICT policy. As Community free networks follow deepening the cultural change process to uproot the belief that ICT is shelf product, as I said that is increasing outside the world, even because of unfair market practices, the lack of efficiency and detachment of the State on the subject. We believe until the problem is timing, that is, the lack of synchronism between the information society and markets and governments that fail to keep up with these demands for an economy of abundance and more horizontal in the processes. To check ....

**Did you experience any unintended consequences of policy developments/interventions, good and bad?**

There are some good experiences, but with great difficulty. The debate on Anatel to allow community providers has consolidated well despite some inconsistencies in the function of the agency, where nonprofits today can provide internet signal through the SLP license - Limited Private, however, since 2008 already exists resolution with based on ISM frequencies, guaranteeing the wifi signal sharing, simply follow certain rules, such as power limit of restricted radiation equipment that were approved by the agency and the exploitation of these services without purpose of profit, ie do not make this place a trade. Another point was the creation of two consecutive years of public calls (PROEXT) in the MEC for creation of community providers experiences as university extension action. Other than that, the debate is around three topics that do not go in line with the aspirations of society and the government persists in maintaining his view that the market is the solution. It is worth noting before that there is nothing against the market itself, but rather how the actions are being done with almost no participation of society in fact no part that actually impact on decision-making. Then returning the three topics are: national broadband plan, now called broadband for all; regulation of Marco Civil da Internet and not least digital cities and their integration with social policies and community related ICTs.

 **Can you think of unresolved issues where further multistakeholder cooperation is needed?**

No doubt we need to put the issue on the national agenda with entities of the society assisting in qualification and pressure on governments and markets. To this end it is necessary to have a permanent agenda and that means resources to keep this mobilization. At this point you need to create content and campaigns to put more debate close to the citizen and an easy to understand language. Another point is to look at the funding partners to encourage more free range of initiatives, open public notices, public calls for such initiatives and awards. In a resides within society this demand for more access, after all we are talking about 4 billion at least disconnected and Brazil, more than half of the population where fixed broadband only 26% are above 2 Mbps speeds.

 **Did you gain any insight as a result of the experience?**

In the first instance would be the socio-economic gains of universal access working possible synergies, such as RNP, SmartGrid, much of the industry that is out of quality of access, digital cities, players to SmartCITIES and of course, free networks and related social initiatives the issue as telecenters and community radios and TVs, culture points, CVTs etc, ie any associative activity or cooperative that is willing to act on this national action for access to information as a human right. Over time it is also clear the gains greater interaction and social participation on politics at all levels of government as well as gains in social development linked to education, training and local economy. We will have more mechanisms for social control over governments, demand transparency on public affairs, democratization of the media, in short, what do is said here is also on the principles of the Marco Civil da Internet, directly or implicitly.

 **List proposed steps for further multistakeholder dialogue/actions.**

Create a global environment, with partners, to encourage, support and development by digital communications democratization initiatives, after all we are talking about convergence; Sensitize governments to create national broadband plans and adjacent policy with the focus not only in telecom market but, with Community initiatives (worth seeing the new national broadband plan of the United States and the Broadband USA) and participative management. Search building laws that are more or less aligned, what do facilitate broader actions and building a global Internet governance, after all it's done by peers, then, to think only in a top-down view does not seem to be the best way to build the Internet we want. The electromagnetic spectrum management must guarantee freedom of expression and communication, therefore, part of the spectrum allocated to radio, TV, mobile telephony, internet and other services should be allocated for non-commercial purposes in a more flexible and effective manner.