

# SANJEEV AGA

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The T.R.A.I.

6<sup>th</sup> January, 2014

New Delhi

Dear Sir,

## RESERVE PRICE FOR AUCTION OF SPECTRUM IN THE 800 MHz BAND

I am attaching my Comments to the Consultation Paper cited above, for your kind consideration.

I have had wide experience in the telecom sector. These comments are in my private capacity as a citizen.

Best regards.

Sanjeev Aga

## **COMMON COMMENT TO QUESTIONS 1 TO 9.**

### **BACKGROUND**

Valid recommendations must be based on facts. As certain premises in this Consultation Paper on spectrum technology neutrality are factually incorrect, I restrict this Comment to facts, without recourse to opinion.

While the Authority has been regulating technologies like 2.5G, 2.75G and 3G long before 2010, only its later Recommendations of 2010, 2012, and 2013 have elaborated its position, the essential Seven Premises are extracted below;

*1. It is true that the UAS License is service and technology neutral and the licensee can use any recognized technology. (1.78 of 11.05.2010)*

*2. Spectrum given in the bands 800/900/1800 are for using specific technology, ie CDMA and TDMA GSM. (1.78 of 11.05.2010)*

*3. Spectrum assigned for 2G services is for a specific technology, it cannot be used for any other technology, until its use is liberalized (2.18 of 23.04.2012).*

*4. Liberalisation of spectrum refers to the removal of technology restrictions to give the licensee an option to deploy new technologies in the same (2.18 of 23.04.2012).*

*5. UAS License clearly restricts the use of spectrum in 800/900/1800 to a prescribed channel plan (2.29 of 23.04.2012)*

*6. In India, spectrum in the 800/900/1800 MHz bands was assigned for 2G services and for a specific technology, either GSM or CDMA (2.65 of 09.09.2013).*

*7. The Authority, after examination of the comments of the stakeholders, finds no*

*reason to alter its views on the issue (2.72 of 09.09.2013).*

## **DEFINITIONAL DISTINCTIONS**

**TECHNOLOGIES Use SPECTRUM To Deliver SERVICES.**

**This definitional distinction between technologies, spectrum, and services, is basic and crucial.**

**2G GSM, 2G CDMA, 2.5G GPRS, 2.75G EDGE, 3G WCDMA, 3G EVDO, 4G LTE etc are all technologies**

**700/800/900/1800/2100/2300 MHz etc are all spectrum bands.**

**Voice, Data, Video etc are all Services.**

## **ANALYSIS**

**The set of 7 Premises cited above are riddled with errors on facts.**

**a) One fundamental factual error is in Premise 3. The Authority has portrayed 2G as a Service. 2G is not a Service. 2G is a Technology which delivers a Service. What can we make of this premise?? Did it mean “*Spectrum assigned for 2G technology is for a specific technology*”? Or, did it mean “*Spectrum assigned for such services as delivered by 2G are for a specific technology*”? From facts, we know it meant neither, as the Authority in 2010 had for long already been regulating another Technology 3G, as also Services delivered by another Technology 3G.**

**If we construct Premise 3 and Premise 6 together, the errors get compounded. Premise 6 goes further “In India, spectrum in the 800/900/1800 MHz band was**

assigned for 2G services....”. Irrespective of whatever meaning we bestow upon the term 2G Services, they do not add up and factually the Authority set no store by any of them.

Similarly, Premise 3 asserts that the spectrum assigned for 2G Services (whatever that means) cannot be used for any other technology. But in fact the Authority was regulating and continues to regulate the use of ‘other technology’ even as this Premise 3 was expressed, contradicting and belying this Premise.

Premise 2 is equally flawed. First, it is inconsistent with Premises 2, 3, and 5, which make it a non-starter. Second, as a manifestation of the broad sweep of policy, it could not be more wrong. The *raison d’être* of the UASL policy was to unify CDMA and GSM, in exact contradiction to this Premise 2.

b) Premise 5 is superficially meaningful, but factually meaningless. Spectrum is necessarily arranged in channels. Channels existed before NTP-99 and before UASL-2003. That a channel is prescribed has no meaning because some channel will always be prescribed.

To elevate a Channel to the commanding heights of policy, such that headline terms *Unified Access*, and *License Service and Technology Neutrality* mean nothing, that channel is not an outcome of policy but it is the policy which is an outcome of channel, is to premise that the tail wags the dog.

c) For the same facts as above, Premise 4 is accurate only as stated, and while consistent with Premise 1, is inconsistent with Premises 2,3, 5, and 6.

In sum, only Premises 1 and 4 are based on facts and backed by the conduct of the Authority. Hypothetically, if Premises 2,3,5, and 6 were to hold, then the conduct of regulation by the Authority before 2010 would be defective. But that point is moot because Premises 2,3, 5, and 6 are axiomatically incorrect.

## **CONCLUSION**

Based only on facts, and without recourse to opinion, the only surviving valid Premises are Premise 1, “*It is true that the UAS License is service and technology neutral, and the licensee can use any recognized technology*”, and Premise 4, “*Liberalization of spectrum refers to the removal of technology restrictions to give the licensee the option to deploy new technologies in the same*”. World-wide, Premise 1 is nothing but the definition of Premise 4. It also so happens that the Authority has exercised its remit from 2003 and until date consistent only with Premises 1 and 4, except for the erraticity caused by the later embrace of invalid premises. The invalid premises have led to absurdities. Metaphorically, Person A and Person B are both allowed to cross a chasm. Person A is allowed in one jump. But Person B is cynically instructed he can do so only in two jumps. The Authority may please examine the facts and revise its position on spectrum technology neutrality to make it consistent and logical.

The Authority has displayed the moral courage in *escaping from old ideas*, and in *changing its opinion when the facts change*. The Recommendations emerging from this Consultation will be fatally flawed if they are based on factually incorrect premises. I am sure the Authority will do right as it deems right.