



To,
Advisor (NSL),
Telecom Regulatory Authority of India,
MTNL Telephone Exchange Building,
Jawahar Lal Nehru Marg, (Minto Road),
New Delhi-110002.

No. 1-4/2012-Regln/5203 Dated: 03-11-2017

{Kind Atten: Shri S.T. Abbas, Advisor (NSL)}

Sir,

Sub:- BSNL Comments on TRAI Consultation Paper on In Flight Connectivity (IFC)

Kindly refer to the TRAI Consultation Paper no.14/2017 dated 29-09-2017 on the subject mentioned above. In this context, point wise BSNL's comments are as follows.

Q.1. which of the following IFC services be permitted in India? a. Internet services b. Mobile Communication services (MCA service) c. Both, Internet and MCA

BSNL response:

It should be both data services like Wi-Fi/internet and voice.

Q.2. Should the global standards of AES/ESIM, shown in Table 2.1, be mandated for the provision of AMSS in Indian airspace?

BSNL Response:

Yes.

Q.3. If MCA services are permitted in Indian airspace, what measures should be adopted to prevent an airborne mobile phone from interfering with terrestrial cellular mobile network? Should it be made technology and frequency neutral or restricted to GSM services in the 1800 MHz frequency band, UMTS in the 2100 MHz band and LTE in the 1800 MHz band in line with EU regulations?

BSNL Response:

To prevent interference, technical guidance in the relevant EU Decisions is sufficient. It should be in the band where there is very less terrestrial communication exists. It should be preferably in L band.

Q.4. Do you foresee any challenges, if the internet services be made available 'gate to gate' i.e. from the boarding gate of the departure airport until the disembarking gate at the arrival airport?

BSNL Response:

Principally there should not be any challenge to it but it be the choice of Airlines and the passengers. There is no technical/operational/regulatory challenge/difficulty.

Q.5. Whether the Unified Licensee having authorization for Access Service/Internet Service (Cat-A) be permitted to provide IFC services in Indian airspace in airlines registered in India?

BSNL response

For IFC deployment, only a specific license by DOT be allowed seeing the security conditions like lawful interception and putting of Gateway in India.

Q.6 Whether a separate category of IFC Service Provider be created to permit IFC services in Indian airspace in airlines registered in India?

BSNL Response:

No, Separate category of IFC Service provider be created to permit IFC in Indian Airspace in airlines registered in India. The security of the country and lawful interception is of paramount importance for inflight connectivity.

Q.7 Whether an IFC service provider be permitted to provide IFC services, after entering into an agreement with Unified Licensee having appropriate authorization, in Indian airspace in airlines registered in India?

BSNL Response:

No, the role of IFC service provider be limited to installation and provision of other specialised works inside the aircraft which is of specialised in nature. Rest the main licensed operator which should be a Govt operator for permission for in flight communication taking into consideration the Security aspects of the country for IFC.

Q.8. If response to Q.7 is YES, is there any need for separate permission to be taken by IFC service providers from DoT to offer IFC service in Indian airspace in Indian registered airlines? Should they be required to register with DoT? In such a scenario, what should be the broad requirements for the fulfilment of registration process?

BSNL Response:

N.A

Q.9. If an IFC service provider be permitted to provide IFC services in agreement with Unified Licensee having appropriate authorization in

airlines registered in India, which authorization holder can be permitted to tie up with an IFC service provider to offer IFC service in Indian airspace?

BSNL Response:

A duly licensed operator specially permitted preferably a Govt Operator for Inflight connectivity/MCA could be permitted to tie up with an IFC Service Provider seeing the security aspect of the nation.

Q.10. what other restrictions/regulations should be in place for the provision of IFC in the airlines registered in India.

BSNL Response:

The Gateway for Inflight connectivity should essentially be in India or Mirror copy solutions be permitted for early start. Security aspect and Lawful interception is of paramount importance and restricted entry like a Govt operator be allowed for IFC in India.

Q.11. What restrictions/regulations should be in place for the provision of IFC in the foreign airlines? Should the regulatory requirements be any different for an IFC service provider to offer IFC services in Indian airspace in airlines registered outside India vis-à-vis those if IFC services are provided in Indian registered airlines?

BSNL Response:

All the communication through IFC should essentially pass through Indian Gateway both for Indian and Foreign Airlines. Gateway for Satellite communication is already provided through BSNL and the same can be leveraged and be allowed to be upgraded to cater for IFC service in Indian Airspace. Regulatory requirements be same both for Indian and Foreign Airlines in Indian Airspace.

Foreign airlines should not be treated differently.

Q.12. Do you agree that the permission for the provision of IFC services can be given by making rules under Section 4 of Indian Telegraph Act, 1885?

BSNL Response:

Section 4 of Indian Telegraph Act, 1885 allows provision of Telegraph services in land, sea, air etc. BSNL has already been given license under Sui Generis category to provide service through Satellite at land, Sea and Air and the same is sufficient.

Q.13. which of the options discussed in Para 3.19 to 3.22 should be mandated to ensure control over the usage on IFC when the aircraft is in Indian airspace?

BSNL Response:

Security requirements are important and should be complied with. Mirror copy solution atleast be allowed as temporary solution for immediate IFC Services in India.

Q.14 Should the IFC operations in the domestic flights be permitted only through INSAT system (including foreign satellite system leased through DOS)?

BSNL Response:

Since the same Aircraft is used both for the national and international routes it may not be working. We have to see the availability of the Network for IFC throughout the Globe coverage.

Q.15 Should the IFC operations in international flights (both Indian registered as well as foreign airlines) flying over multiple jurisdictions be permitted to use either INSAT System or foreign satellite system in Indian airspace?

BSNL Response:

Use of foreign satellites has to be permitted for Global Coverage.

Q.16 Please suggest how the IFC service providers be charged in the following cases? (a) Foreign registered airlines. (b) Indian registered airlines.

A fixed fee be levied for Foreign Registered Airlines and for Indian registered Airlines it should be a percentage of AGR basis.

Q.17. Should satellite frequency spectrum bands be specified for the provisioning of the IFC services or spectrum neutral approach be adopted?

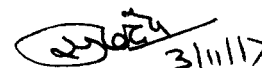
BSNL Response:

Only L band and Ka band be allowed seeing the technical advantages in L band.

Q.18 If stakeholders are of the view that IFC services be permitted only in specified satellite frequency bands, which frequency spectrum bands should be specified for this purpose?

BSNL Response:

L/Ka band



(Sukhdev Singh)

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