SITAONAIR Counter Comments in reply to submissions made on TRAI's Consultation Paper

On

In Flight Connectivity (IFC)

Consultation Paper 14/2017 issued by the Telecom Regulatory Authority of India (29th September 2017)

SITAONAIR submitted its comments on the Consultation Paper on 3rd November 2017, in line with the TRAI's timeline.

Many stakeholders have shown an active interest in the Consultation Paper, and we were pleased to see the large number and comprehensiveness of the submissions made. This underlines the importance of the subject matter, and also demonstrates that there is significant support for a speedy completion of the work and implementation of resulting policy.

SITAONAIR is an IFC Service Provider with global experience both in the provision of MCA services and internet access services. These services are provided over L-Band, Ku-Band and Ka-Band. With that breadth and depth of experience, we are taking the opportunity to make a few short counter comments after reviewing the submissions made. Where in these counter comments we may take a different view from that set out in the submissions of other parties, we do so with no intention to criticise but solely to clarify our views based on our particular experience.

- II. ISSUES FOR CONSULTATION
- 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

We note that many stakeholders with broad interests in the subject matter have advocated that both MCA and internet service be authorised. In particular, we draw TRAI's attention to the fact that the airline submission made specifically advocates this. We believe this demonstrates interest from the aviation industry to whom and to whose passengers these services are provided.

<u>SITAONAIR</u> therefore reiterates its view that both internet and MCA services should be made available in Indian airspace.

We also note that other submissions, like our own one, recognise that there may be additional considerations related to MCA and we fully support the view that, if this is the case, those additional considerations should not delay the introduction of internet services. To the extent that any further work would be considered necessary in relation to interference or competition with terrestrial MNO networks, we would simply note the significant technical work already carried out on this aspect (prior to MCA service being authorised elsewhere in the world) and also note that, in order to ensure any residual concerns are addressed, MCA services could be authorised only above 3000 metres.

We also reiterate our view that, if for any reason the TRAI were to consider that there are additional complexities in establishing a policy for authorizing MCA in India, the IFC Policy could in an initial period only cover Internet services while leaving for a second stage the authorization of MCA on board Indian aircraft.

In these circumstances, however, we would respectfully suggest that MCA services on board foreign aircraft overflying India should nevertheless be authorized from the outset, subject only to security requirements (see our response to Question 13).

Q.2: Should the global standards of AES/ESIM, shown in Table 2-1, be mandated for the provision of AMSS in Indian airspace?

The submissions made show widespread alignment that both global standards of AES/ESIM should be mandated for the provision of AMSS in Indian airspace.

Nevertheless, <u>we reiterate our view that</u>, as many airlines registered in foreign countries currently use the SwiftBroaband ("SBB") services provided by Inmarsat and operating in the L-band, services in this band should also be specifically authorised.

We would assume that the National Table of Frequency Allocations (NTFAs) will be updated accordingly.

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?

No further comments.

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?

No further comments.

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?

The submissions show a relatively wide range of views on the modalities of licensing. However, there is <u>strong convergence on the need for a simple licensing regime</u>.

As already mentioned in our original submission, <u>SITAONAIR</u> believes that any holder of an appropriate license should be permitted to provide IFC services on Indian registered aircraft and that, subject to compliance with any security requirements (see answer to question 13) all IFC service providers providing service on foreign aircraft which overfly India should be permitted to provide those services during such overflight (see our comment on question 11). We note that a Unified Licensee having authorization for Access Service/Internet Service (Cat-A) may be considered as appropriately licensed, and suggest also that appropriate license holders would also be authorised.

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

No further comments.

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?

We reiterate our view that <u>permitting IFC through a partnership with a licensee holding appropriate authorizations</u> (as referred to in the comments under Question 5) would be a simple and efficient way <u>of authorizing IFC services in Indian registered aircraft</u>. We do not see the need for further spectrum licensing constraints on the IFC provider, as this would already be covered by the partnership with an Indian licensee.

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?

No further comments.

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?

No further comments.

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

No further comments.

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?

We note the strong alignment on the principle that these services should not require "re-licensing" when they are already permitted under any applicable requirements of the State of Registry of the aircraft.

We therefore reiterate our view, shared by most stakeholders, that the provision of IFC services on foreign aircraft overflying Indian airspace should not be subject to licensing requirement. Such services would of course need to comply with whatever security requirements may exist (see answer to question 13).

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?

No further comments.

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?

We again respectfully suggest that the ability for a security agency to intercept communications and communications data does not depend on whether the satellite is Indian/foreign owned or leased. What matters is the level and quality of information which can be accessed by the security agency.

SITAONAIR has experience in operating under all three options referred to in the consultation paper. Like many others who have submitted comments, we favour a Mirror Copy solution (as mentioned in

section 3.21 of the consultation paper) as being the optimal solution to meet security requirements at least for in an initial period.

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

While we note some stakeholders have expressed a preference for exclusivity on INSAT services for domestic flights, we respectfully do not see the licensing arguments for this suggestion. The security elements are referred to under Q. 13 above, and we believe these aspects can be addressed by an interception technology choice. Limiting supplier choice for airlines is not something we believe the airlines community would wish to see.

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?

No further comments.

Q.16 Please suggest how the IFC service providers be charged in the following cases?

Calculating revenue earned in Indian airspace (as opposed to elsewhere on a flight) is extremely difficult if not impossible to manage. We therefore reiterate our view that charging mechanism on the basis of AGR (as some stakeholders may appear to advocate) is not appropriate.

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

We note that many patties who have submitted comments do not mention the L-Band,, whereas this is a band equally relevant for aircraft currently overflying India. Therefore, SITAONAIR would like to re-iterate its request to TRAI to consider the L-band in its regulatory framework.

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?

No further comments.

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Geneva, 10 November 2017

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