



To,

Shri Anil Kumar Bhardwaj
Advisor (B&CS)- II
Telecom Regulatory Authority of India (TRAI)
Mahanagar Door Sanchar Bhawan,
J.L. Nehru Marg, (Old Minto Road)
New Delhi - 110002, India

Sub: Comments on behalf of UCN Cable network pvt ltd.on the Consultation Paper on "Telecommunication (Broadcasting and Cable) Services Interconnection (Addressable Systems) (Fourth Amendment) Regulations, 2022 ('CP').

Dear Sir,

This is with reference to aforementioned consultation paper regarding Draft "The Telecommunication (Broadcasting and Cable) Services interconnection (Addressable Systems) (Fourth Amendment) Regulations, 2022 published by TRAI, wherein comments were invited from stakeholders.

In this regard, please find attached our detailed submission, attached as Annexure 1

We hope that our submission will merit your kind consideration and shall be favourably considered and incorporated while formulating regulation to enable IPTV Service Providers to provide seamless and quality service to its subscribers.

Thanking You

Yours Faithfully

For,

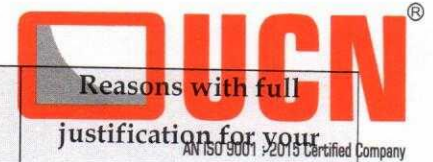


UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com



Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
1	C (a)	No	Retransmission of channels shall be over a closed network owned and/or controlled by DPO for electronic delivery of audio video stream of linear channels using Internet Protocol through an encrypted, point-to-point system architecture to set top boxes located within a subscriber's premises. For the avoidance of doubt, IPTV shall not include any electronic delivery for receipt and viewing via (i.e., directly accessible via) the Internet / world wide web/OTT	As in case of MSOs, the IPTV Provider should also be allowed to share infrastructure of the other service provider (whether TSP or other MSO) for provision of IPTV services. Any ownership requirement would be restrictive only for IPTV services and will also unnecessarily put financial burden on the DPO.
2	Table 2 P#33	No	IPTV Transmission shall be agnostic to any network topology for both Multicast & Unicast methods provided it complies with all regulatory requirements. STBs with facilities for recording programs shall have a copy protection system (i.e., a feature which prevents reproduction of content and/or unauthorized	With advent and advancement of new technologies, both Multicast & Unicast offers similar Quality of Service and Content Security so keeping IPTV Service limited to Multicast would limit the Opportunity to Industry Players from growing



UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com

Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
			copying and distribution of content) and such recorded content should not be transferrable to any other device.	fast and make IPTV successful in the market. Further, IPTV being interactive service, would be required to have functionality of unicast as well. As long as all the regulatory requirements and spec are complied with, there should not be any artificial technological barrier like Multicast or Unicast to offer IPTV Services
3	Table 2 P#34	No	IPTV transmission should be allowed to configure any content delivery network (CDN) in their system to deliver linear content to STBs provided it complies with all regulatory requirements	CDN is essential to make the IPTV System over Unicast scalable and robust for best in class Quality of Service needed for a mass deployment. As long as all the regulatory requirements and spec are complied with, there should not be any artificial technological



UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com

Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
				barrier like non-usage of CDN to offer IPTV Services
4	Table 2 P#37	No	IPTV system should allow recording of linear channel at headend/network level provided Content is DRM protected and only authorized STB should be able to playback the same in line with Broadcasters Agreements in this regard. It should also be allowed to record at STB/DVR level, without there being any option available to transfer such recorded content to any other device.	In the interest of better user-experience, we should keep both options open for end users to enjoy Live Channel Recording feature as per his choice/ need. Live Channel recording can be enabled over Cloud or Locally through connected Hard-Disk with DRM protection. Some leading DTH players are already offering similar Cloud Recording features on their existing Hybrid STB
5	Table 2 P#48	No	The DRM may allow insertion of any self-promotion and/or any third party and/or paid advertisements (including banners and Aston bands) before, during or after	This should be controlled based on Broadcaster's Agreement with respective DPOs to have more efficient way of delivering Ads for


UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com

Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
			transmission of linear channels subject to requisite agreement with the concerned Broadcasters in this regard.	targeted audience. This targeted dynamic Ad-insertion will be strictly in compliance with current TRAI regulations on Quality of Service
6	Table 2 P#49	No	The DRM may permit subscribers to record and/or store channels/content from channels subject to requisite agreement with the concerned Broadcasters in this regard.	Channel Program Recording is an essential and sanity feature for any LiveTv Service. All DTH & Cable TV DPOs are already offering the same. Further, pls refer submission to point #3
7	Table 2 P#51	No	The DPO may sub-license the DRM and/or any rights granted to the DPO by the broadcaster to any entity for re-transmission of channels to subscribers subject to requisite agreement with the concerned Broadcasters in this regard.	Even under the current regime, MSOs are permitted to provide content to other IPTV Service Provider. In view of that, DRM protected content should be allowed to sub-license to other DPOs after obtaining relevant rights from Broadcasters.
	Table 4	No	STB may have feature to	App Download through



UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com

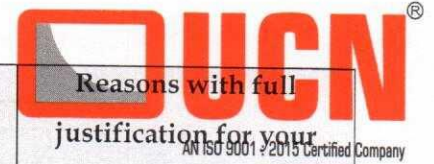
Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
	P#16		download 3rd party App/APK directly from in-built App Store and may also have access to a Browser. However, side Loading of any third-party App should not be allowed on the STB. At the same time, STB having an integrated browser to serve relevant Hybrid STB features, it should not allow any unauthorized access to IPTV through Browser.	App Store is the need of hour in current time with ever-growing App eco-system so direct download from DPO controlled App Store should be allowed. IPTV is an inbuilt service of STB while Apps are managed through App-Store so there is a clear demarcation between them. Browser is an integral part of STB and required for many use-cases so having Browser is an important element for a comprehensive product offering to end-user
9	Table 4 P#18	No	Already covered under above Point #16	Same as above point #16
10	Table 4 P#21	No	The DRM may allow delivering linear TV channels on HLS, Smooth Streaming, Dash & HTTP/TCP subject to IPTV service being not accessible on	IPTV Service should be agnostic to any technology as far as Solution complying to all regulatory specifications.


UCN Cable Network Pvt. Ltd.

502, 'milestone', 12, ramdaspath, nagpur - 440 010

p. +91-712-6633888, 6633999, f. +91-712-6633990

e. info@ucnindia.com visit us at : www.ucnindia.com



Sl.no.	Clause no. of Draft Regulation	Do you agree with the Draft Regulation proposed in this CP (Yes/No)	If you do not agree with the amendment proposed in this CP, then provide amended Clause proposed by you	Reasons with full justification for your response
			Open Internet, i.e. IPTV Service should strictly be accessible in a managed network with DRM protection	With advancement in technology now, both Unicast (HLS, Smooth Streaming, Dash & HTTP/TCP) and Multicast offers similar Quality of Service without any compromise on Content Security

(Handwritten signature)

