



National Information & Communication Technology Authority

RESPONSE TO THE RESPONDENT

Minimum Technical Requirements DVB-T2 Set Top Box

March, 2017

Executive Summary:

NICTA published this consultation paper, “*Minimum Technical Specifications for DVB-T2 Set Top Box*” in both the National and Post Courier newspapers which appeared on three different dates for the public to give their views and comments. The consultation period begun on 15/1/16 and ended on 11/3/16.

In line with the NICT ACT, the document consultation sought professional views and inputs from the ICT industry, stakeholders, and individuals, hereby called respondents, their views and inputs were forwarded to NICTA by way of written submissions. These submissions were analysed by NICTA staff and responded to the respondents accordingly.

NICTA received three (3) submissions from the following respondents, Digicel PNG Ltd, TOLEC and Clique TV.

The summary of the comments and inputs together with NICTA’s response to these comments and inputs are tabled below.

NICTA would like to thank the respondents for their efforts in providing professional views, comments, and inputs to this document.

1.0 Purpose of this document:

- To review recommendations, comments and inputs received from the respondents.
- To provide NICTA’s response to the comments received.

2.0 Respondents:

- 2.1 Digicel PNG
- 2.2 TOLEC
- 2.3 Clique TV

Note: Clique TV submission contained no queries or comment and therefore it is not represented in the table below.

3.0 Respondent's Comments and NICTA'S Response

	INPUTS/COMMENTS	RESPONSE TO INPUTS/COMMENTS
3.1	DIGICEL COMMENTS/INPUTS	NICTA'S RESPONSE
3.1.1	Digicel understands that the type approval of STBs is specifically mentioned as a requirement in the Act. However, Digicel would like to draw to the attention of NICTA that this is not the case in many other countries. Perhaps the requirement in PNG is somewhat of an unnecessary requirement, especially as there is no transmitter involved. The STB is a receive only device and provided it complies with electricity safety requirements, then perhaps that should be the only certification.	Considering Section 176 (3) (a) of NICTA Act, 2009, STB is regarded as receive only device and therefore by conforming to the ACT, Set Top Boxes shall be classified under the Class Licence. Further to this, the Title of this document is changed to: The Minimum Requirements for DBV-T2 STB.
3.1.2	In the event the NICTA wishes to maintain the type approval requirements for STBs in PNG, Digicel suggest that it believes the basic set of requirements identified in this document are in fact for a device which is not a basic arrangement but is in fact a device with some non-basic or entry level features. Digicel believes these extra non entry level features have the effect of increasing the cost of STBs involved which only affects end user, the people of PNG, and the cost effective access to ICT services.	Considering NICTA's response in section 3.1.1 this may not be an issue any more.
3.1.3	It is interesting to note that the currently approved STBs in use by Digicel in PNG would not meet this type approval requirement as they have a rather basic set of features and not some of the non-entry level features being requested here.	Considering NICTA's response in section 3.1.1 this may not be an issue any more.
3.1.4	Digicel request that NICTA considers the following comments:	
	a) All DTT-T2 STBs should be HD and not SD.(part 3, Minimum Technical Specification)	SD is an analogue standard while HD is digital standard, NICTA agreed to delete SD.
	b) 4k should not be compulsory as it increases the price and should be considered a nice to have rather than a must have features. (part 3, Minimum Technical Specification)	NICTA agreed and has made 4k, video o/p resolution an optional feature.

	INPUTS/COMMENTS	RESPONSE TO INPUTS/COMMENTS
	c) The requirement to upgrade CAs via OTA is not technically possible. (part 6, Minimum Technical Specification)	NICTA understands that OTA (Over The Air) option is for free to air unencrypted signal and CA (conditional Access) option is for encrypted signal. OTA and CA will be up graded through USB and other digital interfaces not CAs via OTA. STB should have provisions for free to air TV channels.
	d) Mail feature should be an option. (part 6, Minimum Technical Specification)	NICTA agreed and has made this an optional feature.
	e) Personal mail prompt should be an option. (part 6, Minimum Technical Specification)	NICTA has agreed with the comment and has made this an optional feature.
	f) Teletex should not be required. It's a dead format and no longer required. (part 8, Minimum Technical Specification)	NICTA agreed with this comment and has deleted it however alternate digital mechanism must be provided as an option.
	g) RCA output should be an option. They put up the price and should instead be considered a nice to have feature. (part 9, Minimum Technical Specification)	NICTA has agreed that RCA should be made an optional feature however the fact remains that most TV sets in PNG are analogue and therefore RCA jacks should be still allowed to be used till 2020.
	h) RF loop through should be an option as it puts up the price. It should be considered a nice to have feature rather than a must have feature. (part 9, Minimum Technical Specification)	NICTA agreed and made this an optional feature however this is a standard feature found on most STB.
	i) An included RF cable should be an option and this is normally not required. It should be left to dealers to decide if they include an RF cable as bonus etc. (part 9, Minimum Technical Specification)	NICTA agreed with this comment so provision of RF cable is optional.
	j) A choice of CAs is required. For example DMV use embeded verimatrix. Click use IRDETO. Digicel would be more than happy to share its experience on this aspect with NICTA. (part 10, Minimum Technical Specification)	Up to individual operators to make choices of what CA systems suit their business.

	INPUTS/COMMENTS	RESPONSE TO INPUTS/COMMENTS
	k) Digicel believes that a CI slot should be optional. It simply puts up the price. The use of embedded CAs is cheaper. (part 10, Minimum Technical Specification)	NICTA has agreed that Common Interface (CI) be made an optional feature to save cost and give options to the operator to employ what is viable.
	l) Digicel suggests that the choice of CA should be down to the broadcast operator and not the subject of type approval requirement. (part 10, Minimum Technical Specification)	NICTA has agreed with Digicel and it will be up to the operator to decide which CA system to use.
3.2	TOLEC Ltd INPUTS/COMMENTS	NICTA'S RESPONSE
3.2.1	4K... At this point in time very few countries in the world are broadcasting 4K content so at this point in time it's not relevant.	NICTA agreed and has made this an optional feature.
3.2.2	HE AAC is optional on our STB BUT it is licensed software , we would need to pay extra cost for this license which ultimately gets passed on to the end user increasing overall price of subscriber equipment ,we currently use AC3 (part 3 Minimum Technical Specification)	NICTA agreed and has made this an optional feature.
3.2.3	Both our STB support PVR, I think this is a necessary function these days	NICTA agreed with Tolec that PVR (Personal Video Recording) gives choices for STB owner to record programs.
3.2.4	We do not have a SCART port on any STB, this is a EUOROPLEAN STANDARD and unnecessary for PNG (ALSO No TV's currently imported into Australia/ PNG have a SCART port installed on them anyway.	NICTA agreed with this comment and has deleted it.
3.2.5	Inputting RF into a TV defeats the purpose of a digital STB, I do not think this is necessary, because the purpose is to change analogue to Digital, if we encourage such a port, this will achieve the opposite purpose of Digitalization.	NICTA believes that most TV sets currently in use in PNG is analogue and therefore RF out will be optional and will be in use until 2020.
3.2.6	STB does not have RS232,(not required) we update the STB via USB port.	NICTA agreed with this comment and has deleted RS232.
3.2.7	Our STB do not have CI port, the manufacturer uses proprietary	See comments in 3.1.4 (k)

	INPUTS/COMMENTS	RESPONSE TO INPUTS/COMMENTS
	<p>encryption that matches the STB to the internal 'viewing card'-this number is embedded software - there is no viewing card that can get lost or stolen !</p> <p>Although I can see that a generic brand of STB used for an entire country may require this feature.</p>	
3.3	CLIQUE TV Ltd INPUTS/COMMENTS	NICTA'S RESPONSE
	No comments or queries provided by Clique TV.	Nil