

Annex 1: Questionnaire

Member State Response details (please complete):

<i>Member State</i>	<i>Name</i>	<i>Organisation</i>	<i>Date</i>
Lithuania	Augutis Cesna	Communications Regulatory Authority	26 Sept 2012

Question 1 (consider section 1 of Annex 1 to help you with your answer):

(See Annex 2 for example answers for your assistance)

- i) Please describe the DTT platform in your country, currently on-air, in following terms (please use the following format for your answers):

Member State	No. of Multiplexes	Reception availability	Reception mode¹	Number of TV program services and content format	DTT System and modulation	Intended coverage reach²	Coverage obligation (Y/N)³	Coverage (as a percentage of population)	Spectrum band used (UHF IV/V or VHF Band III)
LTU	4	Pay-TV Free-to-air	Fixed	10 SD	DVB-T, 64-QAM	National	Y	96.3%	UHF Band IV/V
LTU	1	Pay-TV	Fixed	3 HD	DVB-T, 64-QAM	Local	N	41.2%	UHF Band IV/V
LTU	2	Pay-TV	Fixed	9 SD	DVB-T, 64-QAM	Local	N	<20%	UHF Band IV/V

¹ E.g., fixed (roof-top), portable indoor, portable outdoor, mobile.

² E.g., national, regional, local.

³ Is there a legislative coverage obligation, e.g., a Public Service Broadcaster.

ii) Are there plans to deploy (a) additional DTT multiplexes and/or (b) foresee the launch of new services **in the short term (1 – 5 years)**?

(a) additional DTT multiplexes (please use the following format for your answers)

Member State	additional Multiplexes (Y/N)	No. of additional Multiplexes	Reception availability	Reception mode ⁴	Expected content format (SD and or HD)	Expected DTT system and modulation (if known)	Intended coverage reach ⁵	Intended Coverage (as a percentage of population)	Spectrum band used (UHF IV/V or VHF Band III)
LTU	Y	16	Free-to-air	Fixed	tbc	DVB-T, QPSK-64 QAM	Local	<10% each	UHF Band IV/V
LTU	Y	1	Free-to-air	Fixed	2SD+1HD	DVB-T, 16-QAM	National	99.7%	UHF Band IV/V
LTU	Y	2	Pay-TV Free-to-air	Fixed	10 SD or 3HD	DVB-T, 64-QAM	National	80-90%	UHF Band IV/V
LTU	Y	1	Pay-TV	Fixed	7 HD	DVB-T/T2, 256-QAM	National	90%	VHF Band III

(b) foresee the launch of new services (please use the following format for your answers)

Member State	Additional Services (Y/N)	Expected content format (SD and or HD)	Reception availability	Expected content format (SD and or HD)	Interactive services (Y/N)	VoD (Y/N)	Ultra High Definition on TV (Y/N)	Other (Y/N)	If answer Yes to Other, please specify
LTU	Y		Pay-TV	SD + HD	Y	N	N	N	

iii) When do the existing DTT licenses in your country expire?

Answer: **The vast majority of licences are valid until 2022 and one multiplex is licensed until 2031.**

⁴ E.g., fixed (roof-top), portable indoor, portable outdoor, mobile.

⁵ E.g., national, regional, local.

Question 2

How do you foresee different means of reception (DTT, ADSL, Cable, satellite, etc) complementing each other?

Answer: **Cable TV is going to be the main mode for reception of Pay-TV services in highly populated areas.**

DTT will be orientated to rural areas and population which are not going (are not able) to pay for TV services. We seek to keep at least two free-to-air TV programs in DTT.

Satellite TV is ideal solution to cover areas that are not covered by Cable TV and DTT.

Question 3:

i) Do you think that the DTT platform in your country will evolve to being capable of delivering audio-visual services also to mobile terminals?

Answer: **No**

ii) If yes, what is the required evolution of the DTT network platform architecture? Please give details in relation to: -

- a. the DTT network topology (whether there will be a need to migrate from high- power/ high- tower to low- power/ low- tower type of networks);
- b. to the use of MFN versus SFN networks to achieve the evolution, and
- c. a possible migration to a new DTT system(e.g. to facilitate interactive services) and transmitting technologies (e.g., DVB-T2, DVB-T2 Lite, etc.).

Answer:

iii) Do you believe that a DTT platform evolving towards delivering audio-visual services also to mobile terminals may also be used by mobile operators to cope with:

- a. the data traffic required to deliver linear video content (i.e., with mobile terminals including broadcasting tuners), and
- b. certain non-linear content that could be pushed (and stored)?

Answer: **No. Mobile operators will be able to use own spectrum for delivering linear video content ubiquitously to both fixed and mobile terminals.**

iv) What evolutions do you expect would be required for mobile networks to be capable of delivering linear video content ubiquitously to both fixed and mobile terminals?

Answer:

- v) Of a possible convergence between terrestrial mobile and (evolved) DTT platforms, what do you consider will be the consequences of mobile networks being capable of delivering linear video content to mobile terminals?

Answer:

Question 4:

- i) How many DTT multiplexes do you expect will be needed in your country in the long-term (beyond 2020),

Answer: **8 national wide + 1 local multiplex in each region of the country**

- ii) What services do you expect the DTT multiplexes to carry (assuming use of DVB-T2/HEVC)?

Answer: **HDTV, 3DTV, UHD TV**

- iii) What transition and migration paths do you anticipate will be required to achieve this long-term DTT goal for your country?

Answer: **DVB-T to DVB-T2**