

HELLENIC TELECOMMUNICATIONS & POST COMMISSION

Regional Seminar for Europe and CIS on Spectrum Management and Transition to Digital Terrestrial Television

Session 2: DTT Transition

Constantinos BAKALIS

cbakalis@eett.gr

Spectrum Management Hellenic Telecommunications & Post Commission (EETT)

Bucharest, 21-23 March 2016

Component Authorities regarding DTT

Ministry of Infrastructure, Transport and Networks

- Configuration of DTT frequency Map
- → National Public Broadcaster (ERT)
- ➔ Ministerial Decision for Fee
- → Policy on Technical issues on Radio and TV Broadcasting
- EETT
 - → Auction of MUX for DTT, Frequency Authorization
 - → Enforcement

Greek National Council for Radio and Television (NCRTV)

- Content providers coverage
 Number of content providers
- Ministry of Press
 - →Audiovisual policy



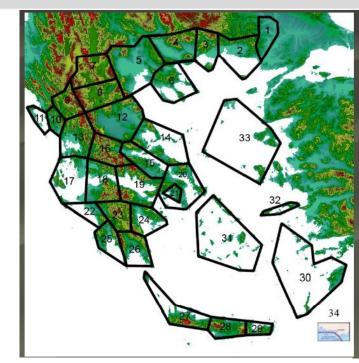
Legislation

- Law 4070/2012 (basic telecommunication law)
 EETT component authority for the DTT auction
- Law 4152/2013 for availability of DD at 1/11/2014
 >EU Derogation for 1/11/2014
- Law 4152/2013 for DTT and DD availability dates
- RSSP program of EU
- Common Ministerial Decision 41167/August 2014 for regional switch over
 - → Five amendments
 - → Gradual operation of 156 broadcasting sites while phasing out the corresponding analogue transmitions from 27/06/2014 to 29/12/2014



RRC 06 / National DTT Frequency Map

- Common Ministerial Decision 42800/5-10-2012 «Frequency Map of DTT»
- 156 Transmitter Sites
- 34 GE06 allotments
- 8-11 channels per each allotment
- Max EIRP per channel and Antenna Patterns per site
- 34 SFN networks and total coverage per allotment for 64 QAM, FEC 3/4, GI 1/8
- Digital Dividend I spectrum clear
- Population coverage 96.2 % for national DTT Network with forecast to use Gap Fillers with upper limit of 22 dBw within SFN
- Other National Restrictions

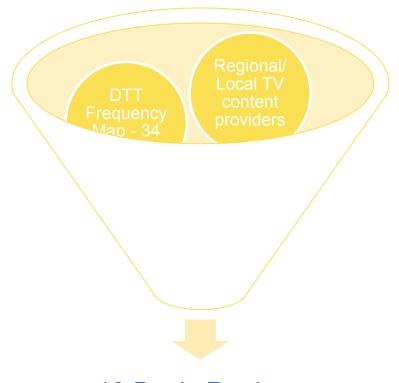


Allotment/SFN		Δίαυλοι												
1	EVROS		25	32	35	46	47	50	51	54	56			
2	PLAKA		24	27	30	31	33	36	43	48				
3	THASSOS		22	23	37	39	41	44	47	51				
4	PAGGAIO		26	28	32	35	40	45	52	53				
5	THESSALONIKI		24	27	30	36	43	48	55	56				
6	XALKIDIKI		25	31	34	38	46	49	50	54				
7	FLORINA		23	26	32	35	40	44	47	52				



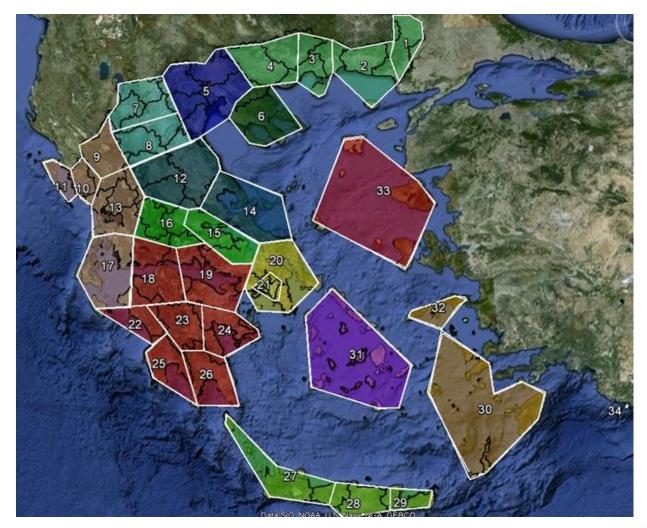
DTT Coverage needs

- National DTT Network for national coverage TV content
- Regional DTT Networks for regional/ local coverage of TV content
 Demanding





13 Regions





Public DTT Network

- ERT (caries national coverage public broadcaster TV content)
 - Two national MUX assigned by <u>Common Ministerial Decision</u> <u>15715/9-8-2013</u>
 - To follow the DTT Frequency Map technical characteristics in 156 sites

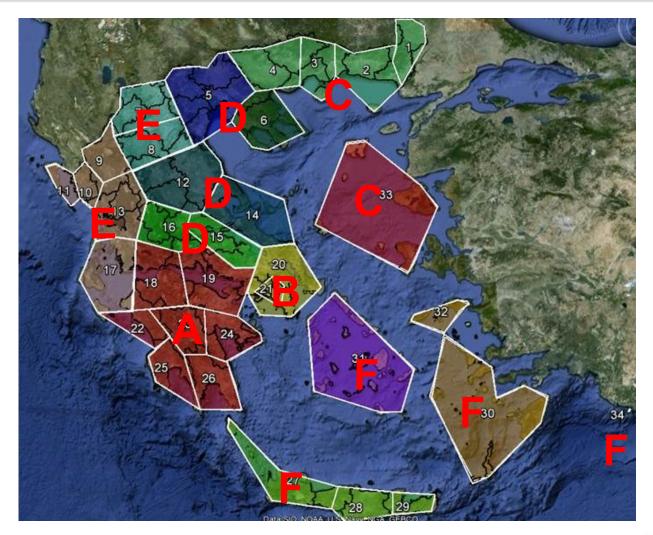


Private DTT Network Provider

- DIGEA SA (carries private national coverage and private regional coverage TV content providers free to air)
 - Frequency authorization through auction
 - → Four National MUX
 - → One to three Regional MUX for the 13 regions
 - → All mux currently in DVB-T
 - Ministerial decision in case that the new technology changes the DTT receivers eg DVB-T2
 - Obligation to notify the users prior to the change



Regional Switch Over .. in 6 months





Future challenges

- Radio Spectrum Committee decision on 700 MHz is official
 - → DD II in June 2017
 - Protection of DTT receivers (risk is increased)
- National decisions regarding DTT due to DD II
- Bilateral negotiations



EETT Annual Report 2014

<u>http://www.eett.gr/opencms/export/sites/default/EETT_EN/</u> <u>Publications/Proceedings/PDFs/2014.pdf</u>

