



NMHH

**National Media and Infocommunications
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Utilization of the digital dividend and the use of 470-790 MHz band in the EU

Prepared by: Dr. Laszlo PADOS and
Krisztián STEFANICS

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- WRC-12 decided that the 700 MHz band should be allocated to both the broadcasting and mobile service in Region 1 from 2015
- WRC-15 finalised international negotiations on technical and regulatory parameters for the use of the 700 MHz band for wireless broadband
- Radio Spectrum Policy Group (RSPG) of EU adopted Opinion², which supports a coordinated EU approach to providing wireless broadband in the 700 MHz frequency band
- The UHF band strategy has major strands :
 - **harmonised technical conditions** for wireless broadband electronic communications services based on the principle of technology and service neutrality;
 - a **common deadline** for making the 700 MHz band available for effective use for wireless broadband electronic communications services in line with the harmonised technical conditions above, and coordination measures to support this transition;
 - **priority** for distribution of audiovisual media services (AVMS) in the sub-700 MHz frequency band.

By 30 June 2020, Member States shall allow the use of the 694-790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services only under harmonised technical conditions set by the Commission pursuant to Article 4 of Decision 676/2002/EC.

Member States may, however, delay allowing the use of the 700 MHz frequency band for up to two years on the basis of one or more of the duly justified reasons set out in the Annex to this Decision

In order to allow the use of the 700 MHz frequency band in accordance with paragraph 1, Member States shall, by 31 December 2017, conclude all the necessary cross-border frequency-coordination agreements within the Union.

This Decision is without prejudice to the right of Member States to organise and use their spectrum for the purposes of public order, public security and defence.

Member States shall allow the transfer or leasing of the rights of use of spectrum for electronic communications services in the 694-790 MHz frequency band.

Member States shall ensure availability ***at least until 2030*** of the 470-694 MHz ('sub-700 MHz') frequency band for the terrestrial provision of ***broadcasting services***, including free television, and for use by wireless audio PMSE on the basis of national needs, ***while taking into account the principle of technological neutrality***.

As soon as possible and no later than 30 June 2018, Member States shall adopt and make public their national plan and schedule ('national roadmap'), ***including detailed steps*** for fulfilling their obligations under Articles 1 and 4. Member States ***shall draw up their national roadmaps after consulting all relevant stakeholders***.

In order to ensure that the use of the **700** MHz frequency band is in accordance with Article 1(1), Member States shall include in their national roadmaps, where appropriate, information on measures, ***including any support measures***, to limit the impact of the forthcoming transition process on the public and on wireless audio PMSE use and to facilitate the timely availability of interoperable television broadcasting network equipment and receivers in the internal market.

Member States may, where appropriate and in accordance with Union law, ensure that adequate compensation for the direct cost, in particular for end-users, of the migration or reallocation of spectrum use is provided promptly and in a transparent manner in order to, inter alia, facilitate transition to more spectrum-efficient technologies.

At the request of the Member State concerned, the Commission may provide guidance on such compensation in order to facilitate the transition in spectrum use.

Justified reasons for a delay in allowing the use of 700 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services later than 30 June 2020 (Article 1(1))

(1) unresolved cross-border coordination issues resulting in harmful interferences;

(2) the need to ensure, and the complexity of ensuring, the technical migration of a large amount of the population to advanced broadcasting standards;

(3) the financial costs of transition exceeding the expected revenue generated by award procedures;

(4) force majeure.

- Responses from PL, BG, HR, FR, MT, SI, EE, SE, LV, AT, EL, HU, CY, ES, IT, CZ, FI, GB, NL, RO (EU) and NO, RS (Serbia did not respond to the 1st Q), CH
- BE, LT, DE, PT, LU indicated « no change » vs the 1st questionnaire
- No responses from IE, DK, SK. Then the same responses as for the 1st Q were assumed

- End of migration date now specified except for PT, ES, LV, SK
- Planned end of migration date exceeding 2020 only for CZ (2021) and IT (2022)
- Authorization date now specified for PL, AT, RO, EL
- Planned authorization date exceeding 2020 only for LT, PL, SI, HR (2022)

- Coordination progress in several coordination clusters, including SEDDIF, which remains however critical
- Coordination initiated between Italy and all neighbours



Q1 plan for migration

- agreed
- final stage
- under development
- preliminary discussion
- not started

Only 509 thousand households on terrestrial platform

MUXA



MUXB



MUXC



MUXD



MUXE



Free channels

FIRST OPPORTUNITY

No change, only 3 DVB-T networks

MUXA



MUXB



+ new SD/HD programmes

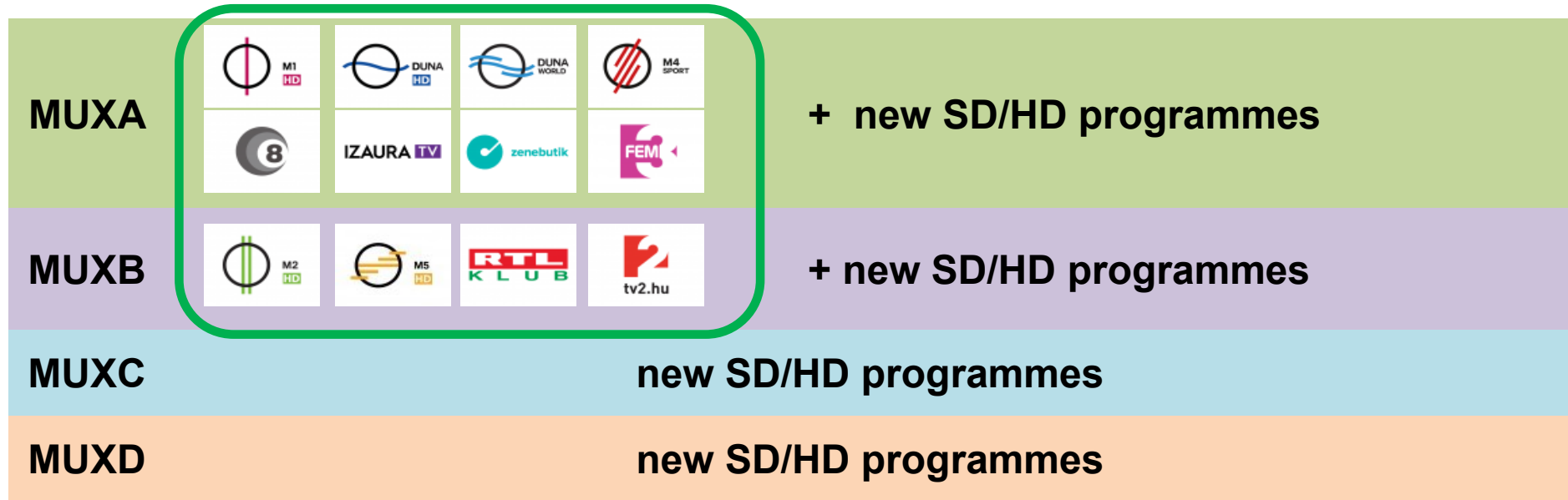
MUXC



+ new SD/HD programmes

- The terrestrial broadcast continues with unchanged technical conditions
- There would be 30 less paid programs available on the platform
- There is no need investment on transmitter site and no need for replacement of receivers
- **Therefore, neither the state, nor the service provider, nor the users are charged with any significant costs during the migration**

Free channels



There is a considerable capacity increase. Flexible use for free and paid channels. Full technology change requires the use of new tools or add-on tools (STB) for the costumers and service providers.

It would be a considerable cost during the switch over.

Free channels

MUXA



MUXB



MUXC

SD/HD programmes

MUXD

SD/HD programmes

Instead of the present 5 MUX, 4 MUX remain. Two DVB-T multiplexes can be used for HD and SD programs free of charge.

2 multiplexes on DVB-T2 technology required new receivers or STB for subscribers and new technology for service providers.

In this case the free programs viewers are not charged any costs during the transition

Free channels



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Thank you for your attention.