



#### The Administrations of

the Kingdom of the Netherlands (Agentschap Telecom – Radiocommunications Agency Netherlands)

and

the Grand Duchy of Luxembourg

(Institut Luxembourgeois de Régulation -

Luxembourg Regulatory Authority)

- together hereinafter referred to as ("the Administrations") -

conclude the following Agreement on the frequency coordination of Terrestrial Digital Audio
Broadcasting in the VHF Band 174-230 MHz

### 1. Introduction

The Administrations of The Netherlands and Luxembourg have worked together to enable T-DAB planning in the VHF Band 174-230 MHz. This will result in an optimization of the GE06 plan that allows both Administrations to implement networks according to their broadcasting requirements. This agreement will allow the Administrations to implement these networks according to their broadcasting requirements as detailed in the Geneva 2006 (GE06) Final Acts<sup>1</sup>. To enable the implementation of these networks, the Administrations have agreed on field strength levels that should not be exceeded at the borders of each of the two countries in order to protect T-DAB reception in each country.

#### 2. Distribution of channels and allotments / assignments

Both Administrations agree on the allocation of channels to the DAB networks such as described in <u>Annex 1</u> (HOL DAB allotments) and <u>Annex 4</u> (LUX DAB assignments). The technical parameters such as indicated in <u>Annex 4</u> apply for the channels 7A, 7B, 7C, 7D and 12C.

OR

<sup>&</sup>lt;sup>1</sup> According to GE'06 article 4.1.2.1.

The Administrations will inform each other about the implementation date(s) of allotments / assignments via bilateral correspondence and officially through the ITU's GE06 coordination procedures.

#### 3. Protection

This document sets out the maximum agreed field strength levels for each DAB frequency block at each country's border for radio frequencies in the 174 - 230 MHz band, which will be used to provide DAB services in both countries.

## 4. Maximum interference field strength

Both Administrations agree on the maximum interfering field strengths levels of the co-channel relations as defined in <u>Annex 3</u>. The cumulative interfering field strength of all assignments or allotments (associated with planned implementation) on the same frequency block shall not exceed these maximum interfering field strength levels.

#### 5. General rules and calculation method

For the purpose of this agreement, both Administrations agree on the following rules as basis for the interference assessment for the coordination of assignments and for the implementation of allotments:

- For field strength calculations, the propagation model described in Recommendation ITU-R P. 1546 shall be used, together with the latest IDWM (ITU Digitized World Map) land-sea geographical data
- Field strength levels are calculated at 10 meters antenna height for 1% time, 50% of locations<sup>2</sup>.
- The power sum method as described in the GE06-Agreement<sup>3</sup> is used to calculate the cumulative interference field strength for the networks recorded in this agreement (Annex 3).
- The cumulative interference field strength of local allotments is calculated at the boundary of the respective country.
- The Administrations will inform each other about the implementation date(s) of assignments / allotments via bilateral correspondence and officially through the ITU's GE06 coordination procedures.

## 6. Addition and deletion of Digital Plan GE06 Plan entries

Both Administrations agree to modify, add or delete their entries in the GE06 Plan according to this Agreement and its associated annexes in accordance with the procedures foreseen in



<sup>&</sup>lt;sup>2</sup> In accordance with Chapter 2 to Annex 2 ('propagation information').

<sup>&</sup>lt;sup>3</sup> In accordance with the methodology defined in Paragraph 3.1, Section II of Annex 4.

Article 4 of the GE06 Agreement. In case of necessary frequency or allotment changes, the Administrations will inform each other in a timely manner.

## 7. Review of the Agreement

It has been agreed between the two Administrations that this coordination agreement can be changed in due course by further optimizing of the plans of both Administrations. However, this agreement may only be amended or abrogated with the consensus of both Administrations.

#### 8. Effective Date

This Agreement shall enter into force from the dates recorded once both Administrations have signed. This Agreement will be signed in two originals, each of which will be accorded equal validity. Each Administration shall be provided with one signed original of this

Agreement/

Groningen, 2021 - 12 - 22

Place

Netherlands

Year-Month-Day

On behalf of the Administration of The

On behalf of the Administration of

Year-Month-Day

Luxembourg

Kier-co Gerritsen Claude Rischette

Head of Section Broadcasting Chef du service Fréquences

Radiocommunication Agency Institut Luxembourgeois de Régulation

Place

# Annex 1: Allotments of the Netherlands

# TerraSys-file with specific data



Layer 1



Layer 2



Layer 3

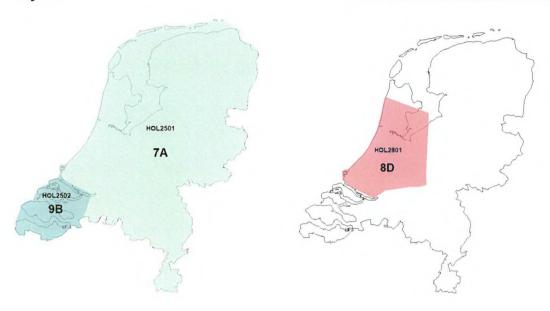


Layer 4



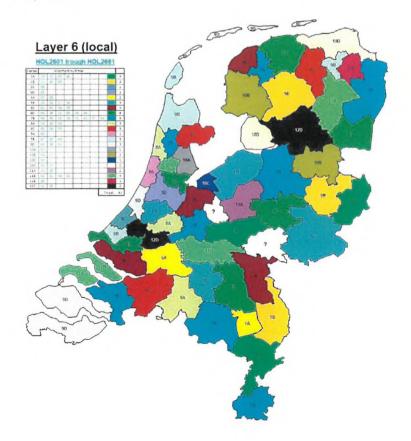
# Layer 5

## Extra Randstad area allotment



# Layer 6

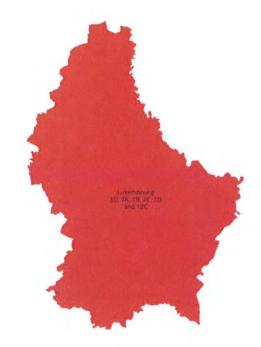
The local allotments that are included in this agreement may change in the interest of further optimization of the Band III plan. Maximum interference field strength of annex 3 will be respected.



Layer 7



Annex 2: Allotments of Luxembourg



# <u>Annex 3:</u> Agreed maximum interference fieldstrength levels between the Netherlands and Luxembourg



#### Interference overview LUXEMBOURG / THE NETHERLANDS

Maximum fieldstrength for layer 6 per frequency of the Netherlands towards Luxembourg is 33 dBuV/m (powersum)

Block	NL towards LUX	LUX towards NL	Comments
5D	N.R.	41	Rec. 1546 / LUX (RPC5/RN6)
7A	42	40	Technical parameters Ch7A-D and 12C DAB_03.3.2021.txt (Rec 1546) (Annex 4)
7B	42	40	Technical parameters Ch7A-D and 12C DAB_03.3.2021.txt (Rec 1546) (Annex 4)
7C	42	40	Technical parameters Ch7A-D and 12C DAB_03.3.2021.txt (Rec 1546) (Annex 4)
7D	42	40	Technical parameters Ch7A-D and 12C DAB_03.3.2021.txt (Rec 1546) (Annex 4)
8C	41	N.R.	Rec. 1546
9C	41	N.R.	Rec. 1546 / Same network as HOL block 11C
11C	41	N.R.	Rec. 1546
12C	43	42	Rec. 1546

N.R. = not relevant

Annex 4: Technical parameters Ch7A-D and 12C DAB\_03.3.2021.txt

