

# Agreement between Denmark and Sweden concerning the use of the broadcast band planned at the RRC 2006 conference and at subsequent multilateral meetings<sup>1</sup>

## Changes to the GE06-plan

In order to re-plan the band 470-694 MHz a number of changes have to be done to the existing GE06-plan. In the following chapter all those changes, which are not already covered by "Coordination agreement relating to DTT in the band 470-694 MHz in Denmark-Germany-Poland-Sweden Warsaw 21 June 2016", are reflected.

A general change is that the respective subareas associated with all TROLLHAETTAN-UDDEVALLA and BAECKEFORS allotments are redefined as given in the file "TROLL-UDD\_BAECK\_areas.txt"<sup>2</sup>.

## Additions

The following Allotments are accepted by Denmark as additions to the GE06 plan:

### *Sweden*

BAECKEFORS:	Ch27, Ch31
TROLLHAETTAN-UDDEVALLA:	Ch22, Ch27, Ch43
BORAAS:	Ch23, Ch33, Ch40, Ch46
FINNVEDEN:	Ch24*, Ch31, Ch39, Ch41*
GOETEBORG:	Ch22, Ch25, Ch28

\* The starting point in time for the use of channel 24 and 41 for allotment FINNVEDEN is dependent upon changes to the allotment KARLSHAMN-KARLSKRONA covered by "Coordination agreement relating to DTT in the band 470-694 MHz in Denmark-Germany-Poland-Sweden Warsaw 21 June 2016".

For an intermediate period of time up to 30 June 2020 at the latest, channel 35 and 38 will be used instead for assignment Finnveden with the following characteristics.

Assignment	Lat (North)	Long (East)	Altitude (m a.s.l.)	Ant. height (m a.g.l.)	ERP (dBW)	Ant (D/ND)	Ch.
Finnveden	57N14 11.000	013E43 14.000	252	238	47,0	ND	35
Finnveden	57N14 11.000	013E43 14.000	252	238	47,0	ND	38

<sup>1</sup> Multilateral replanning meeting Warsaw 16.09.2009, Trilateral agreement between DNK-S-NOR of April 2011 for the band 470-790 MHz and Coordination agreement relating to DTT in the band 470-694 MHz in Denmark-Germany-Poland-Sweden Warsaw 21 June 2016.

<sup>2</sup> SHA-256 sum: 76dc823a4981eef3c357e0f5fe909dea284c100ed2058f217f68b274824a20

## Suppressions

The following Allotments or parts (sub-areas) of Allotments and associated assignments are to be suppressed from the GE06-plan latest 30 June 2020:

### Sweden

TROLLHAETTAN-UDDEVALLA:	Ch23
BORAAS:	Ch29, Ch41, Ch44
GOETEBORG:	Ch33, Ch40, Ch46

## Implementation of the allotment-plan

The Danish Administration accepts the interference levels on Danish DTT allotments caused by the Swedish DTT assignments listed in Annex 1.

The Swedish Administration accepts the interference level on Swedish DTT allotments caused by the Danish DTT assignments listed in Annex 2.

Assignments will not be protected individually; it is the allotment area to which the assignments belong that will be protected. The respective service areas of these assignments outside of the allotment area are not protected.

The parties agree that any implementation of allotments, beyond that listed in Annex 1 and Annex 2 respectively, shall be coordinated if the cumulative interfering field strength from the given SFN exceeds the values listed in Annex 3 on the boundary of any existing co-channel/co-block allotment.

Assignments, that are situated within an allotment area, designated to transmit on the same channel as the allotment, but not link to that allotment, will be treated in the implementation exactly like linked assignments in the RRC 06 planning process.

## Relations to other agreements

This agreement replaces the "Agreement between Denmark and Sweden concerning the use of the broadcast band planned at the RRC 2006 conference and at the multilateral replanning meetings at Warsaw 16.09.2009 and the trilateral agreement between DNK-S-NOR of April 2011 for the band 470-790 MHz" signed April/May 2012.

## Revision

Revision to this agreement can only be made if both parties agree.

## Entry into force

This agreement enters into force upon signature by both parties.

Place: Copenhagen

Date: 22/12 2017

For the Administration of Denmark

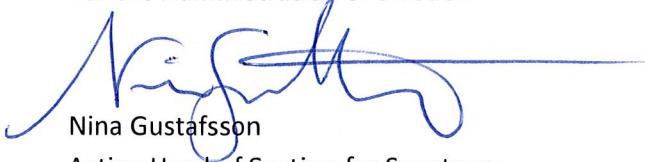


Jeppe Tanderup Kristensen  
Senior Adviser  
Center for Telecoms  
Energistyrelsen

Place: Stockholm

Date: 29 dec. 2017

For the Administration of Sweden



Nina Gustafsson  
Acting Head of Section for Spectrum  
Development, Spectrum Department  
Post- och telestyrelsen

AdminUniqueID	TX-Name	Ch.	ERP/dBW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected DNK allot	Remark
	Falkenberg/Rinsegård	21	23.0	D	HALMSTAD-VÄRBERG				
	Halmstad/Hamnen	21	7.0	ND	HALMSTAD-VÄRBERG				CH. 22 replaces ch. 40
	Halmstad/Oskarström	21	47.0	ND	HALMSTAD-VÄRBERG				CH. 22 replaces ch. 40
	Varberg	21	40.0	D	HALMSTAD-VÄRBERG				CH. 22 replaces ch. 40
	Bäckefors	22	47.0	ND	BAECKEFORS				CH. 22 replaces ch. 40
	Göteborg/Brudaremoss	22	47.0	ND	GOETEBORG				CH. 22 replaces ch. 40
	Göteborg/Sjättadamm	22	33.0	ND	GOETEBORG				CH. 22 replaces ch. 40
	Lilla Edet	22	11.8	D	GOETEBORG				CH. 22 replaces ch. 40
	Möndal/Västerberget	22	30.0	ND	GOETEBORG				CH. 22 replaces ch. 40
	Grebbostad	22	21.1	D	TROLLHAETTAN-UDDEVALLA				
	Kungshamn	22	20.8	D	TROLLHAETTAN-UDDEVALLA				
	Munkedal	22	10.0	D	TROLLHAETTAN-UDDEVALLA				
	Strömstad	22	30.0	ND	TROLLHAETTAN-UDDEVALLA				
	Trollhättan	22	30.0	ND	TROLLHAETTAN-UDDEVALLA				
	Uddevalla	22	47.0	ND	TROLLHAETTAN-UDDEVALLA				
	Helsingborg	22	38.1	D	HELSINGBORG				
	Ängelholm	22	33.0	D	HELSINGBORG				
	Hörby	22	47.0	ND	HOERBY				
	Simrishamn	22	23.0	D	HOERBY				
	Ystad	22	27.0	D	HOERBY				
	Örkelljunga	22	30.0	D	HOERBY				
	Höllviken	22	23.0	D	MALMOE				
	Malmö	22	39.0	ND	MALMOE				
	Trelleborg	22	25.4	D	MALMOE				
	Borås/Dalsjöfors	23	47.0	ND	BORAAS				
	Finnveden	24	47.0	ND	FINNVEDEN				CH. 23 replaces ch. 44
	Markaryd	24	28.8	D	VISLANDA				CH. 24 replaces ch. 38
	Traryd	24	21.1	D	VISLANDA				CH. 24 replaces ch. 6
	Vislanda	24	47.0	ND	VISLANDA				CH. 24 replaces ch. 6
	Bäckefors	25	47.0	ND	BAECKEFORS				CH. 24 replaces ch. 8
	Göteborg/Brudaremoss	25	47.0	ND	GOETEBORG				CH. 25 replaces ch. 46
	Göteborg/Sjättadamm	25	33.0	ND	GOETEBORG				CH. 25 replaces ch. 46
	Lilla Edet	25	11.8	D	GOETEBORG				CH. 25 replaces ch. 46
	Möndal/Västerberget	25	30.0	ND	GOETEBORG				CH. 25 replaces ch. 46
	Grebbostad	25	21.1	D	TROLLHAETTAN-UDDEVALLA				
	Kungshamn	25	20.8	D	TROLLHAETTAN-UDDEVALLA				
	Munkedal	25	10.0	D	TROLLHAETTAN-UDDEVALLA				
	Strömstad	25	30.0	ND	TROLLHAETTAN-UDDEVALLA				

AdminUniqueId	TX-Name	Ch.	ERP/dBW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected DNK allot	Remark
	Trollhättan	25	30.0	ND	TROLLHÄTTAN-UDDEVALLA				
	Uddevalla	25	47.0	ND	TROLLHÄTTAN-UDDEVALLA				
	Helsingborg	25	38.1	D	HELSINGBORG				
	Ängelholm	25	33.0	D	HELSINGBORG				
	Hörby	25	47.0	ND	HOERBY				
	Simrishamn	25	23.0	D	HOERBY				
	Ystad	25	27.0	D	HOERBY				
	Örkelljunga	25	30.0	D	HOERBY				
	Höllviken	25	23.0	D	MALMOE				
	Malmö	25	39.0	ND	MALMOE				
	Trelleborg	25	25.4	D	MALMOE				
	Bäckefors	26	47.0	ND	BAECKEFORS	50.5	4.6	NIBE-TOLNE	
	Finnveden	26	47.0	ND	FINNVEDEN				
	Bäckefors	27	47.0	ND	BAECKEFORS				Ch. 27 replaces ch. 5
	Göteborg/Brudaremoss	27	47.0	ND	GOETEBORG				Ch. 27 replaces ch. 23
	Göteborg/Sjärtadamm	27	33.0	ND	GOETEBORG				Ch. 27 replaces ch. 23
	Lilla Edet	27	11.8	D	GOETEBORG				Ch. 27 replaces ch. 23
	Möndal/Västerberget	27	30.0	ND	GOETEBORG				Ch. 27 replaces ch. 23
	Kungshamn	27	27.8	D	TROLLHÄTTAN-UDDEVALLA	56.9 / 50.6	10,77 / 4,47	THISTED / VIBORG	Ch. 27 replaces ch. 23
	Munkedal	27	10.0	D	TROLLHÄTTAN-UDDEVALLA				Ch. 27 replaces ch. 23
	Trollhättan	27	30.0	ND	TROLLHÄTTAN-UDDEVALLA				Ch. 27 replaces ch. 23
	Uddevalla	27	47.0	ND	TROLLHÄTTAN-UDDEVALLA				Ch. 27 replaces ch. 23
	Gribbestad	27	21.1	D	TROLLHÄTTAN-UDDEVALLA				Ch. 27 replaces ch. 23
	Strömstad	27	30.0	ND	TROLLHÄTTAN-UDDEVALLA				Ch. 27 replaces ch. 23
	Helsingborg	27	38.1	D	HELSINGBORG				Ch. 27 replaces ch. 10
	Ängelholm	27	33.0	D	HELSINGBORG				Ch. 27 replaces ch. 10
	Hörby	27	47.0	ND	HOERBY				Ch. 27 replaces ch. 10
	Simrishamn	27	23.0	D	HOERBY				Ch. 27 replaces ch. 10
	Ystad	27	27.0	D	HOERBY				Ch. 27 replaces ch. 10
	Örkelljunga	27	30.0	D	HOERBY				Ch. 27 replaces ch. 10
	Malmö	27	39.0	ND	MALMOE				Ch. 27 replaces ch. 10
	Trelleborg	27	25.4	D	MALMOE				Ch. 27 replaces ch. 10
	Jämjö	27	30.0	D	KARLSHAMN-KARLSKRONA				Ch. 28 replaces ch. 9
	Karlskrona	27	47.0	ND	KARLSHAMN-KARLSKRONA				Ch. 28 replaces ch. 7
	Ronneby/Kallinge	27	13.0	D	KARLSHAMN-KARLSKRONA				
	Göteborg/Brudaremoss	28	47.0	ND	GOETEBORG				
	Lilla Edet	28	11.8	D	GOETEBORG				

AdminUniqueID	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected DNK allot	Remark
Halmstad/Hamnen	Halmstad/Oskarström	28	7.0	ND	HALMSTAD-VÄRBERG				
Varberg	Grebbestad	28	47.0	ND	HALMSTAD-VÄRBERG				
Kungshamn	Munkedal	28	40.0	D	HALMSTAD-VÄRBERG				
Strömstad	Trollhättan	28	21.1	D	TROLLHAETTAN-UDDEVALLA	53,6	7,34	VIBORG	
Uddevalla	Vislanda	28	20.8	D	TROLLHAETTAN-UDDEVALLA				Ch. 29 replaces ch. 40
Göteborg/Brudaremoss	Göteborg/Sjätsadamm	30	47.0	ND	GOETEBORG				
Kyrkesund	Lilla Edet	30	33.0	ND	GOETEBORG				
Mölndal/Västerberget	Hörby	30	17.0	D	GOETEBORG	52,6 / 53,6	5,86 / 6,87	HEDENSTED-VÄRDE / TOMMERUP-SVENDBORG	Ch. 30 replaces ch. 33
Simrishamn	Örkelljunga	30	11.8	D	GOETEBORG				Ch. 30 replaces ch. 33
Ystad	Höllviken	30	30.0	ND	GOETEBORG				Ch. 30 replaces ch. 33
Karlskrona	Malmö	30	25.4	D	GOETEBORG				Ch. 30 replaces ch. 33
Ronneby/Kallinge	Järjö	30	23.0	ND	HOERBY				Ch. 30 replaces ch. 33
Bäckefors	Karlshamn	30	27.0	D	HOERBY				Ch. 30 replaces ch. 33
Grebbestad	Höllviken	30	30.0	D	HOERBY				Ch. 30 replaces ch. 33
Karlskrona	Malmö	30	23.0	D	MALMOE				Ch. 30 replaces ch. 33
Trelleborg	Järjö	30	39.0	ND	MALMOE				Ch. 30 replaces ch. 33
Karlshamn	Karlshamn	30	30.0	D	MALMOE				Ch. 30 replaces ch. 33
Karlskrona	Karlskrona	30	47.0	ND	KARLSHAMN-KARLSKRONA				
Ronneby/Kallinge	Karlskrona	30	37.0	ND	KARLSHAMN-KARLSKRONA				
Bäckefors	Jämjö	30	13.0	D	KARLSHAMN-KARLSKRONA				
Grebbestad	Karlskrona	31	47.0	ND	KARLSHAMN-KARLSKRONA				
Kungshamn	Karlskrona	31	21.1	D	BAECKEFORS				
Munkedal	Karlskrona	31	20.8	D	TROLLHAETTAN-UDDEVALLA				
Strömstad	Trollhättan	31	10.0	D	TROLLHAETTAN-UDDEVALLA				
Trollhättan	Uddevalla	31	30.0	ND	TROLLHAETTAN-UDDEVALLA	56,7 / 51,6	9,75 / 4,73	THISTED / JYDERUP-KÖPENHAMN	
Finnveden	Jämjö	31	47.0	ND	TROLLHAETTAN-UDDEVALLA				
Karishamn	Karishamn	31	30.0	D	KARLSHAMN-KARLSKRONA				Ch. 31 replaces ch. 24
Karlskrona	Karlskrona	31	47.0	ND	KARLSHAMN-KARLSKRONA				Ch. 31 replaces ch. 24
Ronneby/Kallinge	Ronneby/Kallinge	31	37.0	ND	KARLSHAMN-KARLSKRONA				Ch. 31 replaces ch. 24
		31	13.0	D	KARLSHAMN-KARLSKRONA				Ch. 31 replaces ch. 24

AdminUniqueId	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	IEST	Margin to 49+fcorr	Affected DNK allot	Remark
	Halmstad/Hamnen	32	7.0	ND	HALMSTAD-VARBERG	49.7/48.2	2.6/1.1		
	Halmstad/Oskarström	32	47.0	ND	HALMSTAD-VARBERG				AABENRAA / VORDINGBORG-NAKSKOV
	Varberg	32	40.0	D	HALMSTAD-VARBERG				Ch. 33 replaces ch. 41
	Borås/Dalsjöfors	33	47.0	ND	BORAAS				Ch. 33 replaces ch. 41
	Borås/Sjöbo	33	20.0	D	BORAAS				Ch. 33 replaces ch. 41
	Ulricehamn	33	21.1	D					
	Markaryd	34	28.8	D	VISLANDA				
	Traryd	34	21.1	D	VISLANDA				
	Vislanda	34	47.0	ND	VISLANDA				
	Bäckefors	35	47.0	ND	BAECKEFORS	50.1	2.5		NIBE-TOLNE
	Finnveden	41	47.0	ND	FINNVEDEN				Intermediate channel
	Borås/Dalsjöfors	36	47.0	ND	BORAAS				
	Borås/Sjöbo	36	20.0	D	BORAAS				
	Ulricehamn	36	21.1	D	BORAAS				
	Markaryd	37	28.8	D	VISLANDA				
	Traryd	37	21.1	D	VISLANDA				
	Vislanda	37	47.0	ND	VISLANDA				
	Halmstad/Hamnen	38	7.0	ND	HALMSTAD-VARBERG				
	Halmstad/Oskarström	38	47.0	ND	HALMSTAD-VARBERG	50.5	2.3		VIBORG
	Varberg	38	40.0	D	HALMSTAD-VARBERG				Ch. 38 replaces ch. 7
	Finnveden	38	47.0	ND	FINNVEDEN				Ch. 38 replaces ch. 7
	Finnveden	39	47.0	ND	FINNVEDEN				Intermediate channel
	Markaryd	39	28.8	D	VISLANDA				Ch. 39 replaces ch. 7
	Traryd	39	21.1	D	VISLANDA				
	Vislanda	39	47.0	ND	VISLANDA				
	Borås/Dalsjöfors	40	47.0	ND	BORAAS				Ch. 40 replaces ch. 29
	Borås/Sjöbo	40	20.0	D	BORAAS				Ch. 40 replaces ch. 29
	Ulricehamn	40	21.1	D	BORAAS				Ch. 40 replaces ch. 29
	Finnveden	41	47.0	ND	FINNVEDEN				Ch. 41 replaces ch. 35
	Helsingborg	41	38.1	D	HELSINGBORG				
	Ängelholm	41	33.0	D	HELSINGBORG				
	Hörby	41	47.0	ND	HOERBY				
	Simrishamn	41	23.0	D	HOERBY				
	Ystad	41	27.0	D	HOERBY				
	Örkelljunga	41	30.0	D	HOERBY				
	Höllviken	41	23.0	D	MALMOE				
	Malmö	41	39.0	ND	MALMOE				
	Trelleborg	41	25.4	D	MALMOE				

AdminUniqueID	TX-Name	Ch.	ERP/dBW	Patt	Allotment/SFN	FST	Margin to 48+fcorr	Affected DNK allot	Remark
Järmjö		41	30.0	D	KARLSHAMN-KARLSKRONA				
Karishamn		41	47.0	ND	KARLSHAMN-KARLSKRONA				
Kariskrona		41	37.0	ND	KARLSHAMN-KARLSKRONA				
Ronneby/Kallinge		41	13.0	D	KARLSHAMN-KARLSKRONA				
Borås/Dalsjöfors		42	47.0	ND	BORAAS				
Borås/Sjöbo		42	20.0	D	BORAAS				
Ulricehamn		42	21.1	D	BORAAS				
Jämjö		42	30.0	D	KARLSHAMN-KARLSKRONA				
Karishamn		42	47.0	ND	KARLSHAMN-KARLSKRONA				
Kariskrona		42	37.0	ND	KARLSHAMN-KARLSKRONA				
Ronneby/Kallinge		42	13.0	D	KARLSHAMN-KARLSKRONA				
Göteborg/Brudaremoss		43	47.0	ND	GOETEBORG				
Göteborg/Sjärtadamm		43	33.0	ND	GOETEBORG				
Lilla Edet		43	11.8	D	GOETEBORG				
Mölnadal/Västerberget		43	30.0	ND	GOETEBORG				
Grebbestad		43	21.1	D	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 9
Kungshamn		43	20.8	D	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 9
Munkedal		43	10.0	D	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 7
Strömstad		43	30.0	ND	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 9
Trollhättan		43	30.0	ND	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 9
Uddevalla		43	47.0	ND	TROLLHAETTAN-UDDEVALLA				Ch. 43 replaces ch. 9
Höörby		43	47.0	ND	HOERBY				
Simrishamn		43	23.0	D	HOERBY				
Ystad		43	27.0	D	HOERBY				
Örkelljunga		43	30.0	D	HOERBY				
Höllviken		43	23.0	D	MALMOE				
Malmö		43	39.0	ND	MALMOE				
Trelleborg		43	25.4	D	MALMOE				
Jämjö		43	30.0	D	KARLSHAMN-KARLSKRONA				
Karishamn		43	47.0	ND	KARLSHAMN-KARLSKRONA				
Kariskrona		43	37.0	ND	KARLSHAMN-KARLSKRONA				
Ronneby/Kallinge		43	13.0	D	KARLSHAMN-KARLSKRONA				
Markaryd		44	28.8	D	VISLANDA				
Traryd		44	21.1	D	VISLANDA				
Vislanda		44	47.0	ND	VISLANDA				
Helsingborg		45	38.1	D	HELSINGBORG				
Ängelholm		45	33.0	D	HELSINGBORG				
Halmstad/Hamnen		45	7.0	ND	HALMSTAD-VARBERG	50.3	1.03		VIBORG

AdminUniqueID	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected DNK allot	Remark
	Halmstad/Oskarström	45	47.0	ND	HALMSTAD-VARBERG				
Varberg		45	40.0	D	HALMSTAD-VARBERG				
Borås/Dalsöfors	46	47.0	ND	BORAAS					Ch. 47 replaces ch. 30
Borås/Sjöbo	46	20.0	D	BORAAS		49.9	0.37		Ch. 47 replaces ch. 30
Uricehamn	46	21.1	D	BORAAS					
Helsingborg	47	38.1	D	HELSINGBORG					
Ängelholm	47	33.0	D	HELSINGBORG					
Halmstad/Hamnen	47	7.0	ND	HALMSTAD-VARBERG		50.3	0.67		
Halmstad/Oskarström	47	47.0	ND	HALMSTAD-VARBERG					
Varberg		47	40.0	D	HALMSTAD-VARBERG				
Finnveden	48	47.0	ND	FINNVEDEN					
Väinamo	48	20.0	D	FINNVEDEN					

AdminUniqueID	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	THISTED	21	44.0	D	THISTED				
	SKIVE	21	17.0	ND	VIBORG				HALMSTAD-VARBERG
	VIBORG	21	47.0	ND	VIBORG				
	VIBORG BY	21	17.0	ND	VIBORG				
	LEMVIG	21	17.0	D	VIDEBAEK				
	STRUER	21	17.0	D	VIDEBAEK				
	VIDEBAEK	21	47.0	ND	VIDEBAEK				
	THISTED	22	44.0	D	THISTED	46,8	1.90		
	AABENRAA	22	47.0	D	AABENRAA-TOMMERUP-SVENDborg				TROLLHAETTAN-UDEVALLA
	SVENDBORG	22	44.0	ND	AABENRAA-TOMMERUP-SVENDborg				
	FLENSBURG	22	20.0	D	AABENRAA-TOMMERUP-SVENDborg	49,7 / 46,5	4,59 / 1,37		GOETEBORG / HELSINGborg-HOERBY-MALMOE
	TOMMERUP	22	47.0	ND	AABENRAA-TOMMERUP-SVENDborg				
	ANHOLT	22	23.9	D					
	BORUP S AALE	23	33.0	ND	JYDERUP-KOEBENHAVN				
	GLADSAXE	23	40.0	D	JYDERUP-KOEBENHAVN				
	HELSINGOER	23	23.0	D	JYDERUP-KOEBENHAVN				
	JYDERUP	23	47.0	D	JYDERUP-KOEBENHAVN				
	KALUNDborg	23	20.0	D	JYDERUP-KOEBENHAVN				
	KOEBENHAVN VEST	23	47.0	D	JYDERUP-KOEBENHAVN				
	SKODSB/LANDSKRON	23	29.0	D	JYDERUP-KOEBENHAVN				
	LYNETTEN	23	39.0	D	JYDERUP-KOEBENHAVN				
	SKAMLEBAEK	23	31.8	D	JYDERUP-KOEBENHAVN				
	VARDE	23	47.0	ND	VARDE				
	LEMVIG	23	17.0	D	VIDEBAEK				
	STRUER	23	17.0	D	VIDEBAEK				
	VIDEBAEK	23	47.0	ND	VIDEBAEK				
	LAESOE	23	23.0	D					
	AARHUS	24	39.0	D	HADSTEN-AARHUS				
	EBELTOFT N	24	32.5	D	HADSTEN-AARHUS				
	GIERRILD	24	26.0	ND	HADSTEN-AARHUS				
	GRENNA	24	23.0	ND	HADSTEN-AARHUS				
	HADSTEN	24	47.0	ND	HADSTEN-AARHUS				
	RANDERS	24	17.0	D	HADSTEN-AARHUS				
	SILKEBORG	24	17.0	ND	HADSTEN-AARHUS				
	STUDSTRUP	24	23.0	ND	HADSTEN-AARHUS				
	AABENRAA	25	47.0	ND	AABENRAA				
	FLENSBURG	25	20.0	D	AABENRAA				
	SVENDBORG	25	44.0	ND	TOMMERUP-SVENDborg	49,8 / 46,5	4,09 / 0,80		GOETEBORG / HELSINGborg-HOERBY-MALMOE

AdminUniqueID	TX-Name	Ch.	ERP/dBW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	TOMMERUP	25	47.0	ND	TOMMERUP-SVENDborg				
	AARHUS	26	39.0	D	HADSTEN-AARHUS				
	EBELTOFT N	26	32.5	D	HADSTEN-AARHUS				
	GIERRILD	26	26.0	ND	HADSTEN-AARHUS				
	GRENAA	26	23.0	ND	HADSTEN-AARHUS				
	HADSTEN	26	47.0	ND	HADSTEN-AARHUS				
	RANDERS	26	17.0	D	HADSTEN-AARHUS				
	SILKEBORG	26	17.0	ND	HADSTEN-AARHUS				
	STUDSTRUP	26	23.0	ND	HADSTEN-AARHUS				
	FREDERIKSHAVN	26	23.0	D	NIBE-TOLNE				FINNVEDEN
	HADSUND	26	17.0	ND	NIBE-TOLNE				
	HIRTSHALS	26	26.0	ND	NIBE-TOLNE				
	HOBRO	26	17.0	ND	NIBE-TOLNE				
	NIBE	26	47.0	ND	NIBE-TOLNE				
	SAEBY	26	26.0	ND	NIBE-TOLNE				
	SKAGEN	26	30.0	ND	NIBE-TOLNE				
	TOLNE	26	40.0	ND	NIBE-TOLNE				
	THISTED	27	44.0	ND	THISTED				
	SKIVE	27	17.0	ND	VIBORG				
	VIBORG	27	47.0	ND	VIBORG				
	VIBORG BY	27	17.0	ND	VIBORG				
	ANHOLT	27	23.9	D					
	SKIVE	28	17.0	ND	VIBORG				
	VIBORG	28	47.0	ND	VIBORG				
	VIBORG BY	28	17.0	ND	VIBORG				
	AARHUS	29	39.0	D	HADSTEN-AARHUS				
	EBELTOFT N	29	32.5	D	HADSTEN-AARHUS				
	GIERRILD	29	26.0	ND	HADSTEN-AARHUS				
	GRENAA	29	23.0	ND	HADSTEN-AARHUS				
	HADSTEN	29	47.0	ND	HADSTEN-AARHUS				
	RANDERS	29	17.0	D	HADSTEN-AARHUS				
	SILKEBORG	29	17.0	ND	HADSTEN-AARHUS				
	STUDSTRUP	29	23.0	ND	HADSTEN-AARHUS				
	FREDERIKSHAVN	29	23.0	D	NIBE-TOLNE				
	HADSUND	29	17.0	ND	NIBE-TOLNE				
	HIRTSHALS	29	26.0	ND	NIBE-TOLNE				
	HOBRO	29	17.0	ND	NIBE-TOLNE				
	NIBE	29	47.0	ND	NIBE-TOLNE				

AdminUniqueId	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
SAEBY		29	26.0	ND	NIBE-TOLNE				
SKAGEN		29	30.0	ND	NIBE-TOLNE				
TOLNE		29	40.0	ND	NIBE-TOLNE				
AABENRAA		30	47.0	ND	AABENRAA-TOMMERUP-SVENDborg				
FLENSborg		30	20.0	D	ABENRAA-TOMMERUP-SVENDborg				
SVENDBORG		30	44.0	ND	ABENRAA-TOMMERUP-SVENDborg				
TOMMERUP		30	47.0	ND	ABENRAA-TOMMERUP-SVENDborg				
HEDENSTED		30	47.0	ND	HEDENSTED-VARDE				
KOLDING		30	23.0	ND	HEDENSTED-VARDE				
VARDE		30	47.0	ND	HEDENSTED-VARDE				
VEJLE		30	23.0	ND	HEDENSTED-VARDE				
ANHOLT		30	23.9	D					
BORUPS ALLE		31	33.0	ND	JYDERUP-KOEBENHAVN				
GLADSAKE		31	40.0	ND	JYDERUP-KOEBENHAVN				
HELSINGOER		31	23.0	ND	JYDERUP-KOEBENHAVN				
JYDERUP		31	47.0	ND	JYDERUP-KOEBENHAVN				
KALUNDBORG		31	20.0	D	JYDERUP-KOEBENHAVN				
KOEBENHAVN VEST		31	47.0	ND	JYDERUP-KOEBENHAVN				
SKODSB/LANDSKRON		31	29.0	D	JYDERUP-KOEBENHAVN				
LYNETTEN		31	39.0	D	JYDERUP-KOEBENHAVN				
SKAMLEBAEK		31	31.8	D	JYDERUP-KOEBENHAVN				
NAKSKOV		31	40.0	ND	VORDINGborg-NAKSKOV				
VORDINGborg		31	47.0	ND	VORDINGborg-NAKSKOV				
THISTED		31	44.0	D	THISTED				
AABENRAA		32	47.0	D	AABENRAA				
FLENSborg		32	20.0	D	AABENRAA				
VARDE		32	47.0	ND	VARDE				
GUDHJEM		32	17.0	D	ROE				
HAMMEREN		32	20.0	D	ROE				
NEKSOE		32	33.0	D	ROE				
ROE		32	38.5	D	ROE				
NAKSKOV		32	40.0	ND	VORDINGborg-NAKSKOV				
VORDINGborg		32	47.0	ND	VORDINGborg-NAKSKOV				
BORUPS ALLE		33	33.0	ND	JYDERUP-KOEBENHAVN				
GLADSAKE		33	40.0	ND	JYDERUP-KOEBENHAVN				
HELSINGOER		33	23.0	ND	JYDERUP-KOEBENHAVN				
JYDERUP		33	47.0	ND	JYDERUP-KOEBENHAVN				
KALUNDBORG		33	20.0	D	JYDERUP-KOEBENHAVN				

AdminUniqueId	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	KOEBENHAVN VEST	33	47.0	ND	JYDERUP-KOEBENHAVN				
	SKODSB/LANDSKRON	33	29.0	D	JYDERUP-KOEBENHAVN				
	LYNETTEN	33	39.0	D	JYDERUP-KOEBENHAVN				
	SKAMLEBAEK	33	31.8	D	JYDERUP-KOEBENHAVN				
	GUDHJEM	33	17.0	D	ROE				
	HAMMEREN	33	20.0	D	ROE				
	NEKSOE	33	33.0	D	ROE				
	ROE	33	38.5	D	ROE				
	VARDE	33	47.0	ND	VARDE				
	LAESOE	33	23.0	D					
	JYDERUP	34	47.0	ND	JYDERUP				
	KALUNDBORG	34	20.0	D	JYDERUP				
	SKAMLEBAEK	34	31.8	D	JYDERUP				
	NAKSKOV	34	40.0	ND	VORDINGBORG-NAKSKOV				
	VORDINGBORG	34	47.0	ND	VORDINGBORG-NAKSKOV				
	VARDE	34	47.0	ND	VARDE				
	LEMVIG	34	17.0	ND	VIDEBAEK				
	STRUER	34	17.0	D	VIDEBAEK				
	VIDEBAEK	34	47.0	ND	VIDEBAEK				
	LAESOE	34	23.0	ND					
	FREDERIKSHAVN	35	23.0	D	NIBE-TOLNE				
	HADSUND	35	17.0	ND	NIBE-TOLNE				
	HIRTSHALS	35	26.0	ND	NIBE-TOLNE				
	HOBRO	35	17.0	ND	NIBE-TOLNE				
	NIBE	35	47.0	ND	NIBE-TOLNE				
	SAEBY	35	26.0	ND	NIBE-TOLNE				
	SKAGEN	35	30.0	ND	NIBE-TOLNE				
	TOLNE	35	40.0	ND	NIBE-TOLNE				
	THISTED	35	44.0	D	THISTED				
	SVENDborg	35	44.0	ND	TOMMERUP-SVENDborg				
	TOMMERUP	35	47.0	ND	TOMMERUP-SVENDborg				
	AARHUS	36	38.5	ND	HADSTEN-AARHUS-HEDENSTED				
	EBELTOFT N	36	32.5	D	HADSTEN-AARHUS-HEDENSTED				
	GUERRILD	36	26.0	ND	HADSTEN-AARHUS-HEDENSTED				
	GRENAA	36	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
	HADSTEN	36	46.5	D	HADSTEN-AARHUS-HEDENSTED				
	HEDENSTED	36	47.0	ND	HADSTEN-AARHUS-HEDENSTED				
	KOLDING	36	23.0	ND	HADSTEN-AARHUS-HEDENSTED				

AdminUniqueId	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
RANDERS		36	17.0	D	HADSTEN-AARHUS-HEDENSTED				
SILKEBORG		36	17.0	ND	HADSTEN-AARHUS-HEDENSTED				
STUDSTRUP		36	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
VEJLE		36	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
FREDERIKSHAVN		37	23.0	D	NIBE-TOLNE				
HADSUND		37	17.0	ND	NIBE-TOLNE				
HIRTSHALS		37	26.0	ND	NIBE-TOLNE				
HOBRO		37	17.0	ND	NIBE-TOLNE				
NIBE		37	47.0	ND	NIBE-TOLNE				
SAEBY		37	26.0	ND	NIBE-TOLNE				
SKAGEN		37	30.0	ND	NIBE-TOLNE				
TOLNE		37	40.0	ND	NIBE-TOLNE				
AABENRAA		37	47.0	ND	AABENRAA				
FLENSBURG		37	20.0	D	AABENRAA				
SVENDSBORG		37	44.0	ND	TOMMERUP-SVENDSBORG				
TOMMERUP		37	47.0	ND	TOMMERUP-SVENDSBORG				
SKIVE		38	17.0	ND	VIBORG				
VIBORG		38	47.0	ND	VIBORG				
VIBORG BY		38	17.0	ND	VIBORG				
NAKSKOV		38	40.0	ND	VORDINGBORG-NAKSKOV				
VORDINGBORG		38	47.0	ND	VORDINGBORG-NAKSKOV				
GUDHJEM		39	17.0	D	ROE				
HAMMEREN		39	20.0	D	ROE				
NEKSOE		39	33.0	D	ROE				
ROE		39	36.5	ND	ROE				
FREDERIKSHAVN		39	23.0	D	NIBE-TOLNE				
HADSUND		39	17.0	ND	NIBE-TOLNE				
HIRTSHALS		39	26.0	ND	NIBE-TOLNE				
HOBRO		39	17.0	ND	NIBE-TOLNE				
NIBE		39	47.0	ND	NIBE-TOLNE				
SAEBY		39	26.0	ND	NIBE-TOLNE				
SKAGEN		39	30.0	ND	NIBE-TOLNE				
TOLNE		39	40.0	ND	NIBE-TOLNE				
AABENRAA		40	47.0	ND	AABENRAA				
FLENSBURG		40	20.0	D	AABENRAA				
BORUPS ALLE		40	33.0	ND	KOEBENHAVN				
GLADSAXE		40	40.0	ND	KOEBENHAVN				
HELSINGOER		40	23.0	ND	KOEBENHAVN				

AdminUniqueID	TX-Name	Ch.	ERP/dBW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	KOEBENHAVN VEST	40	47.0	ND	KOEBENHAVN				
	SKODSB/LANDSKRON	40	29.0	D	KOEBENHAVN				
	LYNETTEN	40	39.0	D	KOEBENHAVN				
	GUDHJEM	40	17.0	D	ROE				
	HAMMEREN	40	20.0	D	ROE				
	NEKSOE	40	33.0	D	ROE				
	ROE	40	36.5	ND	ROE				
	HEDENSTED	41	47.0	ND	HEDENSTED				
	KOLDING	41	23.0	ND	HEDENSTED				
	VEJLE	41	23.0	ND	HEDENSTED				
	VARDE	41	47.0	ND	VARDE				
	ANHOLT	41	23.9	D					
	LEM/VIG	42	17.0	D	VIDEBAEK				
	STRUER	42	17.0	D	VIDEBAEK				
	VIDEBAEK	42	47.0	ND	VIDEBAEK				
	BORUP ALLE	42	33.0	ND	KOEBENHAVN				
	GLADSAYE	42	40.0	ND	KOEBENHAVN				
	HELSINGOER	42	23.0	ND	KOEBENHAVN				
	KOEBENHAVN VEST	42	47.0	ND	KOEBENHAVN				
	SKODSB/LANDSKRON	42	29.0	D	KOEBENHAVN				
	LYNETTEN	42	39.0	D	KOEBENHAVN				
	JYDERUP	42	47.0	D	VORDINGBORG-NAKSKOV-JYDERUP				
	KALUNDBORG	42	20.0	D	VORDINGBORG-NAKSKOV-JYDERUP				
	NAKSKOV	42	40.0	ND	VORDINGBORG-NAKSKOV-JYDERUP				
	SKAMLEBAEK	42	31.8	D	VORDINGBORG-NAKSKOV-JYDERUP				
	VORDINGBORG	42	47.0	ND	VORDINGBORG-NAKSKOV-JYDERUP				
	LAESOE	42	23.0	D					
	HEDENSTED	43	47.0	ND	HEDENSTED				
	KOLDING	43	23.0	ND	HEDENSTED				
	VEJLE	43	23.0	ND	HEDENSTED				
	SVENDBORG	43	44.0	ND	TOMMERUP-SVENDborg				
	TOMMERUP	43	47.0	ND	TOMMERUP-SVENDborg				
	ANHOLT	43	23.9	D					
	AARHUS	44	38.0	D	HADSTEN-AARHUS-HEDENSTED				
	EBELTOFT N	44	32.5	D	HADSTEN-AARHUS-HEDENSTED				
	GUERRILD	44	26.0	D	HADSTEN-AARHUS-HEDENSTED				
	GRENAA	44	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
	HADSTEN	44	45.2	D	HADSTEN-AARHUS-HEDENSTED				

AdminUniqueID	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	HEDENSTED	44	47.0	ND	HADSTEN-AARHUS-HEDENSTED				
KOLDING		44	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
RANDERS		44	17.0	D	HADSTEN-AARHUS-HEDENSTED				
SILKEBORG		44	17.0	ND	HADSTEN-AARHUS-HEDENSTED				
STUDSTRUP		44	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
VEJLE		44	23.0	ND	HADSTEN-AARHUS-HEDENSTED				
THISTED		45	44.0	D	THISTED				
SKIVE		45	17.0	ND	VIBORG				
VIBORG		45	47.0	ND	VIBORG				
VIBORG BY		45	17.0	ND	VIBORG				
GUDHJEM		45	17.0	D	ROE				
HAMMEREN		45	20.0	D	ROE				
NEKSOE		45	33.0	D	ROE				
ROE		45	36.5	ND	ROE				
AARHUS		46	39.0	D	HADSTEN-AARHUS				
EBELTOFT N		46	32.5	D	HADSTEN-AARHUS				
GUERRILD		46	26.0	ND	HADSTEN-AARHUS				
GRENAA		46	23.0	ND	HADSTEN-AARHUS				
HADSTEN		46	47.0	ND	HADSTEN-AARHUS				
RANDERS		46	17.0	D	HADSTEN-AARHUS				
SILKEBORG		46	17.0	ND	HADSTEN-AARHUS				
STUDSTRUP		46	23.0	ND	HADSTEN-AARHUS				
HEDENSTED		46	47.0	ND	HEDENSTED				
KOLDING		46	23.0	ND	HEDENSTED				
VEJLE		46	23.0	ND	HEDENSTED				
FREDERIKSHAVN		46	23.0	D	NIBE-TOLNE				
HADSUND		46	17.0	ND	NIBE-TOLNE				
HIRTSHALS		46	26.0	ND	NIBE-TOLNE				
HOBRO		46	17.0	ND	NIBE-TOLNE				
NIBE		46	47.0	ND	NIBE-TOLNE				
SAEBY		46	26.0	ND	NIBE-TOLNE				
SKAGEN		46	30.0	ND	NIBE-TOLNE				
TOLNE		46	40.0	ND	NIBE-TOLNE				
SKIVE		47	17.0	ND	VIBORG				
VIBORG		47	47.0	ND	VIBORG				
VIBORG BY		47	17.0	ND	VIBORG				
LEMVIG		47	17.0	ND	VIDEBAEK				
STRUER		47	17.0	D	VIDEBAEK				

AdminUniqueID	TX-Name	Ch.	ERP/dbW	Patt	Allotment/SFN	FST	Margin to 49+fcorr	Affected S allot	Remark
	VIDEBAEK	47	47.0	ND	VIDEBAEK				
	LEMvig	48	17.0	ND	VIDEBAEK				
	STRUER	48	17.0	D	VIDEBAEK				
	VIDEBAEK	48	46.5	D	VIDEBAEK				
	JYDERUP	48	47.0	D	JYDERUP				
	KALUNDBORG	48	20.0	D	JYDERUP				
	SKAMLEBAEK	48	31.8	D	JYDERUP				
	BORUPS ALLE	48	33.0	ND	KOEBENHAVN				
	GLADSAKE	48	40.0	ND	KOEBENHAVN				
	HELSINGOER	48	23.0	ND	KOEBENHAVN				
	KOEBENHAVN VEST	48	47.0	ND	KOEBENHAVN				
	SKODSB/LANDSKRON	48	29.0	D	KOEBENHAVN				
	LYNETTEN	48	39.0	D	KOEBENHAVN				
	NAKSKOV	48	40.0	ND	VORDINGBORG-NAKSKOV				
	VORDINGBORG	48	47.0	ND	VORDINGBORG-NAKSKOV				
	LAESOE	48	23	ND					

## Annex 3 to agreement between Denmark and Sweden

### Interfering field strength requiring coordination for DVB-T in UHF

If the cumulative interfering field strength exceeds the values listed in Table 1 below on the boundary of any existing co-channel/co-block allotment coordination with the affected administration is needed.

For affected DVB-T it's proposed to use the  $E_{\max \text{ int}}$  for RPC2.

Calculation setup:

- Field strengths are calculated at 10 meters height for 1% time, 50% of locations.
- The power sum method is used to calculate the cumulative interference field strength.
- The cumulative interference field strength is calculated at the boundary of the co-channel/co-block allotments.
- For field strength calculation, the latest version of the propagation model ITU-R P. 1546 should be used.
- The land-sea data from IDWM should be used.

#### DVB-T interfered by DVB-T for 650 MHz

Reference planning configuration	RPC2
Reference location probability	95%
Reference C/N [dB]	19
Reference ( $E_{\text{med}}$ )ref [dB $\mu$ V/m] at 650 MHz	78
CF at 650 MHz	12.8
IM	2.8
$E_{\max \text{ int}}$ [dB $\mu$ V/m] at 650 MHz	<b>49</b>

Table 1  $E_{\max \text{ int}}$  for DVB-T interfered by DVB-T

The values in Table 1 should be adjusted with respect to frequency with  $30 * \log(f/f_{650})$ , f in MHz.

#### Derivation maximum allowable interfering field strength

The maximum allowable interfering field strength,  $E_{\max \text{ int}}$ , at any test point given by the input requirement is calculated as follows:

$$E_{\max \text{ int}} = E_{\text{med}} + f_{\text{corr}} - CF - PR + IM$$

where

$E_{\text{med}}$  is the minimum median equivalent field strength (in dB $\mu$ V/m) for 200 MHz and 650 MHz, respectively;

$f_{\text{corr}}$  is the frequency correction (in dB) for UHF, given by  $30 * \log(f/f_{650})$ , f in MHz;

CF is the combined location correction factor:  $CF = q \sqrt{(\sigma_w^2 + \sigma_i^2)}$ ;

$q$  is the distribution factor;

$\sigma_w$  is the standard deviation of the lognormal distribution of the wanted signal (in dB);

$\sigma_i$  is the standard deviation of the lognormal distribution of the interfering signal (in dB);

PR is the appropriate protection ratio;

When the interfering system is of the same type as the wanted one, PR is equal to C/N for the wanted system's RPC. PR and C/N are taken from Addendum 12 to Document 7-E, input from CEPT to RRC-06.

IM is the implementation margin (in dB).