SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL

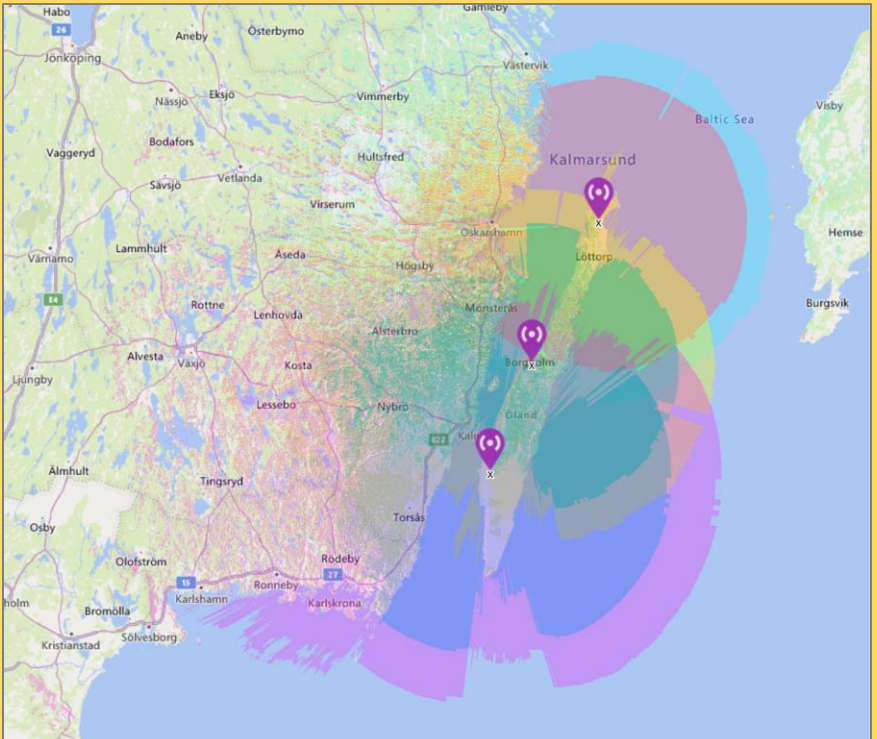
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

v2023-02-05

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

SK7RN – SK7RFL



Repeater System

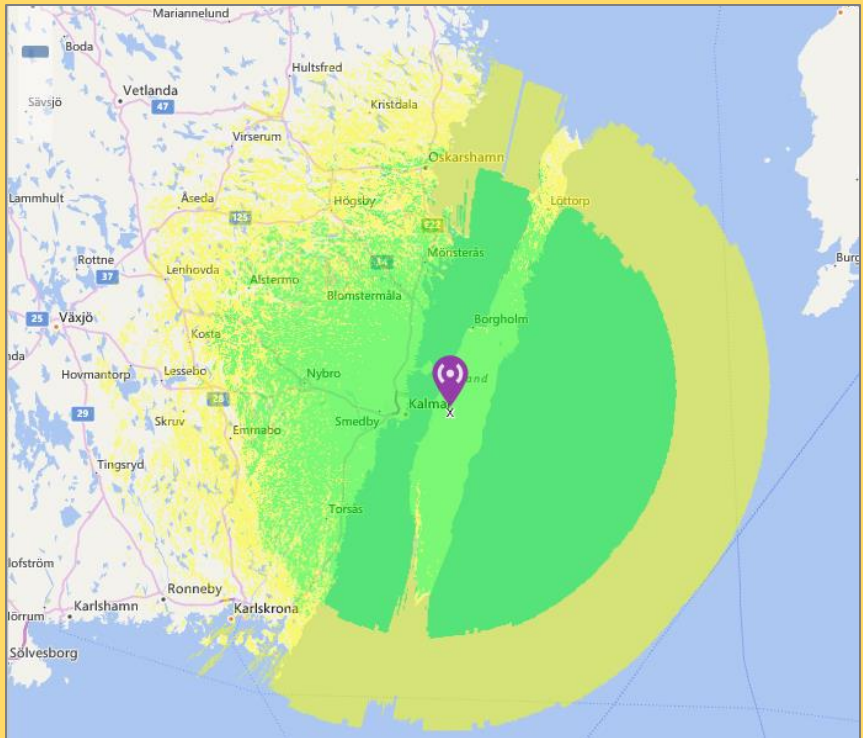
SvxLink

EchoLink

DMR

Öland

2022



SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
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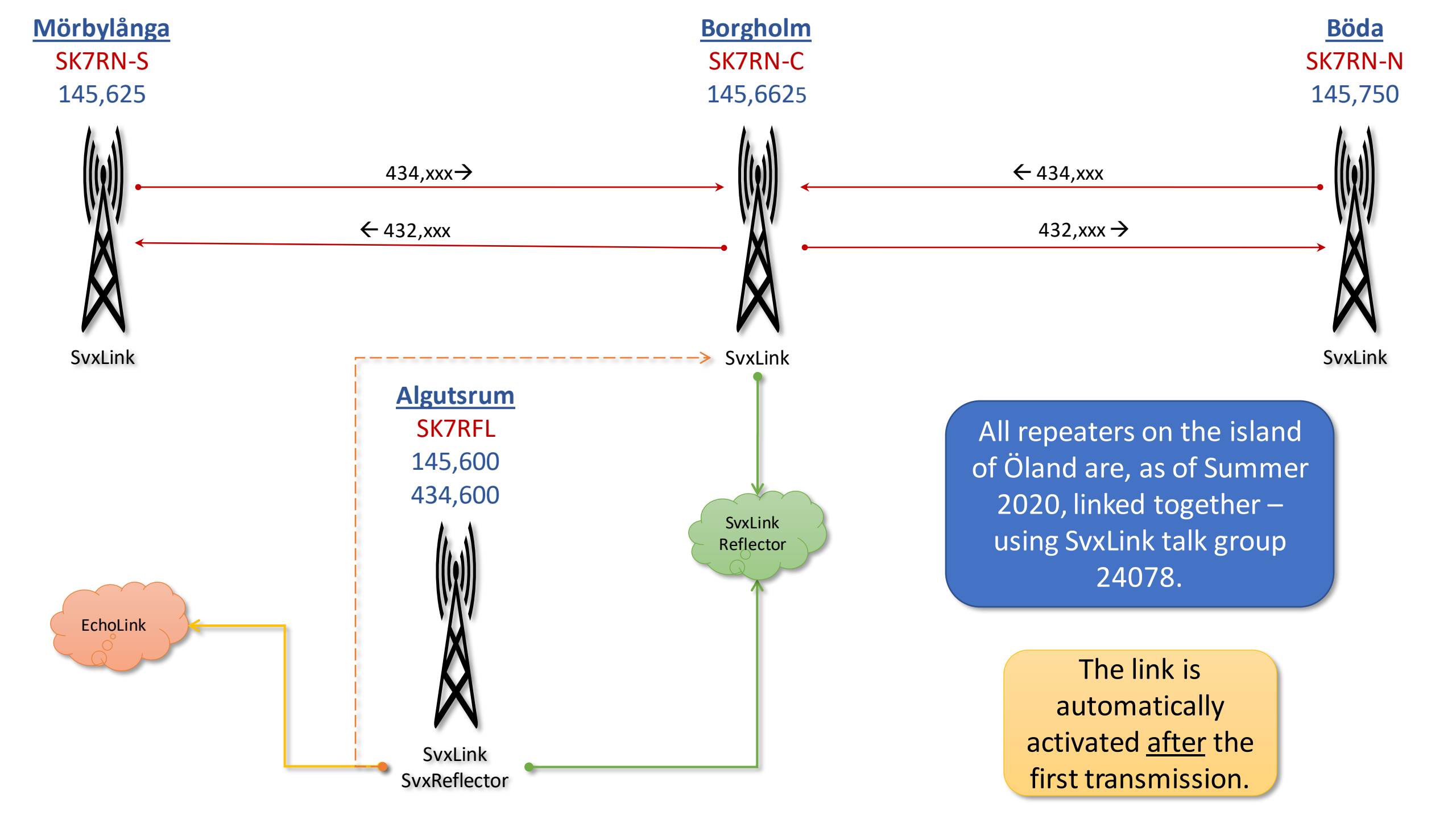
Conditions and pre-requisites Öland

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

- SK7RN's 3 repeaters shall be linked together.
- The linking of the 3 repeaters must not be dependant of a functioning Internet.
  - As a consequence hereof, the links must be analogue or digital radio links.
- There must be a way to disconnect our local repeaters from the network, in case of an emergency.
  - There is now such a command.
- There shall be a link between SK7RN and SK7RFL repeaters.
  - This link may use the Internet.
  - The link may be automatic or manual.
- The use of the analogue repeaters shall not require anything else than "an ordinary analogue radio".
- Users must be able to use the repeater system, exactly like today,
  - Without any knowledge about the technology behind
  - Without using any DTMF commands.
  - Without using CTCSS.
- Affiliation with the Swedish National SvxReflector Network.
- The local repeaters must not be occupied for hours by seemingly irrelevant traffic.
  - Adaption of monitored talk groups.
  - Use of auto-QSY.
- The upgrade to SvxLink will have
  - no, or at least very few, impacts on the daily use of the repeater system.
  - large impact on the technology behind.
- There will be great possibilities for the users, who would like to activate the functions of SvxLink.


Mörbylånga
SK7RN-S
145,625
Borgholm
SK7RN-C
145,6625
Böda
SK7RN-N
145,750
434,xxx→
← 432,xxx
← 434,xxx
432,xxx →
SvxLink
SvxLink
SvxLink
Algutsrum
SK7RFL
145,600
434,600
SvxLink
Reflector
EchoLink
SvxLink
SvxReflector
All repeaters on the island of Öland are, as of Summer 2020, linked together – using SvxLink talk group 24078.
The link is automatically activated after the first transmission.

SK7RN
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Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

SvxLink

Advanced repeater controller and EchoLink software for Linux including a GUI, Qtel - The Qt EchoLink client

SvxLink

Talk Groups

Topology

Swedish National SvxLink Reflector Network (”Östkustlänken”)

International traffic

SvxPortal

SvxLink – SvxReflector

Granudden.info
Väderstation på Öland
Peter Lindquist SM5GXQ

User

- The speech is analogue over radio.
- Existing analogue radios can still be used.
- Does not require any registration.
- Talk Groups — *Link repeaters together*
- DTMF — *Not mandatory*
- CTCSS — *Not mandatory*

Repeater | Simplex node

- RepeaterLogic | SimplexLogic.
- Affiliation with the National Svx Reflector.
- Monitored talk groups.
- Default talk group.
  - Automatically activated upon start of repeater.
- Time-activated talk groups.
- EchoLink.

Manual talk group selection

- DTMF
  - **91***tg*#
  - Shortcuts at SK7RFL|SK7RN|SK5BN.
- CTCSS
  - May be mandatory on certain nodes.
  - May be used to select talk group at repeater start.

Automatic activation of talk group

- Incoming call on monitored talk group
  - Only if the repeater is idle.
- Default talk group (automatically activated)
  - Upon start from local radio only.
- Time-activated talk group.
  - The repeater is ”locked” onto a bulletin talk group.

There is no ”Private Call” on SvxLink

- Manual QSY command **92#**.
  - Moves active nodes to a private talk group.

There is no ”Private call” on SvxLink

- Automatic QSY from talk group 240 after 5 mins.
  - Moves active nodes to a private talk group.

SvxLink Commands
SK7RFL – SK7RN – SK5BN

In SvxLink, all DTMF commands must be followed by a ”square” sign (#).

EchoLink is available at SK7RFL and SK5BN

DMR is available at SK7RFL

* *Deviation from SvxLink standard*

Show the command list at SK7RFL.se.

General Commands

0|*|5 Start of the repeater
SK7RFL: DTMF **0** SK7RN: DTMF * SK5BN: DTMF **5**
Also 1750 Hz or CTCSS 79,7 Hz SK5BN: 103,5 Hz

Other commands can only be givet after the repeater has been started.

***** Status

0* Full status *

2* List connected stations (EchoLink) *

6* List connected stations (DMR) *

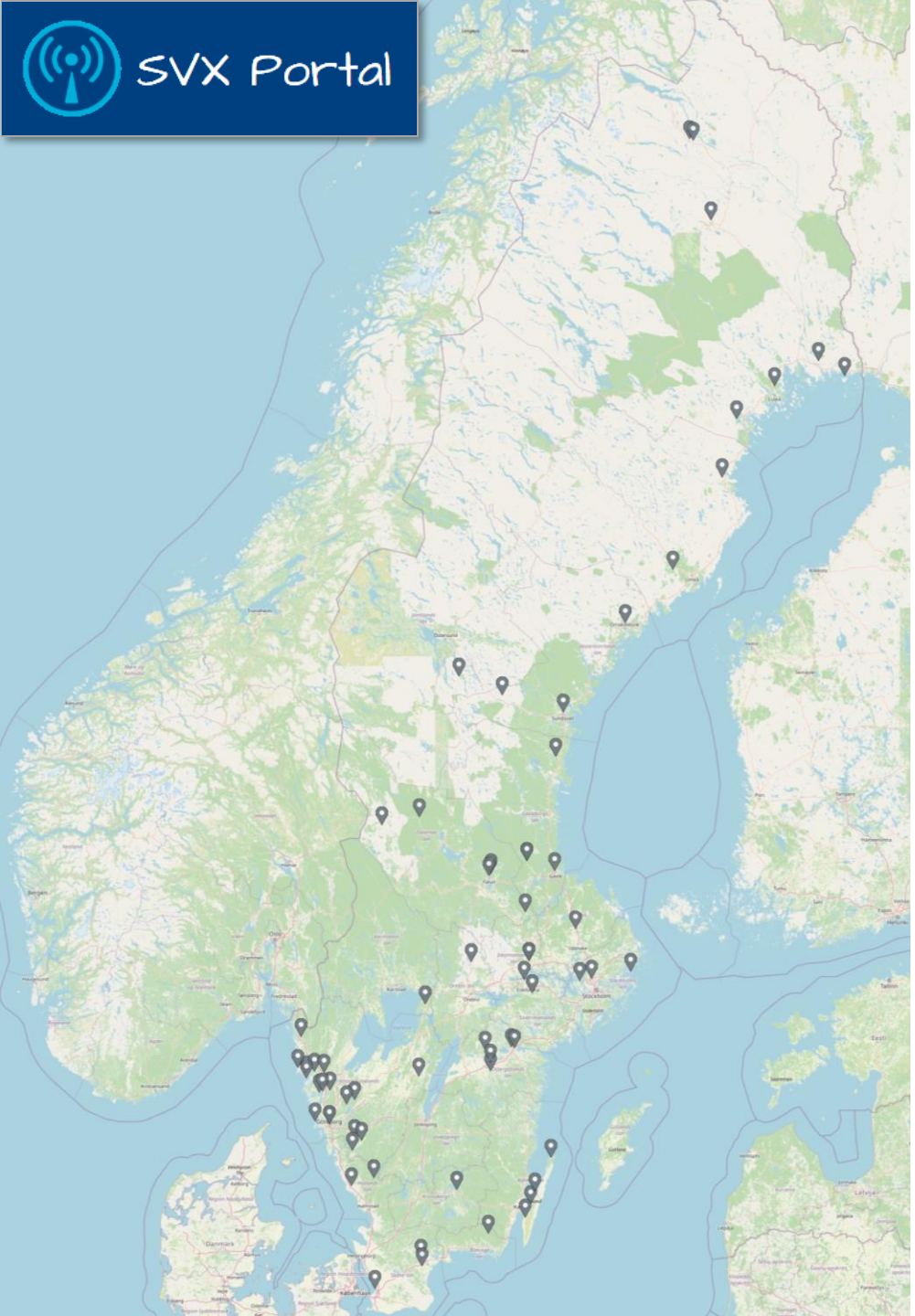
1 Activate the Parrot

2 Says the repeaters EchoLink number *
nbr Connect to EchoLink node *nbr* *
2**nbr* *If the node number overlaps a talk group command* *

5 Weather (METAR) *SK7RFL SK7RN*

51	Kalmar Airport	ESMQ
52	Ronneby Airport	ESDF
53	Visby Airport	ESSV
54	Växjö Airport	ESMX
55	Norrköping Airport	ESSP

Deactivate module, Disconnect

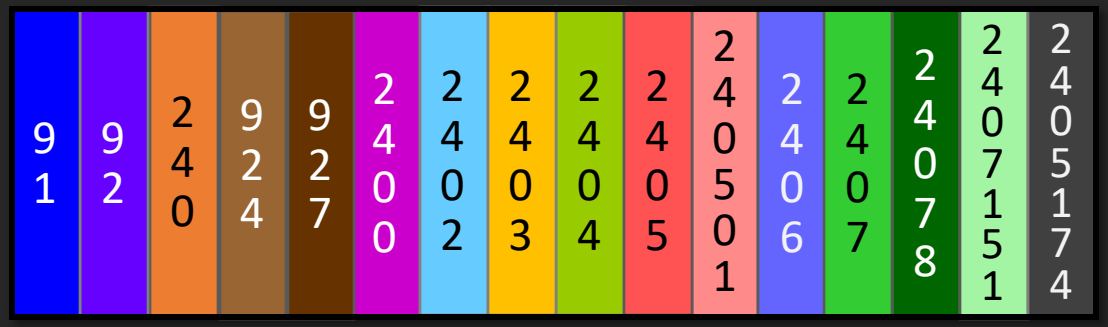


SVX Portal

Anropsignal	TG#	Aktiv	Övervakade TGs
SA4THA	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24020 24070 24088 24098 2404106
SA5BJM	0	Nej	240 2405 24020 24070 240582
SA6EAL	0	Nej	240 2406 24061 24063 24070 24097 24098
SA6GDS	0	Nej	240 2406 24061 24063 24097 24098
SJ2W	0	Nej	240 2402 24020 24021 24022 24070 2402100
SK0BO	0	Nej	240 2400 24003
SK0CT-70	0	Nej	240 2400 24001 24002 24003
SK2AZ	0	Nej	240 2402 24020 24021 24022 240211
SK2AZ-L	0	Nej	24020 240211
SK2RIU	0	Nej	240 2402 24020 24021 24022 24033 240210
SK3GK-2	0	Nej	240 2403 24020 24031 24070 240305
SK3GK-70	0	Nej	240 2403 24020 24031 24070 240305
SK3GW	0	Nej	240 2403 24020 24031 24070 2403101
SK3LH	0	Nej	240 2402 2403 24020 24021 24022 24033 24034 240341
SK3RFG	0	Nej	91 240 2403 24022 24033 24070 240301
SK3RIN	0	Nej	240 2402 2403 24021 24033 24070 240306
SK3RKL	0	Nej	240 2403 24022 24033 24034 240341
SK3RQE	0	Nej	240 2403 24020 24033 24070
SK3W	0	Nej	240 2403 24020 24031 24099 2403100
SK4AO	0	Nej	240 2404 24041
SK4EA-L	0	Nej	240 2404 24020 24042
SK4KO	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24070 240408 2404081
SK4RGL	0	Nej	240 2404 24041 24070
SK5AS	0	Nej	240 2405 24059 24070
SK5BN	0	Nej	91 92 240 2405 24059 24078 240028 240501 240515 240541
SK5LW-2	0	Nej	240515
SK5LW-70	0	Nej	240 2402 2405 24020 24070 240515
SK5RHQ-2	0	Nej	240 240541
SK5RHQ-70	0	Nej	240 2405 24070 240541
SK5RHT-10	0	Nej	2405 24059
SK5RHT-6	0	Nej	240 2405 24051
SK6IF	0	Nej	240 2406 24070 240609 2406087
SK6IF-2K	0	Nej	240 2406 24062 24070 24098 240604 240609
SK6IF-2T	0	Nej	240 2406 24062 24070 240609 2406087
SK6JX	0	Nej	240 2406 24061 24070 24097 24098
SK6QA	0	Nej	240 2406 24062 24070 240603 240604 240605
SK6QA-70	0	Nej	240 2406 24062 24064
SK6RFQ-2	0	Nej	240 2406 24070 240602
SK6RFQ-70	0	Nej	240 2406 24070 240602
SK6RIC-70	0	Nej	240 2406 240617
SK6RKI	0	Nej	240 2406 24062 24070 240602 240620
SK7BQ-R	0	Nej	240 2407 24075 240777
SK7HW	0	Nej	240 2407 24072 24077
SK7JL	0	Nej	91 92 240 924 927 2407 24074 24078 2407151 24071519
SK7RFL	0	Nej	91 92 240 2407 24073 24078 240501 240721 2407151
SK7RN	0	Nej	91 92 240 2407 24073 24078 240501 2407151 2407364
SL6ZAQ	0	Nej	240 2406 24062 24070 240601 240609
SM0SVX	0	Nej	240 2400 24020 24070 24099 2400238
SM2YUW	0	Nej	240 2402 24020 24021 24022 24062 24063 24070 24077 24088 24097 24098 24770 240211
SM3UQO	0	Nej	91 92 235 240 242 244 2402 2403 24033 24070 240306 2403042
SM4FBD	0	Nej	240 2404 2406 24063 24098
SM4JDP	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24070 240408 2400408 2404081 2404082
SM4KUH	0	Nej	240 2404 24041 2404013
SM5GXQ	0	Nej	91 92 235 240 2407 24078 24098 240501 240602 240620 2405174 2407151
SM6LNJ	0	Nej	240 2405 2406 24062 24064 24070 24098 240604
SM6OEQ	0	Nej	240 2406 24061 24062 24063 24067 24070 24088 240603 240604
SM6SXJ	0	Nej	240 2406 2407 24061 24062 24063 24070 24088 24098 240602 240603 240617 240618 240770 240777
SM6TZL	0	Nej	240 2406 24061 24062 24063 24070 24097 24098 240602
SM6VAG	0	Nej	240 2406 24061 24062 24063 24070
SM6ZDO	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24061 24062 24063 24070 24098 240515 240602 240603 240617 2405174
SM7ECA	0	Nej	240 2406 2407 24061 24062 24063 24070 24078 24098
SM7FLD	0	Nej	240 2407 24075 240770 240777 2407056
SM7XCE	0	Nej	240 2407 24070 24073 24074 24077 24078 24088 24098 2407151

SvxLink

Swedish National SvxLink Reflector Network



Show the talk group list at the Swedish Svx Portal.

240 Sverige
2400 SM0
2401 SM1
2402 SM2
24020 Bulletin
24021 Norrbotten
24022 Västerbotten
2403 SM3
24031 Gävleborgs Län
24033 Västernorrland Län
24036 Östersund
2404 SM4
24041 Falun
240408 SK4RGO
2405 SM5
24051 Uppsala Län
24052 Sörmlands Län
240515 Eskilstuna
240511 Linköping
240501 Norrköping
24054 Västmanland Län
240541 Västerås
2406 SM6
24061 Halland
24062 Bohuslän
240602 SK6RFQ
240620 SK6RKI
240603 SK6QA
240604 SK6IF-2K
240609 SK6IF-2T
2406087 SK6IF
24063 Mark med omnejd
240630 SK6LK
240617 SK6RIC
2407 SM7
24070 Bulletin
24071 Jönköpings Län
24072 Kronobergs Län
240770 SK7HW
24073 Kalmar Län
24074 Blekinge Län
2407151 Spjutsbygd
24075 Skåne Län
240777 SK7BQ
240702 SK7REE
24078 Öland

SvxLink

Commands (Talk Groups)

SK7RFL – SK7RN – SK5BN

9*# Status

91# Activate default talk group *Non standard*
SK7RFL/SK7RN: 24078 SK5BN: 240501 SM5GXQ: 2405174

91*tg*# Select talk group *tg*
910# De-select talk group
919# Local QSO

92# ”QSY” to random talk group
92*tg*# ”QSY” to *tg*

93# Follow last QSY

94*tg*# Temporarily monitor talk group *tg*

Show the command list at SK7RFL.se.

Genvägar *Ej SvxLink standard*

0	Återställ talgruppsval (lokalt QSO)	=910
9	Deaktivera alla talgrupper	=919
240	Aktivera talgrupp 240	
2400	Aktivera talgrupp 2400, dvs distrikt SM0	
2402	Aktivera talgrupp 2402, dvs distrikt SM2	
240210	Anslut tillfälligt till SK2RIU, dvs Umeå	
24021	Aktivera talgrupp 24021, dvs Norrbotten	
24022	Aktivera talgrupp 24022, dvs Västerbotten	
2403	Aktivera talgrupp 2403, dvs distrikt SM3	
24031	Aktivera talgrupp 24031, dvs Gästrikland	
24033	Aktivera talgrupp 24033, dvs Västernorrland	
24034	Anslut tillfälligt till SK3LH, dvs Örnsköldsvik	
2404	Aktivera talgrupp 2404, dvs distrikt SM4	
2405	Aktivera talgrupp 2405, dvs distrikt SM5	
240501	Anslut tillfälligt till SK5BN, dvs Norrköping	
240515	Anslut tillfälligt till SK5LW, dvs Eskilstuna	
240541	Anslut tillfälligt till SK5RHQ, dvs Västerås	
2405174	Anslut tillfälligt till SM5GXQ, Norrköping|Färjestaden	
2406	Aktivera talgrupp 2406, dvs distrikt SM6	
24061	Aktivera talgrupp 24061, dvs Halland	
24062	Aktivera talgrupp 24062, dvs Bohuslän	
240602	Anslut tillfälligt till SK6RFQ, dvs Göteborg	
240603	Anslut tillfälligt till SK6QA, dvs Stenungsund	
2406087	Anslut tillfälligt till SK6IF, dvs Lysekil	
240604	Anslut tillfälligt till SK6IF-2K, dvs Kungshamn	
240609	Anslut tillfälligt till SK6IF-2T, dvs Tanum	
24063	Aktivera talgrupp 24063, , dvs simplexnoder	
240617	Aktivera talgrupp 240617, dvs Alingsås	
2407	Aktivera talgrupp 2407, dvs distrikt SM7	
24071	Aktivera talgrupp 24071, dvs Jönköping	
24072	Aktivera talgrupp 24072, dvs Kronoberg	
240770	Anslut tillfälligt till SK7HW, dvs Växjö	
24073	Aktivera talgrupp 24073, dvs Kalmar	
24074	Aktivera talgrupp 24074, dvs Blekinge	
2407151	Anslut tillfälligt till SK7JL, dvs Spjutsbygd	
24075	Aktivera talgrupp 24075, dvs Skåne	
240777	Anslut tillfälligt till SK7BQ, dvs Kristianstad	
24078	Aktivera talgrupp 24078, dvs Öland	

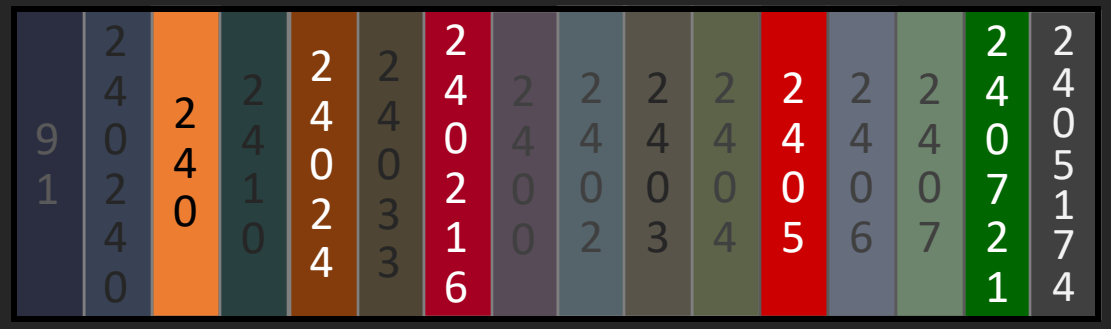
SvxLink

Commands

DMR talk groups

SK7RFL – SM5GXQ

DMR bridge is only available
at SK7RFL and SM5GXQ



6*	Status	*(talk group and stations)*
96*tg*	Select DMR talk group*tg*	
960	De-select DMR talk group	
969	Block incoming DMR traffic	
96*	Says DMR talk group	
96	Activate default talk group	

SK7RFL: 240721 SM5GXQ: 2405174

SvxLink

CTCSS Mapping

SK7RFL – SK7RN

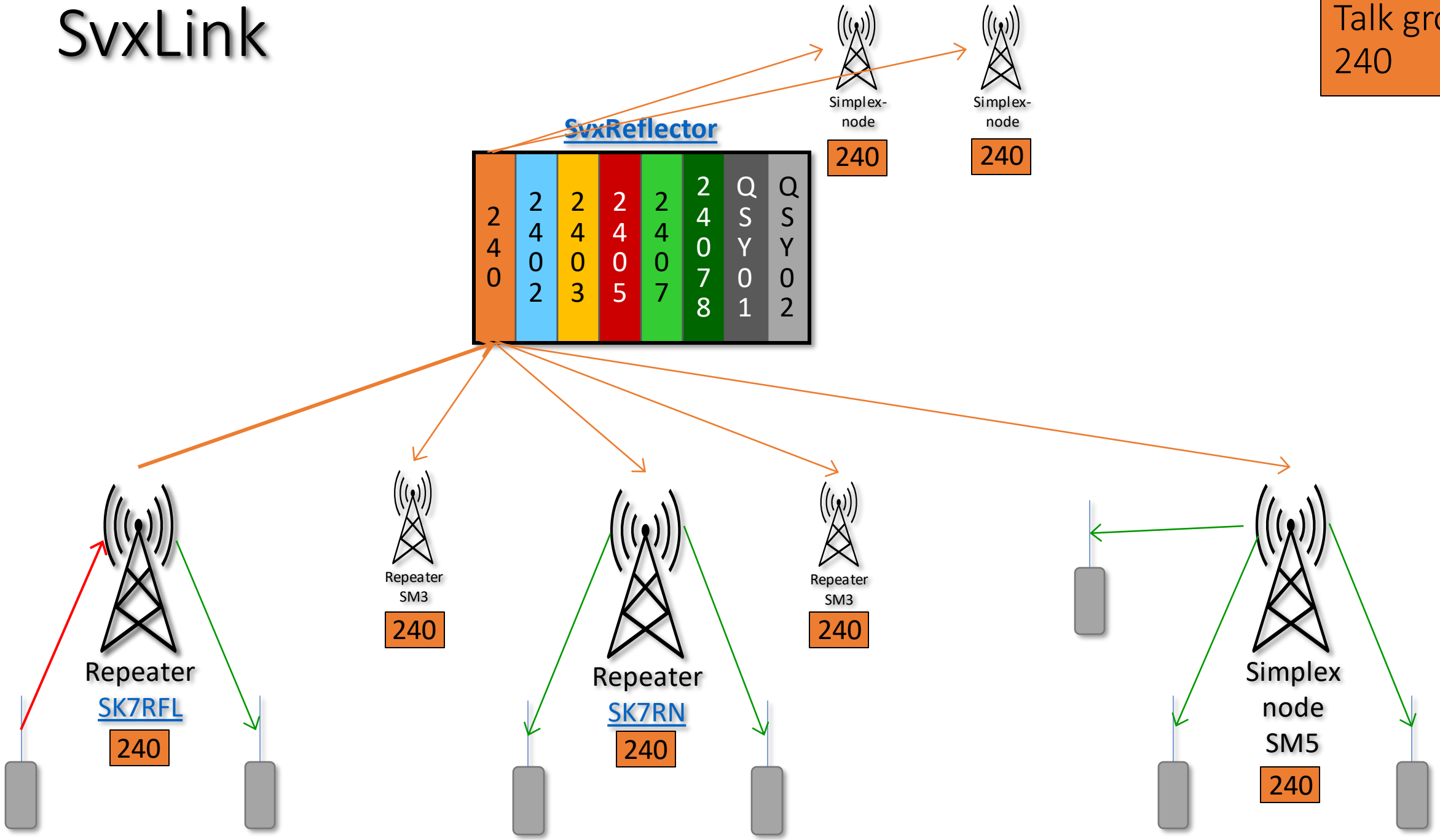
CTCSS may be used to activate a talk group.
The repeater needs to be started with this tone.
The local talk group is activated after the first transmission.

79,7 Hz	SK7RFL SK7RN	(SK7JL SK5BN)
88,5 Hz	Talk group 240	
189,9 Hz	Talk group 2400	*Non standard*
146,2 Hz	Talk group 2402	
250,3 Hz	Talk group 2403	*Non standard*
151,4 Hz	Talk group 2404	
91,5 Hz	Talk group 2405	
118,8 Hz	Talk group 2406	
225,7 Hz	Talk group 2407	*Non standard*
210,7 Hz	Talk group 24073	*Non standard*

Show CTCSS mapping for each repeater at the Swedish Svx Portal.

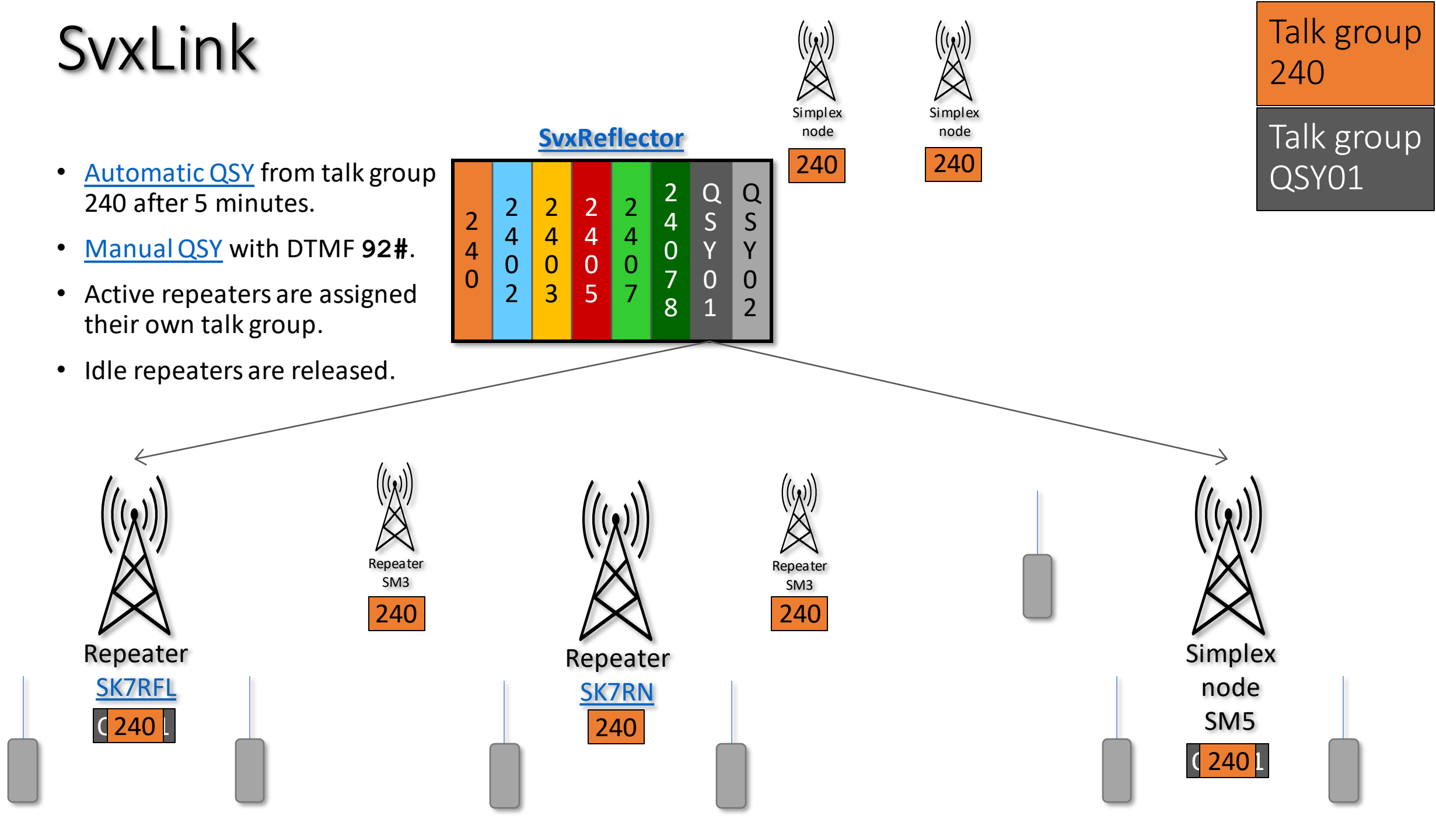
SvxLink

Talk group 240



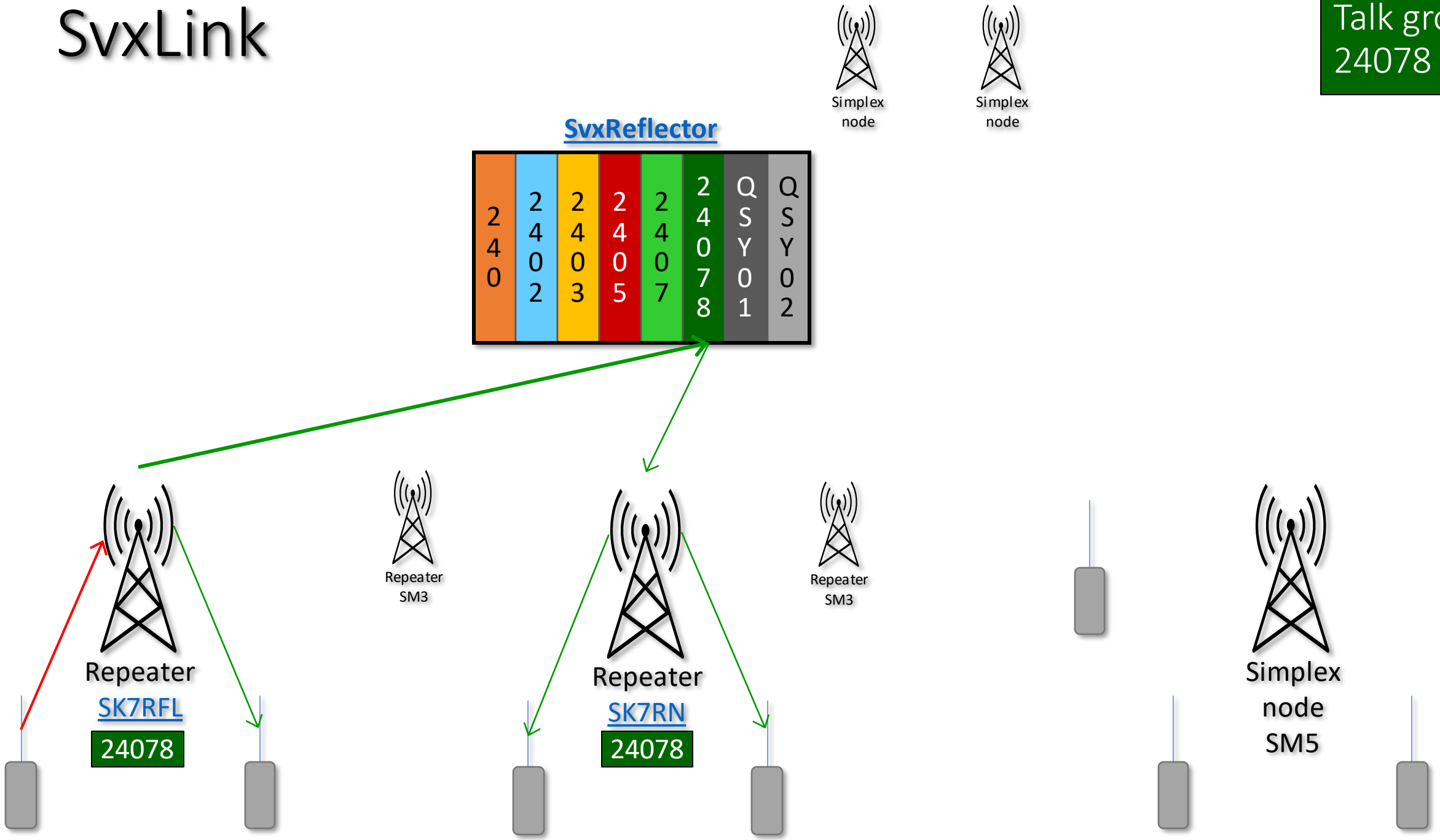
SvxLink

- Automatic QSY from talk group 240 after 5 minutes.
- Manual QSY with DTMF **92#**.
- Active repeaters are assigned their own talk group.
- Idle repeaters are released.

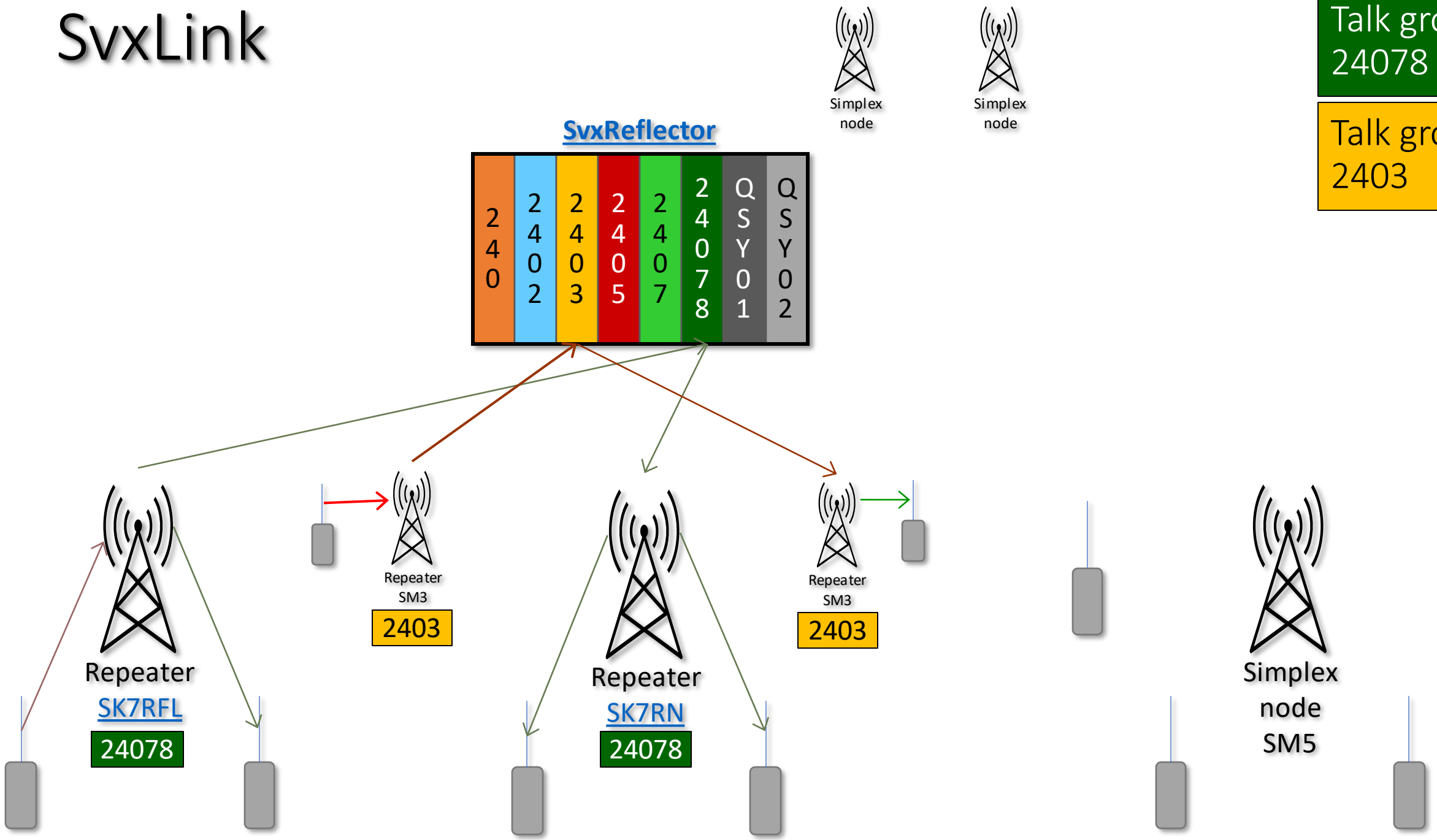


SvxLink

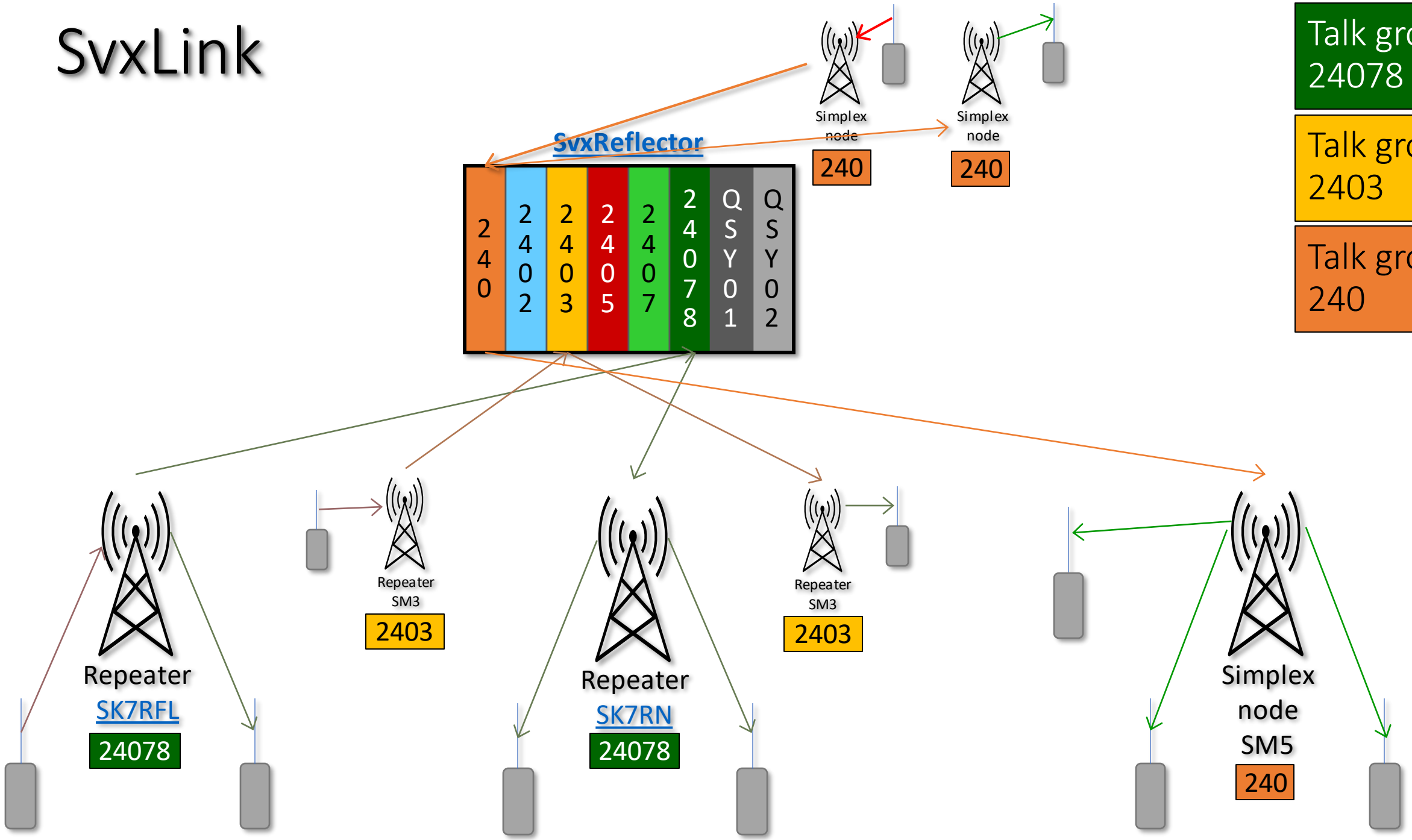
Talk group 24078



SvxLink


Talk group 24078
Talk group 2403
Simplex node
Simplex node
SvxReflector
240
2402
2403
2405
2407
24078
QSY01
QSY02
Repeater SM3
2403
Repeater SM3
2403
Repeater SK7RFL
24078
Repeater SK7RN
24078
Simplex node SM5

SvxLink


Talk group 24078
Talk group 2403
Talk group 240
Simplex node
240
Simplex node
240
SvxReflector
240
2402
2403
2405
2407
24078
QSY01
QSY02
Repeater SM3
2403
Repeater SM3
2403
Repeater SK7RFL
24078
Repeater SK7RN
24078
Simplex node SM5
240

SvxLink
EchoLink Macros
SK7RFL – SK5BN – SM5GXQ

View this Macro List at [SK7RFL.se](SK7RFL.se).

Makro	ID	Call	Plats	Anm	SW
D98	26370	SM7GMD	Mönsterås	Sysop SK7RFL	
D99	352661	SM5GXQ	Norrköping	Sysop SK7RFL	[svx]
D01	394667	SK0MM-R	Ingarö		[svx]
D02	788662	SM0KJD-R	Haninge		ASL
D03	759523	SK0BO-L	Finnhamn		[svx]
D04	691285	SA0BXI-L	Märsta		[svx]
D05					
D21	106121	SM2NLD-L	Storuman		[svx]
D22					
D31	138925	SM3LVB-R	Östersund		
D32	721188	SK3GA-L	Hudiksvall		
D41	700259	SK4KO-R	Mora		[svx]
D42	911050	SM4MET-L	Hagfors		
D43					
D51					
D52	788590	SM5RYI-R	Sala		
D53	271125	SK5UM-R	Flen		
D54	163622	SM5YMS-R	Värna		[svx]
D55	574460	SA5KBE-L	Stigtomta		[svx]
D56	839597	SM5RVH-L	Nyköping		
D57	295002	SM5RWD-L	Dunker		
D58	650238	SA5UTR-R	Nyköping		[svx]
D59					
D61	5908	SK6BA-L	Kinna		EchoIRLP
D62	600030	SM6SMY-L	Älvängen		
D63	288856	SM6VBT-R	Mölndal		EchoIRLP
D64	269926	SM6JZZ-L	Skövde		
D65	954346	SM6OWJ-L		Västkustlänken	
D66	845041	SM6GEV-L	Mölnlycke		ORP
D71	27266	SK7JC-R	Olofström	SK7RGM	
D72	24393	SK7HW-R	Växjö		[svx]
D73	818377	SM7WDG-L	Sjöbo		
D2416	496682	SM6NCS-L	DMR GW	Sweden Link	
D2401	493310	SM0TSC-L	DMR GW	Tg 2401	
D24033	721188	SK3GA-L	DMR GW	Tg 24033	

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

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Väderstation på Öland

Peter Lindquist SM5GXQ

SvxLink

Advanced repeater controller and EchoLink software for Linux including a GUI, Qtel - The Qt EchoLink client

International Traffic

Reflectors

Talk groups

Topology

Svx Portals

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

SvxLink – Multiple Reflectors

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

- Reflector ”SE” Swedish National Reflector.
- Reflector ”UK” ”International” reflector in England (G4NAB).
- Reflektor ”DE” ”Funknetz.de” reflector in Germany.
- Reflector ”SK7RFL” Local Reflector at the Repeater.
  - Used for incoming EchoLink and DMR connections.
  - May be used for emergency traffic, when the repeaters are not connected to the networks.
- SK7RFL, SK7RN, SK5BN, SM5GXQ are connected to SE, UK and DE reflector networks.
  - They do not monitor any international talk groups with heavy traffic load.
  - There is no direct bridging between the reflectors.
  - SM5GXQ Simplex node monitors (more) international talk groups.
- Normally only one reflector is active at the same time.
  - No ”leakage” between the networks.
  - Same talk group numbers in use in both networks. They are not necessarily bridged.
- All talk groups can be activated as usual with DTMF.
  - The repeater ”knows” which reflector to use.
- Talk group numbers are announced with:
  - ”Talk group” for the Swedish Reflector.
  - ”UK” for the English (international) Reflector.
  - ”DE” for Funknetz.de.

SvxLink – International Traffic

Anropsignal	TG#	Aktiv	Övervakade TGs	Start tid	Aktiv tid
SA0CAM	0	Nej	240 2400 24020 24070		
SA3AUX	0	Nej	240 2402 2403 2404 2406 24020 24033 24063 24070 24098		
SA5BJM	0	Nej	240 2405 24020 240582		
SA6GDS	0	Nej	240 2406 24061 24063 24070 24098		
SK0RMT	0	Nej	240 2400 2405 24070		
SK2AZ	0	Nej	240 2402 24020 24021 24022 240211		
SK2AZ-L	0	Nej	24020 240211		
SK2RIU	0	Nej	240 2402 24020 24021 24022 24033 240210		
SK2RWJ	0	Nej	240 2402 24020 24021 24022 240211		
SK3BG	0	Nej	91 92 235 240 242 244 2402 2403 24033 24070 240306 2403042		
SK3GK-2	0	Nej	240 2403 24020 24031 24070 240305		
SK3GK-70	0	Nej	240 2403 24020 24031 24070 240305		
SK3GW	0	Nej	240 2403 24020 24031 24070		
SK3LH	0	Nej	240 2402 2403 24020 24021 24022 24033		
SK3RFG	0	Nej	91 240 2403 24021 24022 24033 24070 240301		
SK3RIN	0	Nej	240 2402 2403 24021 24033 24070 240306		
SK3RQE	0	Nej	240 2403 24020 24033 24062 24070 240541		
SK4RGL	0	Nej	240 2404 24041 24070		
SK5AS	0	Nej	240 2405 24055 24070		
SK5LW-2	0	Nej	240515		
SK5LW-70	0	Nej	240 2402 2405 24020 24022 24070 240515		
SK5RHQ-2	0	Nej	240541		
SK5RHQ-70	0	Nej	240 2405 240541		
SK5RHT-6	0	Nej	240 2405 24055 24070		
SK6IF	0	Nej	240 2406 24062 24070		
SK6JX	0	Nej	240 2406 2407 24061 24070		
SK6QA	0	Nej	240 2406 24062 24070		
SK6RFQ-2	0	Nej	240 2406 24062 24070 240602 240603		
SK7JL	0	Nej	91 92 240 2407 24074 24078 2407151 24071519		
SK7RFL	0	Nej	91 92 240 924 927 2407 24078 240721 2407151		
SK7RN	0	Nej	91 92 240 924 927 2407 24078 2407151 2407364		
SM0SVX	0	Nej	240 2400 24020 24070 24099 2400238		
SM0SVX-L	0	Nej	2400238		
SM4FBD	0	Nej	240 2404 2406 24063 24098		
SM5GXQ	0	Nej	91 92 235 240 924 927 2405 2407 24078 24098 240501 2405174 2407151		
SM6LNJ	0	Nej	240 2405 2406 24062 24064 24070		
SM6SXJ	0	Nej	91 92 240 2400 2401 2402 2403 2404 2405 2406 2407 24061 24062 24063 24070 24088 24098		
SM6TZL	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24061 24062 24063 24070 24098		
SM6UDU	0	Nej	2406 2407 24061 24062 24063 24064 24070 24078 24098		
SM6UNC	0	Nej	91 92 240 927 2402 2403 2406 2407 24061 24062 24063 24070 24098		
SM6XGP	0	Nej	91 240 2400 2402 2403 2404 2405 2406 2407 240602		
SM6ZDO	0	Nej	240 2400 2402 2403 2404 2405 2406 2407 24061 24062 24063 24070 24098		

Callsign	TG#	Is talker	Monitored TGs
G4NAB	0	NO	9 235 2350 2351 23520 23561 23590
G4NAB-4	0	NO	235 2350 2351 23520 23561 23590
GB3EV	0	NO	235 2350 23520
GB3WK	0	NO	235 2350 23590
M0XHN	23526	YES	23526
SK5BN	0	NO	91 92 240 924 927 2405 240501
SK7RFL	0	NO	91 92 240 924 927 2407 24078 240721
SK7RN	0	NO	91 92 240 924 927 2407 24078 2407364
SM5GXQ	0	NO	91 92 235 240 924 927 2405 2407 24078 2405174

Anropsignal	TG#	Aktiv	Övervakade TGs
BV5DJ-DJ	0	Nej	28 80 81 262 777 4711
DB0AM	0	Nej	8 88 262 882 26390
DB0EIN-DV	0	Nej	77 91 235 777 6213 26298 37574
DB0FHS	0	Nej	80 81 89 777 2622 19055
DB0FTS	0	Nej	28 80 81 84 88 89 262 777 882 985
DB0GSW	0	Nej	89 99 262
DB0KOE	0	Nej	80 81 84 88 89 262
DB0MGN	0	Nej	8 66 80 81 84 88 89 99 262 264 777 986 2327
DB0MVP	0	Nej	19055
DB0PER	0	Nej	81 262 19348
DB0RUG	0	Nej	28 80 262 777
DB0SRB	0	Nej	80 81 84 88 89 262 916 2629
DB0TDR	262	Nej	
DB0THM	0	Nej	8 88 262 882 986 26390
DB3MAX	0	Nej	77 80 262 777 7777 18311 19055
DB3MAX-DJ2	0	Nej	77 80 262 777 18311 19055
DB3MAX-DV	0	Nej	80 262 777 18311
DC1RME-DJ	0	Nej	8 88 262 882 26390
DC2PI-DJ	0	Nej	80 81 84 88 89 262 777
DF9OO	0	Nej	262 777 37574
DG0CCO	0	Nej	8 9 80 81 84 88 89 99 262 777
DG0TD	0	Nej	28 80 262 777 4711
DG1US-DJ	0	Nej	77 777 6213 37574
DG4MK-S	0	Nej	89 99 262 777
DG6IMF-DJ	0	Nej	20 80 81 84 89 99 262 777 2622
DH9YAP-DJ	0	Nej	8 9 80 81 88 89 99 262 777 4711 26390 37574
DJ1JAY-D	0	Nej	66
DJ1VK	0	Nej	56479
DJ6WF-DJ	0	Nej	19348
DL1BH	0	Nej	777
DL1BH-DJ	0	Nej	89 262 264 888
DL1HQN-DJ	0	Nej	8 9 80 81 84 88 89 99 262 777
DL1HRC-DJ	0	Nej	8 9 80 81 84 88 89 99 262 777
DL2HXA-1	0	Nej	80 81 84 88 89 262 2629
DL4AWI-DJ	0	Nej	80 81 84 88 89 262 2629
DM0GAP	0	Nej	80 81 88 262 880 882
DM0HR	0	Nej	80 81 84 88 89 262 777 981
DM3AL-DJ	0	Nej	8 9 80 81 84 88 89 99 262 777
DO0FWH	0	Nej	80 81 89 99 262 777 19055 26239
DO0HWI	0	Nej	27 80 81 84 88 89 262 777
DO0KGS	0	Nej	80 81 84 88 89 262 984 2629
DO0LF	0	Nej	262 777 34497
DO0RDG	0	Nej	80 262 777 18311
DO0RDG-DV	0	Nej	77 262 777 18311 19055 26298
DO0RM	0	Nej	70 80 81 84 88 89 262 2629
DO1NGH	0	Nej	88 262 882 986 26284 26390
DO1RHC	0	Nej	84 232 262 264 26298
DO2KTE-DJ	0	Nej	80 81 84 88 89 262 2629
DO4AA	0	Nej	777 4711 6213 37574
DO4BOS-DJ	0	Nej	8 9 77 80 81 84 88 89 99 262 777
Funknetz-nrw	0	Nej	84
MQTT	0	Nej	8 9 80 81 84 88 89 91 92 99 235 262 777 882 888 986 2622 19055 26298 26390
Neumarkt	0	Nej	26390
OE7SBH-DJ	0	Nej	80 81 89 99 232 262 777 2327
SM5GXQ	0	Nej	91 92 235 240 924 927 2405 2407 2405174

SK7RN
Ölands Radioamatörer

New function in Receiver Monitor

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

SK7RFL	**Öland**	**24070**		**Algutsrum**	**55 %**	**145.0000**	**00:48**
R0	Algutsrum				55%	145.0000	
RU0	Algutsrum				2%	432.6000	
SM7YPV					0%	EchoLink in	
SM7BKZ					0%	EchoLink in	
SM7PHS					0%	DMR	

SM5GXQ	Öland	0		G4NAB	100 %	GB Reflector	-
2m	Färjestaden				0%	145.2875	
G4NAB					100%	GB Reflector	
VK4TUX-T					0%	GB Reflector	

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

BrandMeister
DMR Master Server

DMR
DIGITAL MOBILE RADIO

MOTOTRBO™

TGIF Network
DMR

SWEDMR
Swedish Digital Mobile Radio Group

DMR-MARC
Motorola Amateur Radio Club Worldwide Network

DMR

Simplex traffic

Repeater traffic

Brandmeister

DMR+

TGIF

Talk groups

Group calls

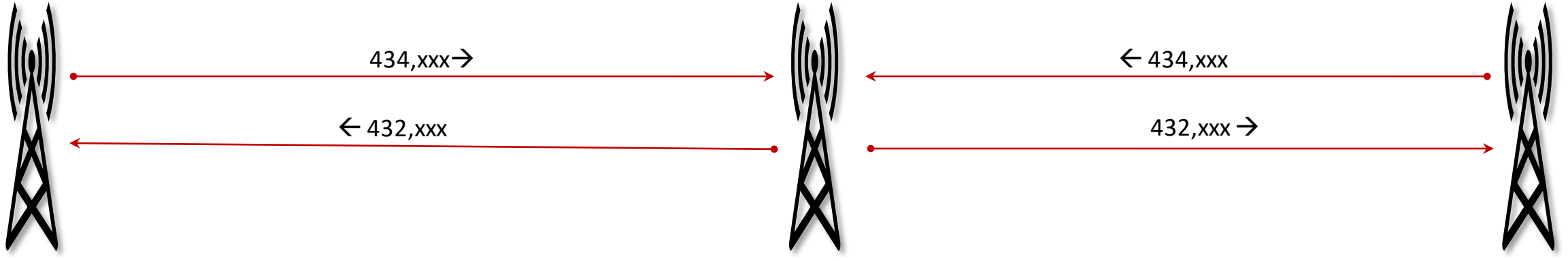
Private calls

DMR-repeater

Mörbylånga
SK7RN-S
145,625

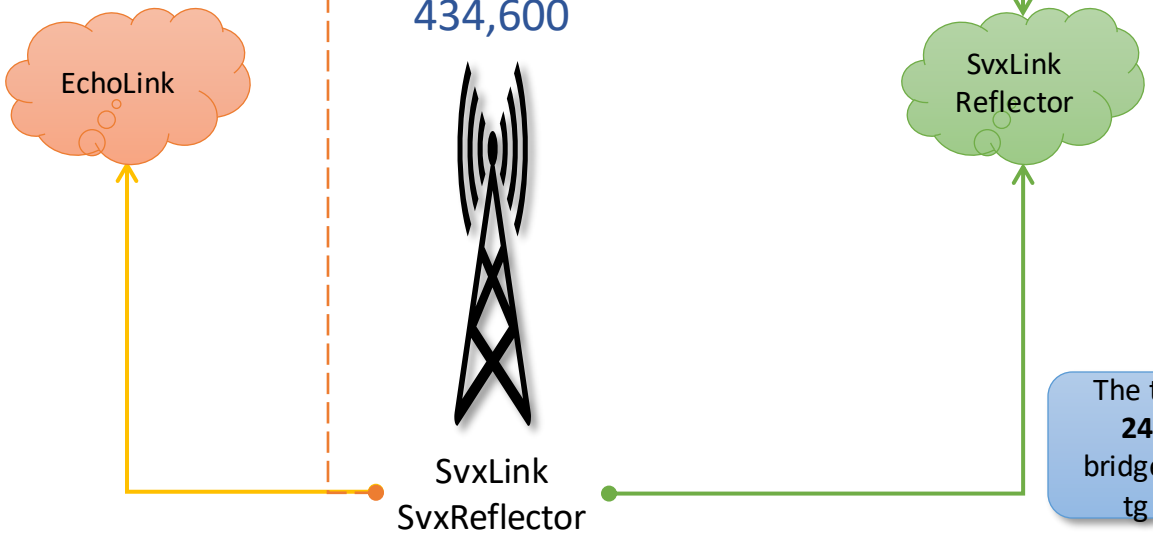
Borgholm
SK7RN-C
145,6625

Böda
SK7RN-N
145,750



Algutsrum
SK7RFL
145,600
434,600

Algutsrum
SK7RFL
MMDVR
434,550



DMR – Brandmeister – DMR+ – TGIF

Granudden.info
Väderstation på Öland
Peter Lindquist *SM5GXQ*

- The speech is digital over radio.
- Requires registration (7-digit ID).
- Talk Groups (group calls)
- Private calls
- Time slots (TS 1|2)
- Colour code (DCC) – *0-15*

Repeater | Hotspot

- Connection to Brandmeister Master.
  - There is another network; DMR+ (Ref | Tg),
  - and TGIF (Tg).
- Static (monitored) Talk groups
- Dynamic Talk Groups (User activated).
- Time-activated Talk groups.

Repeater traffic

- Two time slots =two simultaneous QSOs at the same frequency

Simplex traffic | Simplex Hotspot

- Only one time slot =only one QSO per frequency.

Selection of talk groups

- Incoming call on a static (monitored) Talk group, or use of Digital monitor | Promiscuous mode.
- By selecting a Talk group in the radio and making an outbound call.

Digital Radio – DMR – SK7RFL

Brandmeister – DMR+ – TGIF

Granudden.info
Väderstation på Öland
Peter Lindquist SM5GXQ

Repeatern passar nedanstående talgrupper.

- Detta kallas *Statiska Talgrupper*, i **fet** stil.
- *Dynamiska* Talgrupper (*User activated*), i *kursiv* stil.

TS1 (tidlucka 1)

Tg	Nät	Namn		
9	BM	Lokalt QSO	*Bryggad med Brandmeister 240717*	**) endast SK7RFL*
240717	*BM*	*Lokalt kluster på SK7RFL*	*På andra repeatrar/hotspots, bryggad med 9*	
7	TGIF	Lokalt QSO	*Bryggad med TGIF 240717.*	**) endast SK7RFL*
240717	*TGIF*	*Lokalt kluster på SK7RFL*	*På andra repeatrar/hotspots, bryggad med 7.*	
924	BM	Svenska språket		
927	BM	Nordiska språk		
17	DMR+	Nordiska språk		*Specialfall utan prefix*
27	DMR+	Nordiska språk, Europa		*Specialfall utan prefix*
80240	DMR+	Sverige		
240	TGIF	Sverige		*Specialfall utan prefix*
2407	TGIF	Distrikt SM7		*Specialfall utan prefix*
31665	*TGIF*	*Thank God it's Friday*	*User activated*	*Specialfall utan prefix*
6	BM	*Länk mot SK7RFL Analogt*	*User activated*	**) endast SK7RFL*
240721	*BM*	*Länk mot SK7RFL Analogt*	*På andra repeatrar/hotspots.*	
91	BM	*World Wide*	*User activated*	
1	DMR+	*World Wide*	*User activated*	*Specialfall utan prefix*
113	TGIF	*World Wide, English*	*User activated*	*Specialfall utan prefix*
114	TGIF	*World Wide*	*User activated*	*Specialfall utan prefix*
92	*BM*	*Europe*	*User activated*	
2	*DMR+*	*Europe*	*User activated*	*Specialfall utan prefix*
111	*TGIF*	*Europe*	*User activated*	*Specialfall utan prefix*

*Tg **6** aktiveras med automatik vid bulletin.*

Internationella talgrupper kan förekomma i varierande omfattning, beroende på trafikbelastning.

View the talk group list at SK7RFL.se.

TS2 (tidlucka 2)

Tg	Nät	Namn	D-Star	YSF	Wires-X
240	BM	Sverige			
2407	BM	Distrikt SM7	DCS010W	DCS010W	
24073	BM	SM7, Kalmar län	*Tredje länet i SM7, inofficiell*		
240x	BM	*Distrikt SMx*	*User activated*		
241x	BM	*SM Tactical x*	*User activated*		
240240	BM	SM X-link	DCS010B	XLX010B	
24024	BM	Sweden Link	DCS010E	YSF43075	28635
240216	BM	Sweden Hub	DCS010J	YSF80858	27781
2410	BM	SSA-bulletin	DCS010D	XLX010D	
8	DMR+	Reflektor 4650	*Välj reflektor med individanrop till: 8ref.*		

Normalt måste man använda prefix för att sända på talgrupper för DMR+ samt TGIF.

Undantaget är: (i förekommande fall markerat med grön färg ovan)
- DMR+ Tg 1–5 *samt* 10–17.
- TGIF Tg 101–119, 2400–2407, 240 samt 31665.

*För **DMR+** skall i sådana fall talgruppsnumret alltid börja med prefixet 8, samt bestå av totalt 5 siffror.*

*För **TGIF** skall i sådana fall talgruppsnumret alltid börja med prefixet 4, samt bestå av totalt 7 siffror.*

Utfyllnad med erforderligt antal nollor skall då ske mellan prefixet och det verkliga talgruppsnumret.

Observera också skillnaden mellan:
- 240 TS2 =Brandmeister 240
- 240 TS1 =TGIF 240
- 80240 TS1 =DMR+ 240

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Bridged Traffic

DMR D-Star YSF SvxLink

DMR
DIGITAL MOBILE RADIO

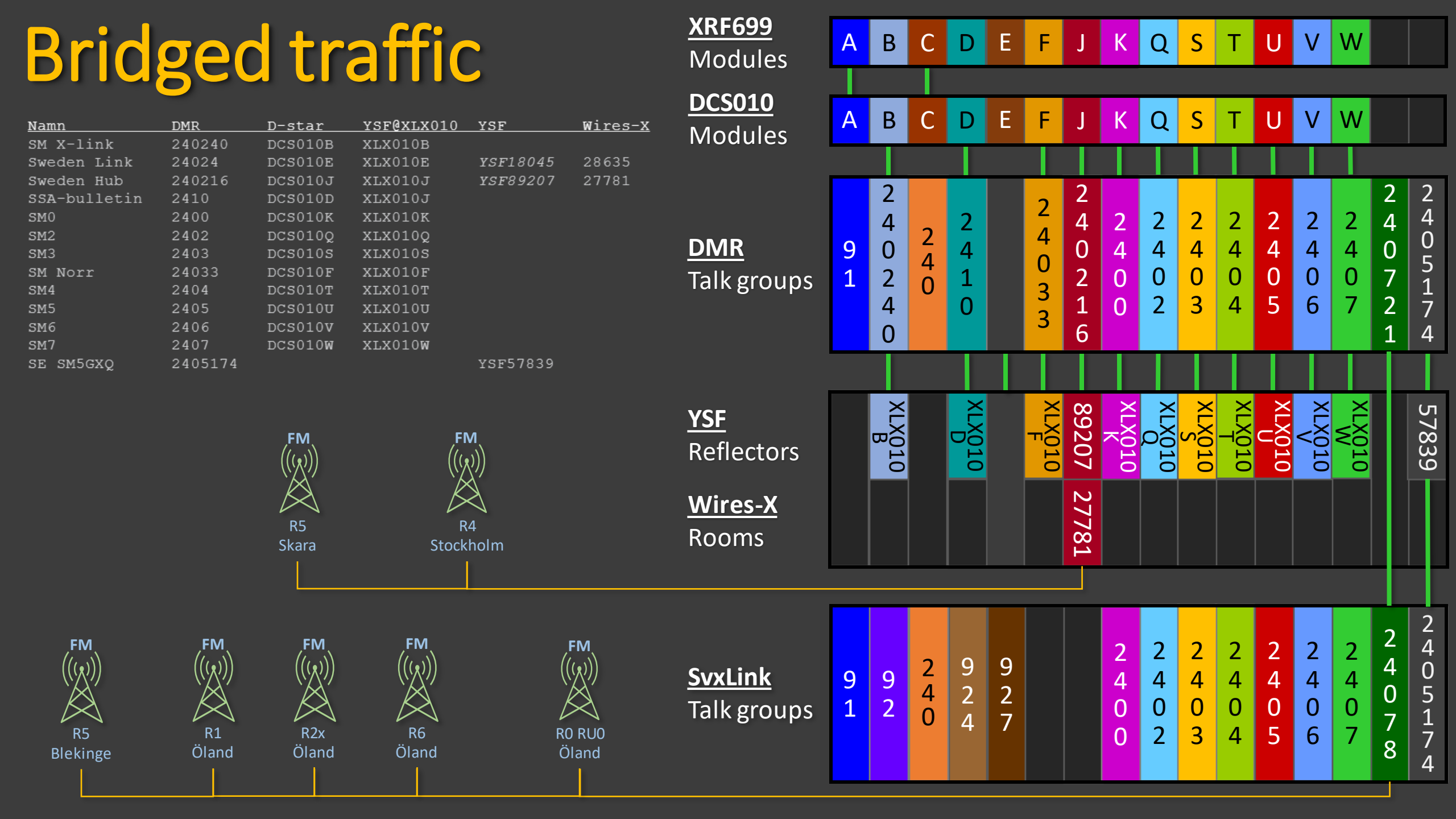
D-STAR
DIGITAL

YAESU
System Fusion

SvxLink
Advanced repeater controller and EchoLink software for Linux including a GUI, Qtel - The Qt EchoLink client

Bridged traffic

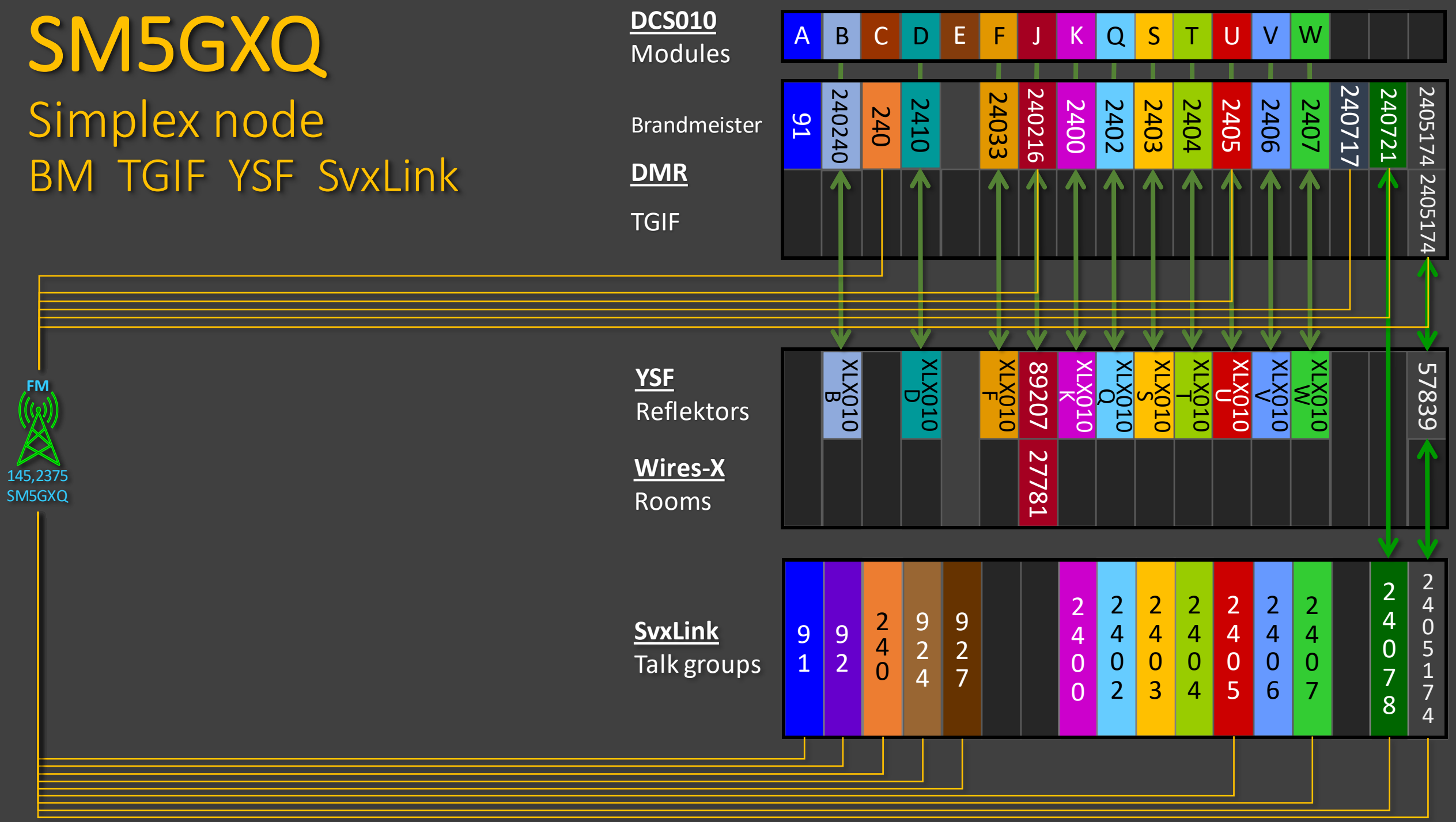
Namn	DMR	D-star	YSF@XLX010	YSF	Wires-X
SM X-link	240240	DCS010B	XLX010B		
Sweden Link	24024	DCS010E	XLX010E	*YSF18045*	28635
Sweden Hub	240216	DCS010J	XLX010J	*YSF89207*	27781
SSA-bulletin	2410	DCS010D	XLX010J		
SM0	2400	DCS010K	XLX010K		
SM2	2402	DCS010Q	XLX010Q		
SM3	2403	DCS010S	XLX010S		
SM Norr	24033	DCS010F	XLX010F		
SM4	2404	DCS010T	XLX010T		
SM5	2405	DCS010U	XLX010U		
SM6	2406	DCS010V	XLX010V		
SM7	2407	DCS010W	XLX010W		
SE SM5GXQ	2405174			YSF57839	



SM5GXQ

Simplex node

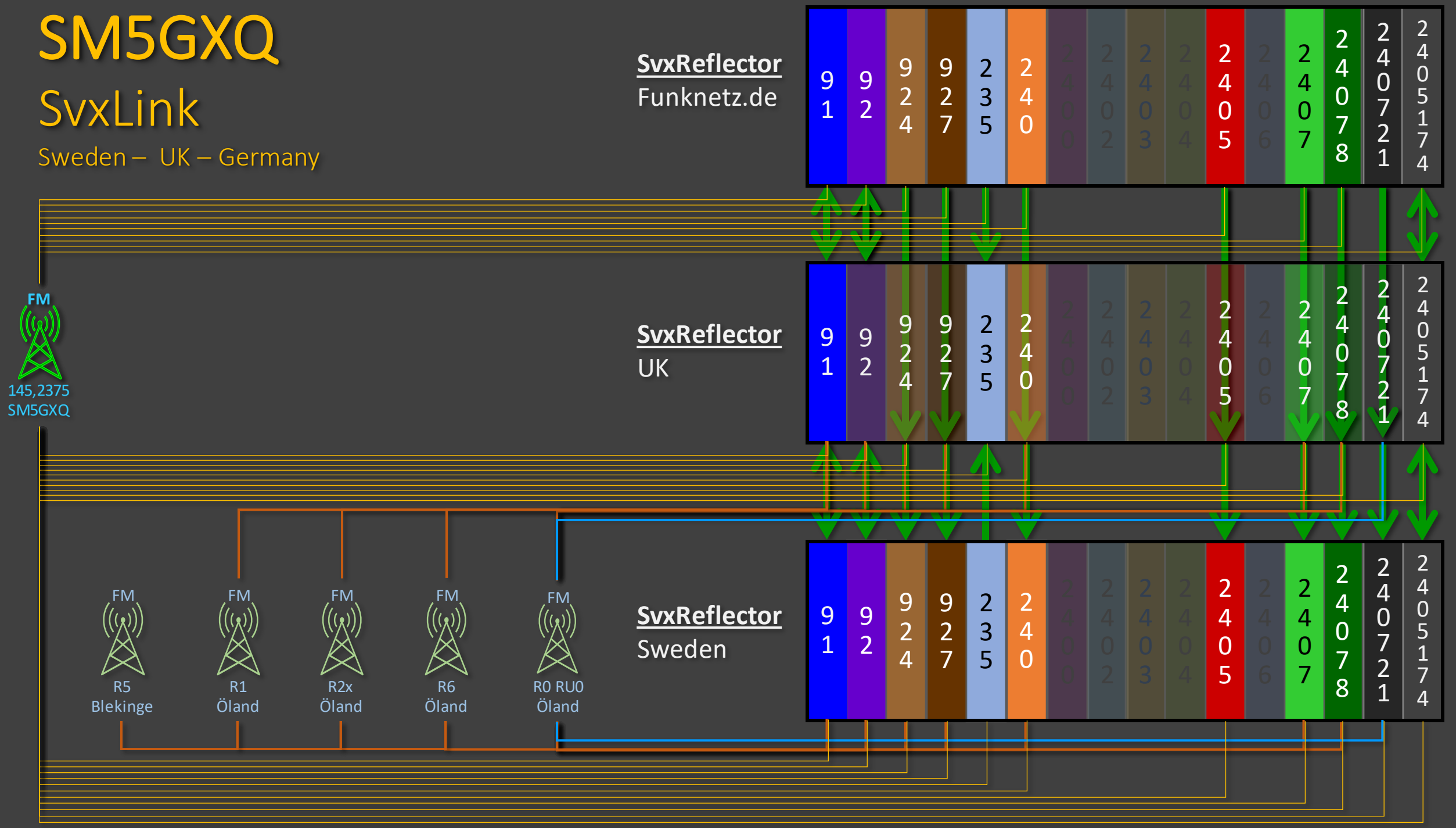
BM TGIF YSF SvxLink



SM5GXQ

SvxLink

Sweden – UK – Germany



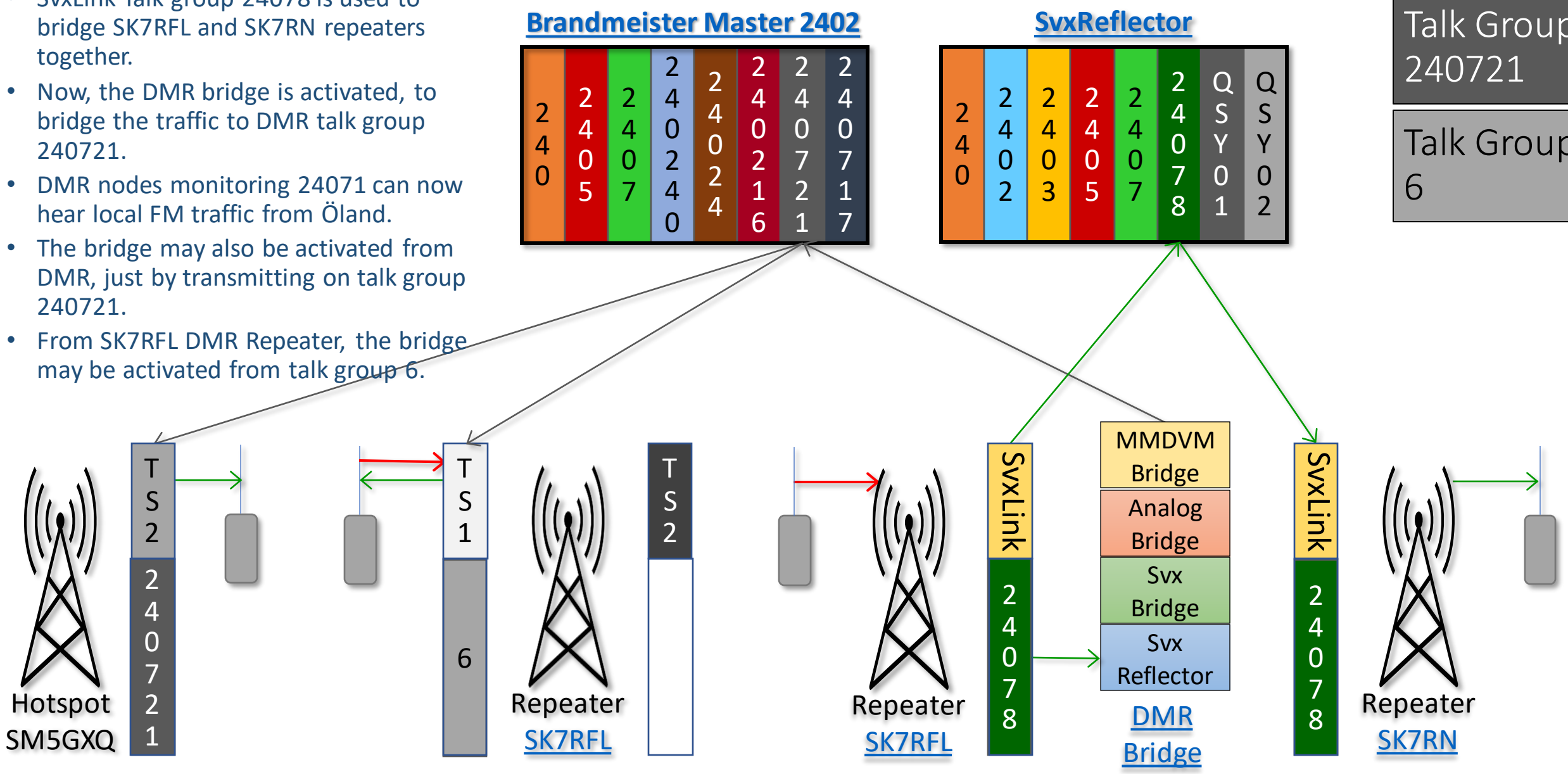
DMR Bridge @SK7RFL

- SvxLink Talk group 24078 is used to bridge SK7RFL and SK7RN repeaters together.
- Now, the DMR bridge is activated, to bridge the traffic to DMR talk group 240721.
- DMR nodes monitoring 24071 can now hear local FM traffic from Öland.
- The bridge may also be activated from DMR, just by transmitting on talk group 240721.
- From SK7RFL DMR Repeater, the bridge may be activated from talk group 6.

Talk Group 24078

Talk Group 240721

Talk Group 6



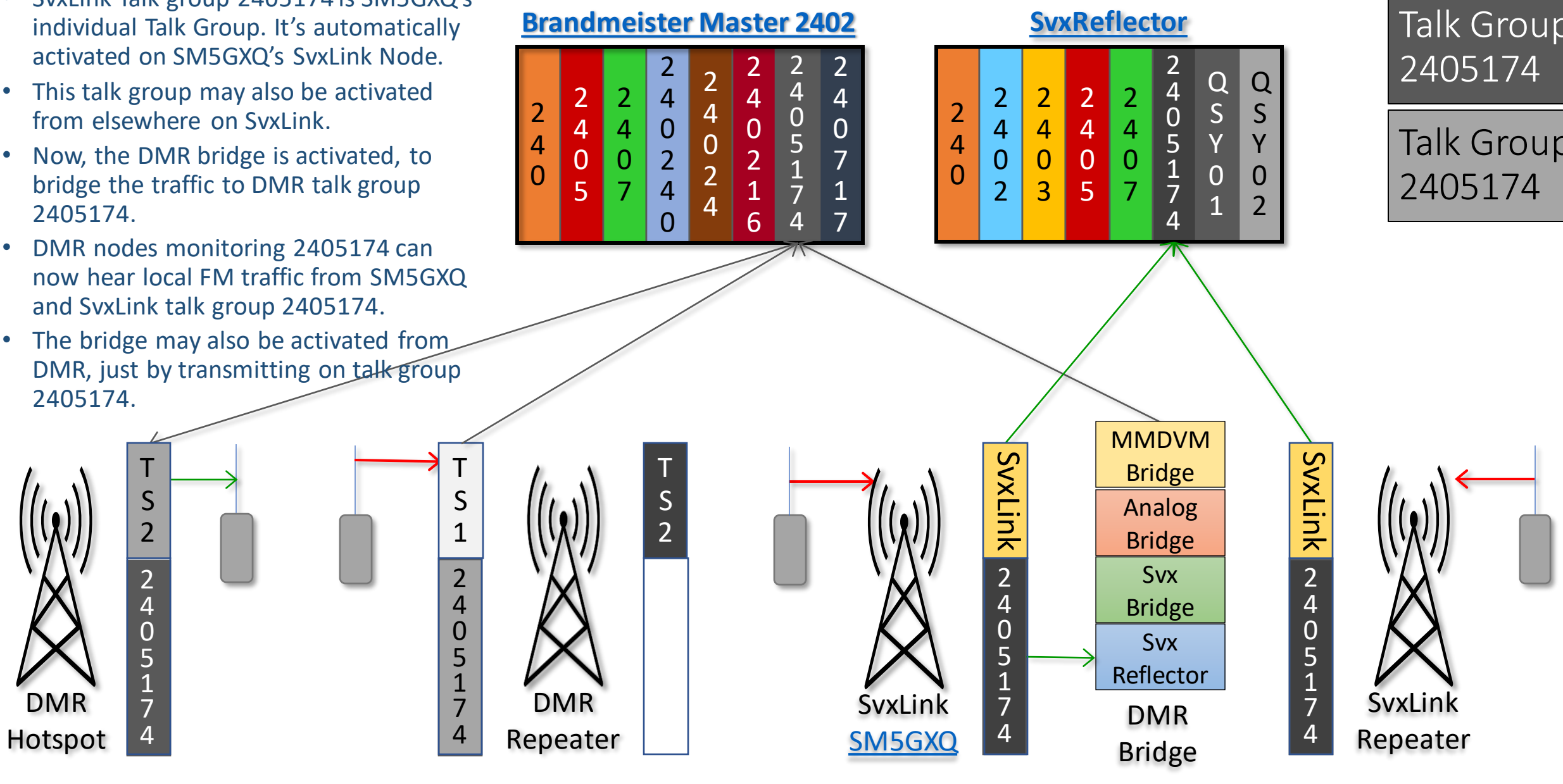
DMR Bridge @SM5GXQ

- SvxLink Talk group 2405174 is SM5GXQ's individual Talk Group. It's automatically activated on SM5GXQ's SvxLink Node.
- This talk group may also be activated from elsewhere on SvxLink.
- Now, the DMR bridge is activated, to bridge the traffic to DMR talk group 2405174.
- DMR nodes monitoring 2405174 can now hear local FM traffic from SM5GXQ and SvxLink talk group 2405174.
- The bridge may also be activated from DMR, just by transmitting on talk group 2405174.

Talk Group 2405174

Talk Group 2405174

Talk Group 2405174



Traffic Cases

Link flow

SvxLink

Swedish National SvxLink Network

International SvxLink Network

EchoLink

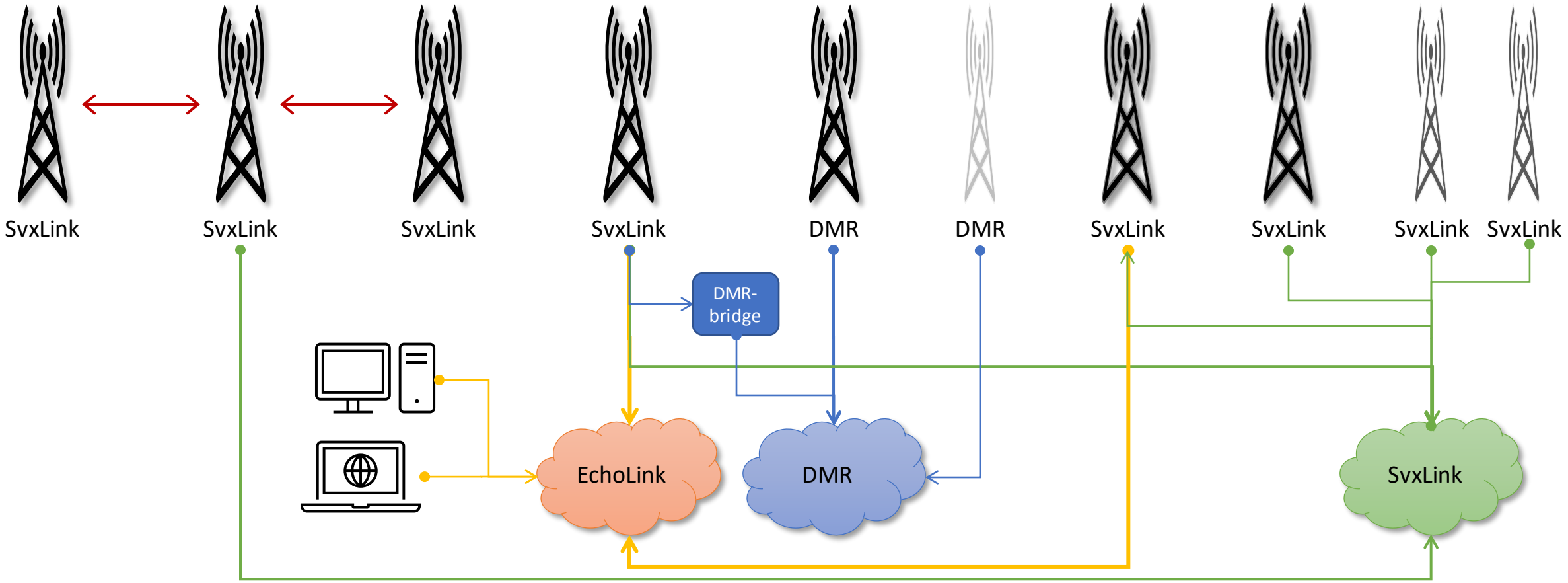
DMR

SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Topology

Böda	Borgholm	Mörbylånga	Algutsrum	Algutsrum		Norrköping	Spjutsbygd	Rpt "n"	Rpt "n"
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL	SK7RFL		SK5BN	SK7JL	SK3xxx	SK3xxx
145,750	145,6625	145,625	145,600 434,600	434,550		434,600	145,725		



SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Start from SK7RFL

Böda	Borgholm	Mörbylånga	Algutsrum		Norrköping	Spjutsbygd
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL		SK5BN	SK7JL
145,750	145,6625	145,625	145,600		434,600	145,725
			434,600			

At first, only SK7RFL is activated. The first transmission is always local.

After the first transmission, SK7RN's three repeaters are activated, as well as the DMR Bridge to talk group 240721.

SK7RFL's DMR Repeater is not activated.

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Start från SK7RN

NORRKÖPINGS RADIOKLUBB SK5BN

Böda	Borgholm	Mörbylånga	Algutsrum		Norrköping	Spjutsbygd
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL		SK5BN	SK7JL
145,750	145,6625	145,625	145,600 434,600		434,600	145,725

At first only the Mörbylånga repeater is started.

Borgholm and Böda are activated <u>after</u> the first transmission.

From the subsequent transmission, SK7RFL is activated, as well as the DMR Bridge to talk group 240721. SK7RFL's DMR repeater is not activated.

SK7RN
Ölands Radioamatörer

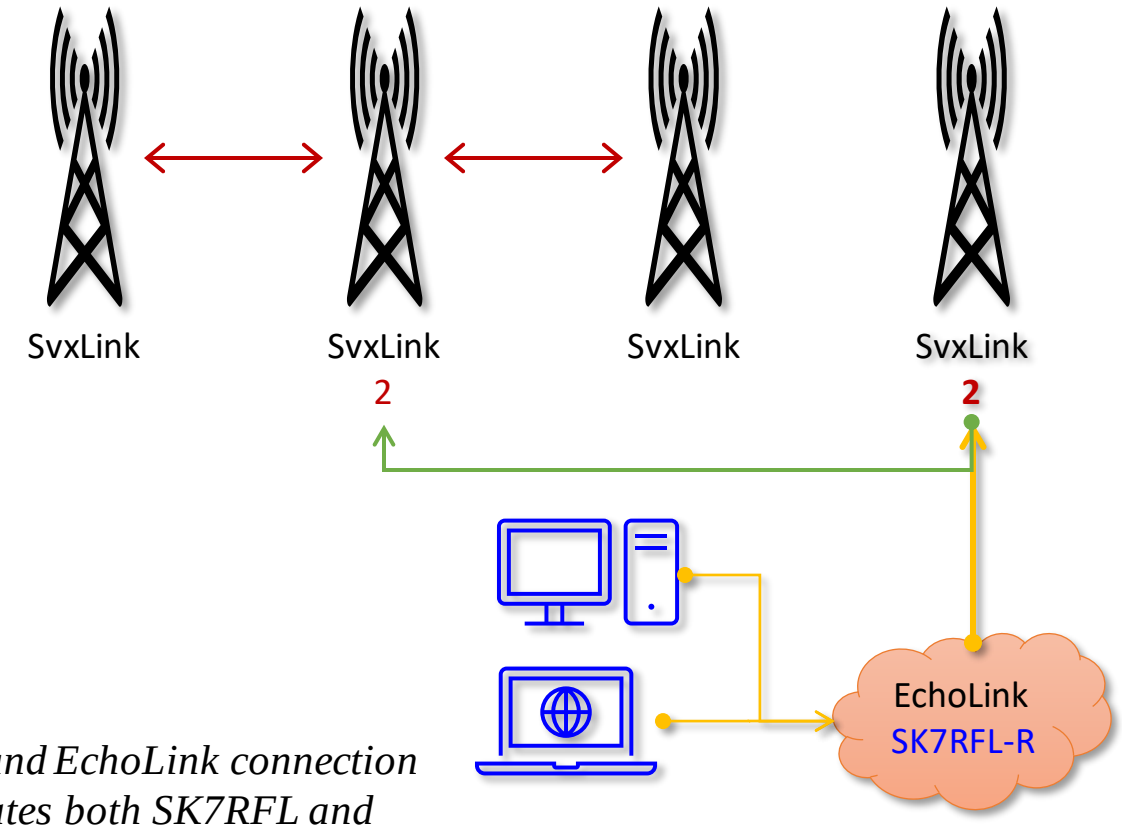
Inbound EchoLink to SK7RFL

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Böda	Borgholm	Mörbylånga	Algutsrum
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL
145,750	145,6625	145,625	145,600
			434,600



Inbound EchoLink connection activates both SK7RFL and SK7RN's three repeaters.

SK7RN
Ölands
Radioamatörer

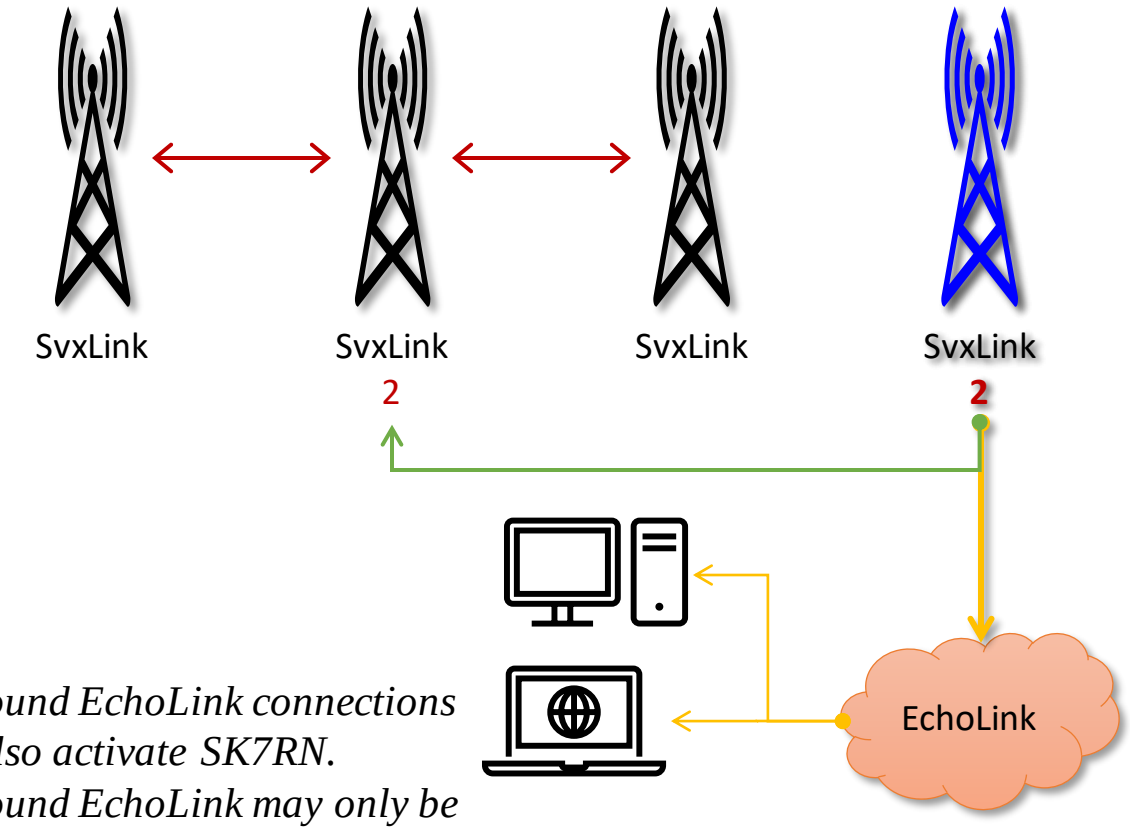
Outbound EchoLink from SK7RFL

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Böda	Borgholm	Mörbylånga	Algutsrum
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL
145,750	145,6625	145,625	145,600
			434,600



Outbound EchoLink connections will also activate SK7RN.
Outbound EchoLink may only be initiated from SK7RFL.

SK7RN
Ölands
Radioamatörer

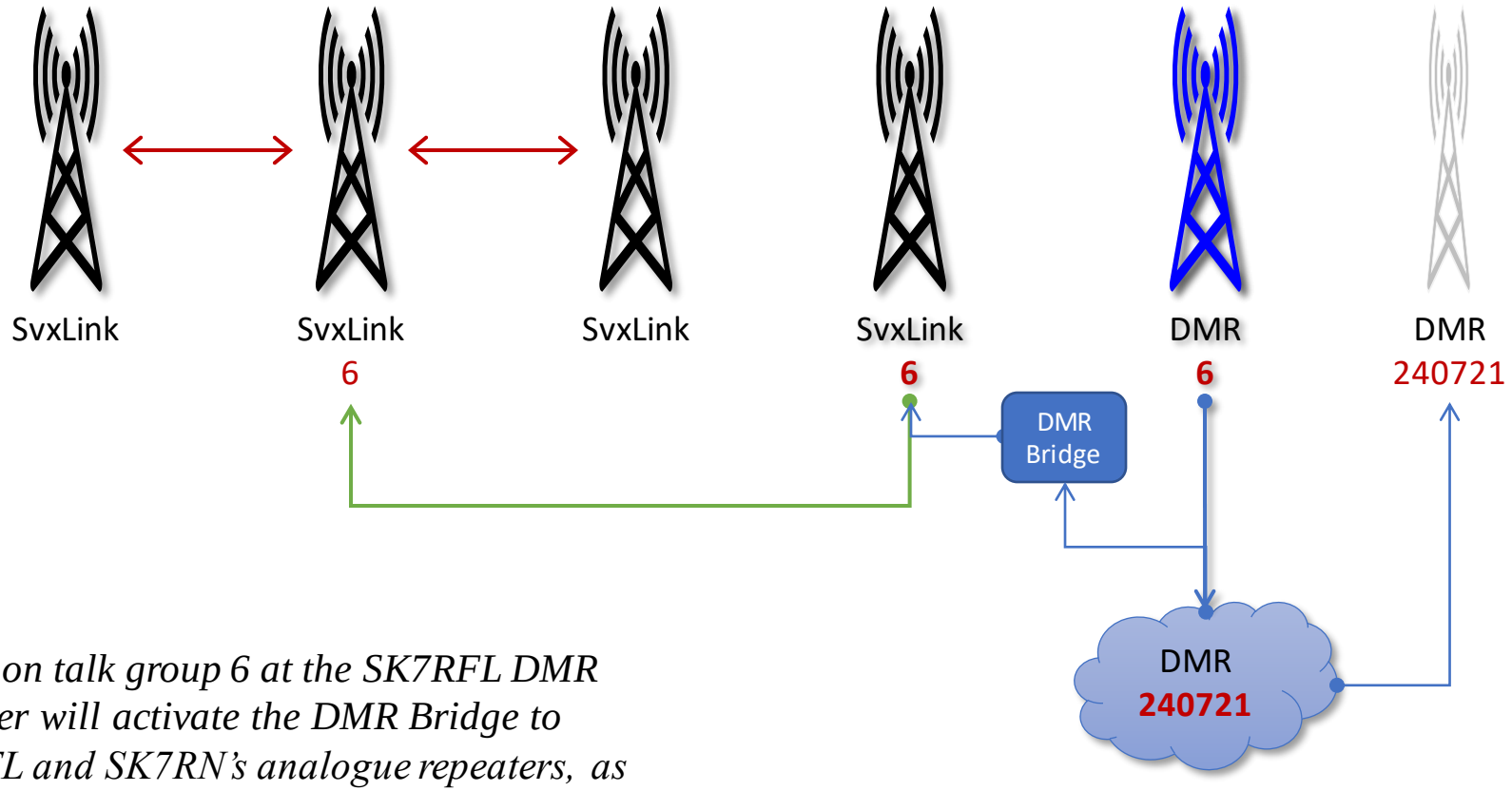
Start from SK7RFL DMR Talk group 6

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Böda	Borgholm	Mörbylånga	Algutsrum	Algutsrum
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL	SK7RFL
145,750	145,6625	145,625	145,600	434,550
			434,600	



Traffic on talk group 6 at the SK7RFL DMR Repeater will activate the DMR Bridge to SK7RFL and SK7RN's analogue repeaters, as well as DMR talk group 240721.

SK7RN
Ölands
Radioamatörer

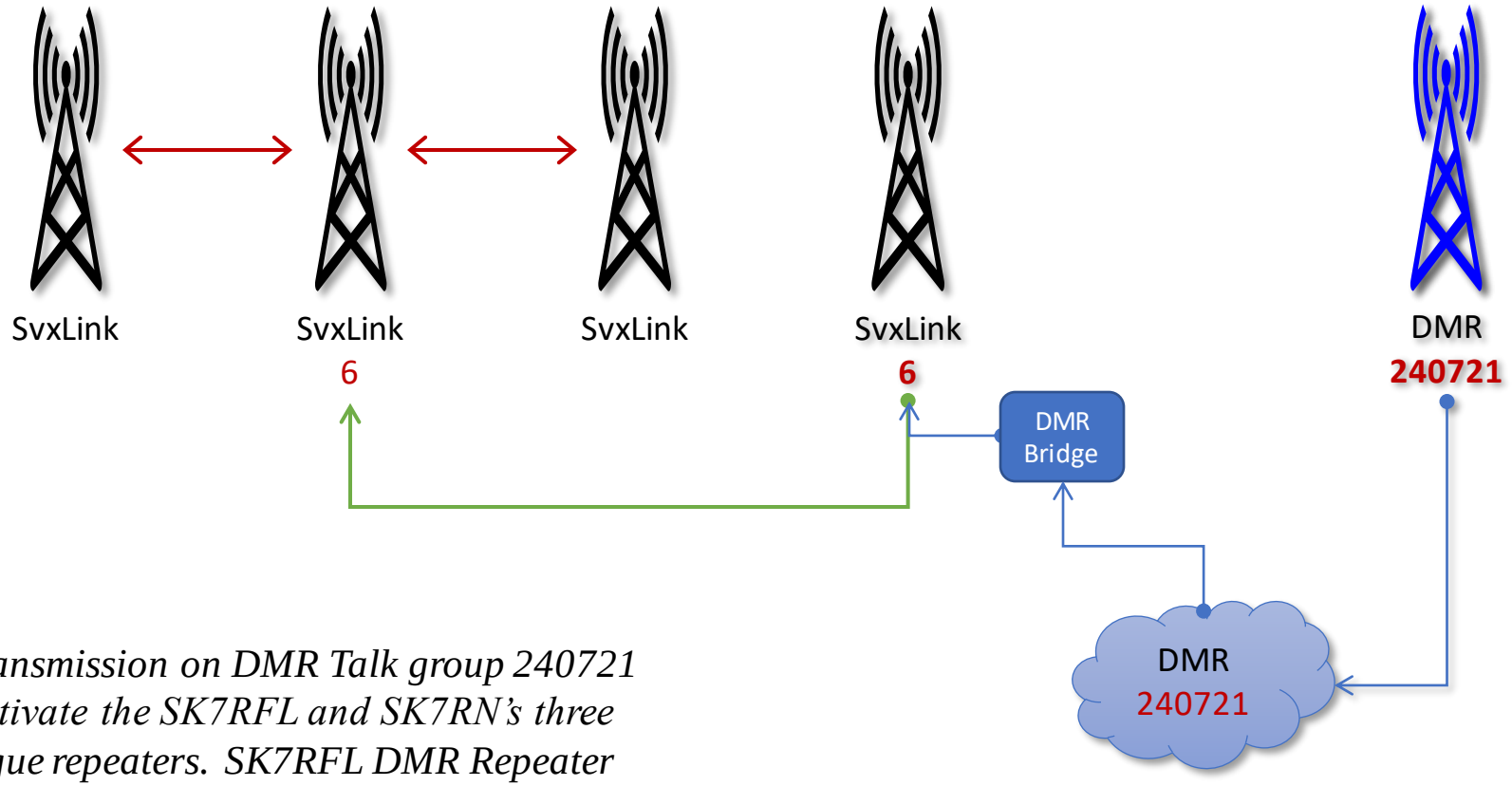
Start from DMR Talk group 240721

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Böda	Borgholm	Mörbylånga	Algutsrum
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL
145,750	145,6625	145,625	145,600
			434,600



Any transmission on DMR Talk group 240721 will activate the SK7RFL and SK7RN's three analogue repeaters. SK7RFL DMR Repeater is however not activated.

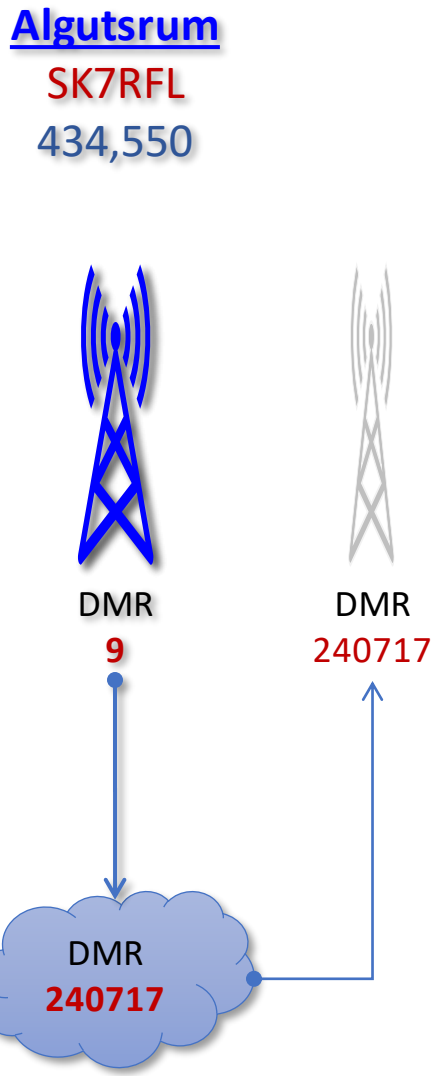
SK7RN
Ölands
Radioamatörer

Start from SK7RFL DMR Talk group 9

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717



Any traffic from talk group 9 (TS1) at SK7RFL is translated and linked onto talk group 240717 on the Brandmeister DMR Network.

SK7RN
Ölands Radioamatörer

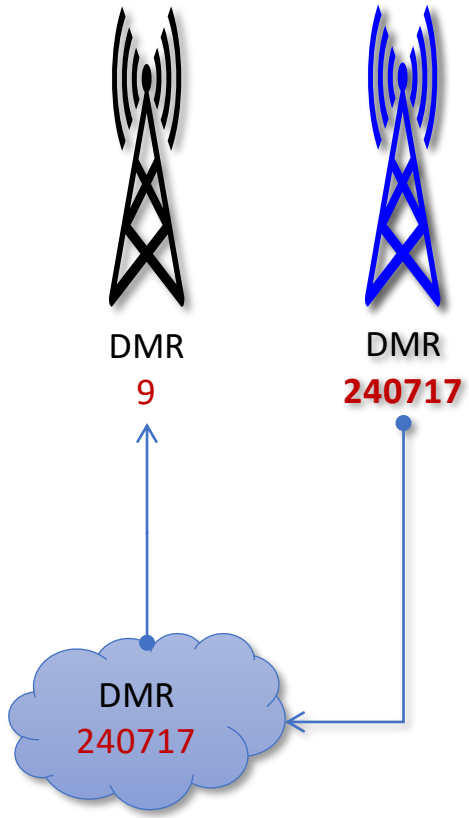
Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Start from DMR Talk group 240717

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Algutsrum
SK7RFL
434,550



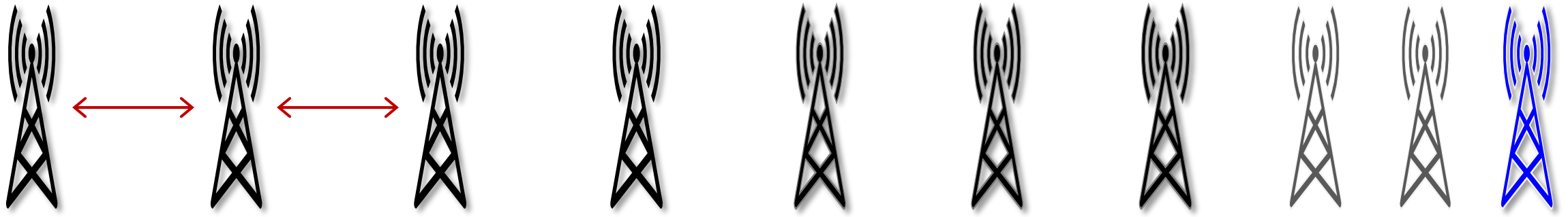
Any traffic on DMR Talk group 240721 will be translated into tg 9, and transmitted locally at SK7RFL DMR Repeater on TS1.

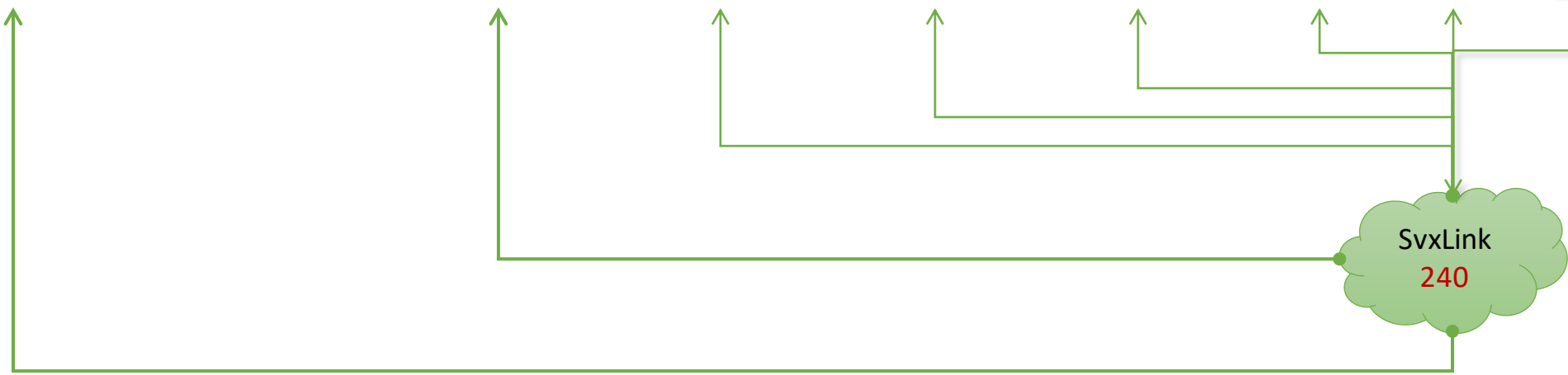
SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Start from SvxLink talk group 240

Böda	Borgholm	Mörbylånga	Algutsrum	Linköping	Spjutsbygd	Norrköping	Länk x	Rpt 1	Rpt "n"
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL	SK5AS	SK7JL	SK5BN	SA0xxx	SK2xxx	SK3xxx
145,750	145,6625	145,625	145,600 434,600	145,7875	145,725	434,600			





Talk group 240 will activate all affiliated repeaters in Sweden.

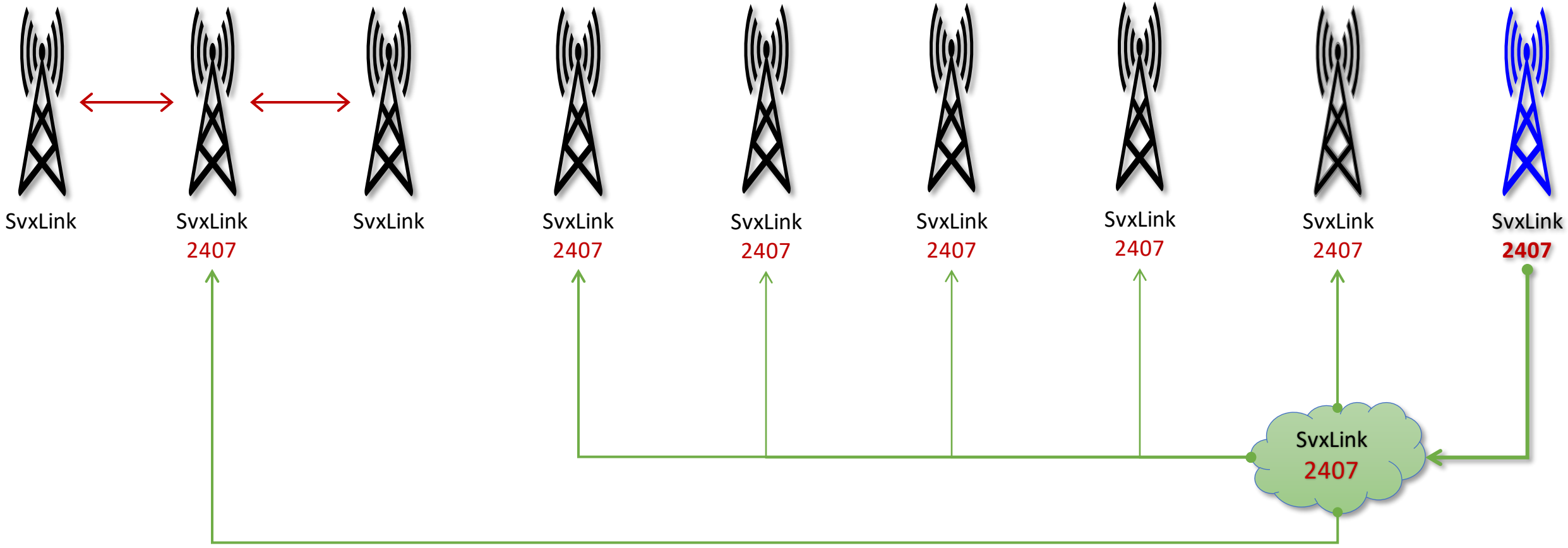
SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Start from SvxLink 2407

NORRKÖPINGS RADIOKLUBB SK5BN

Böda	Borgholm	Mörbylånga	Algutsrum	Kristianstad	Växjö	Helsingborg	Spjutsbygd
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL	SK7BQ	SK7HW	SK7REE	SK7JL
145,750	145,6625	145,625	145,600 434,600	145,600	145,675	145,650	145,725



SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Link Flow

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

- **Start from SK7RN** — *As long as the user does not issue any DTMF commands during his first transmission*
  - Start from e.g. Böda — Only Böda is activated.
  - Transmission — Now Borgholm and Mörbylånga are started as well.
  - Transmission — Activates SK7RFL (FM) as well as the DMR Bridge to talk group 240721.

- **Start from SK7RFL (FM)** *As long as the user does not issue any DTMF commands during his first transmission*
  - Start from SK7RFL — SK7RFL 2m + 70cm is activated.
  - Transmission — ()
  - Transmission — Now SK7RN (Böda-Borgholm-Mörbylånga) is activated, as well as the DMR Bridge to talk group 240721.

- **Start from SK7RFL DMR** Talk group 6, TS1
  - Transmission — SK7RFL (2m/70cm) as well as SK7RN (Böda-Borgholm-Mörbylånga) are immediately activated.

- **Start from BM (DMR)** Talk group 240721
  - Transmission — SK7RFL (2m/70cm) as well as SK7RN (Böda-Borgholm-Mörbylånga) are immediately activated.

- **Start from SvxLink** Talk group 240, 2407, 24073, 24078
  - Transmission — SK7RFL (2m/70cm) as well as SK7RN (Böda-Borgholm-Mörbylånga) are immediately activated.

SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

SSA Bulletin

Sundays at 09:00

Swedish SvxLink Network

Talk Group 24070

”The Öland Link”

EchoLink

SK7RFL-R

DMR

Talk Group 240721

SK7RN
Ölands Radioamatörer

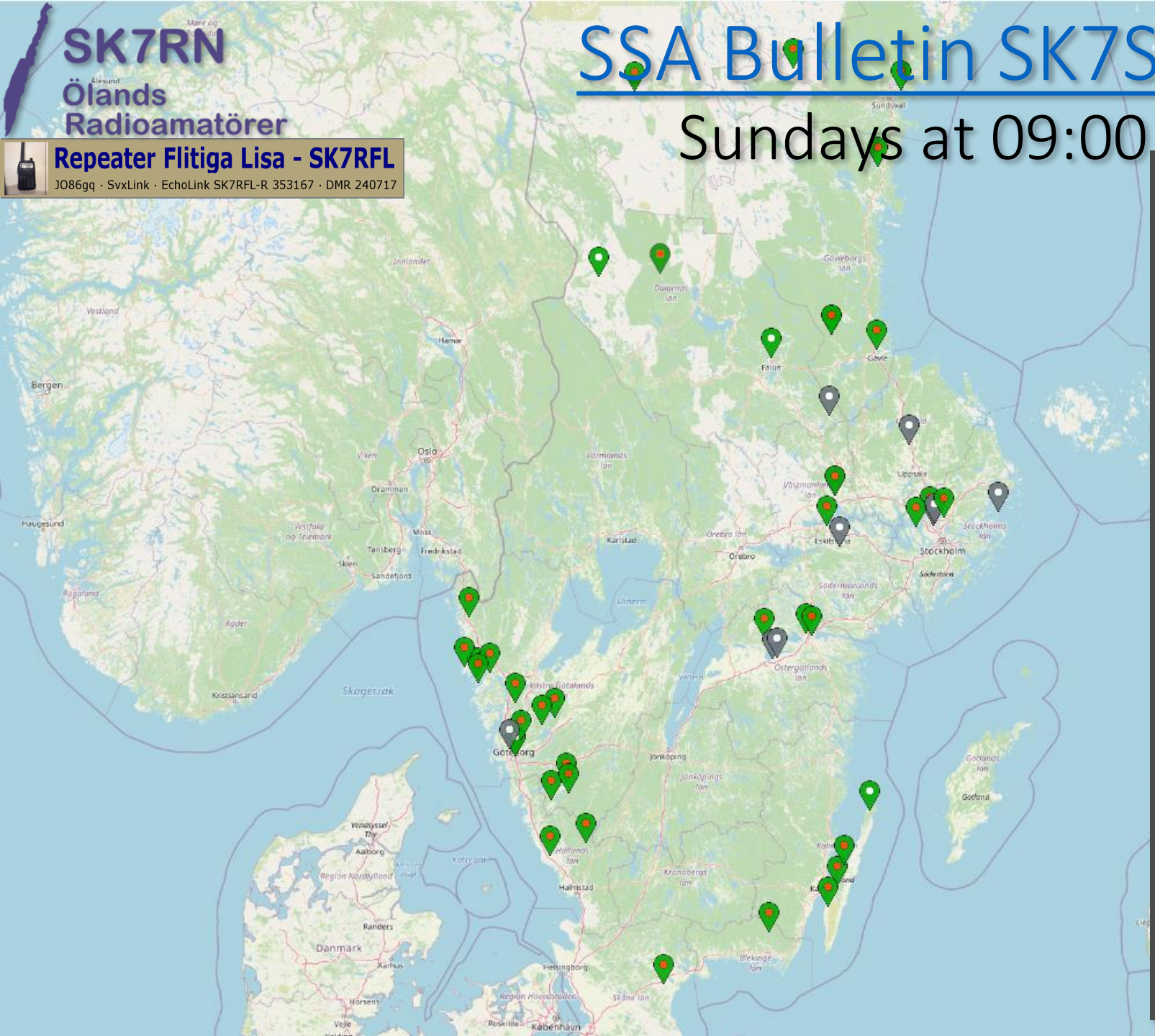
Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

SSA Bulletin SK7SSA

Sundays at 09:00

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ



Bulletinen sänds fn ut över följande repeatrar och nät.

SK7RFL	145,600	Analog FM	Algutsrum
SK7RFL	434,600	Analog FM	Algutsrum
SK7RFL	434,550	DMR tg 6	Algutsrum
SK7RN	145,750	Analog FM	Böda
SK7RN	145,6625	Analog FM	Borgholm
SK7RN	145,625	Analog FM	Mörbylånga
SM5GXQ	245,2375	Analog FM	Norrköping
SK7JL	145,725	Analog FM	Spjutsbygd
SM7FLD	145,2375	Analog FM	Everöd
SK6JX	145,625	Analog FM	Falkenberg
SM6SXJ	434,8875	Analog FM	Galtabo
SK6IF	145,600	Analog FM	Bokenäs
SK6IF	434,800	Analog FM	Lysekil
SK6IF-2K	145,675	Analog FM	Kungshamn
SK6IF-2T	145,575	Analog FM	Tanumshede
SM6LNJ	434,950	Analog FM	Skaftö
SK6QA	145,7125	Analog FM	Stenungsund
SM6OEQ	434,500	Analog FM	Stenungsund
SK6RFQ-2	145,650	Analog FM	Göteborg
SK6RFQ-70	434,650	Analog FM	Göteborg
SM6ZDO	145,2375	Analog FM	Alingsås
SK5BN	434,600	Analog FM	Norrköping
SK5AS	145,7875	Analog FM	Linköping
SK5LW-70	434,850	Analog FM	Eskilstuna
SK5RHQ-70	434,775	Analog FM	Västerås
SA0CAM	144,600	Analog FM	Rotebro
SK3GW	434,875	Analog FM	Gävle
SK3GK-2	145,700	Analog FM	Gävle
SK3GK-70	434,825	Analog FM	Gävle
SK4KO	145,600	Analog FM	Mora
SM4KUH	145,2375	Analog FM	Falun
SA4THA	145,3375	Analog FM	Älvdalen
SK3RFG	145,725	Analog FM	Sundsvall
SK3RIN	145,700	Analog FM	Ånge
SK3BG	433,475	Analog FM	Sundsvall
SA3AUX	145,400	Analog FM	Hede, Härjedalen
SK3RQE	145,000	Analog FM	Hudiksvall
SM6UNC	145,3375	Analog FM	Torestorp, Mark
SM6TZL	434,225	Analog FM	Örby, Mark
SM6TZL	145,2375	Analog FM	Örby, Mark
SA6GDS	145,2875	Analog FM	Istorp
Talgrupp	24070	SvxLink	DTMF 9424070#
Talgrupp	240721	DMR	Brandmeister
SK7RFL-R	353167	EchoLink	Max 10 anslutningar

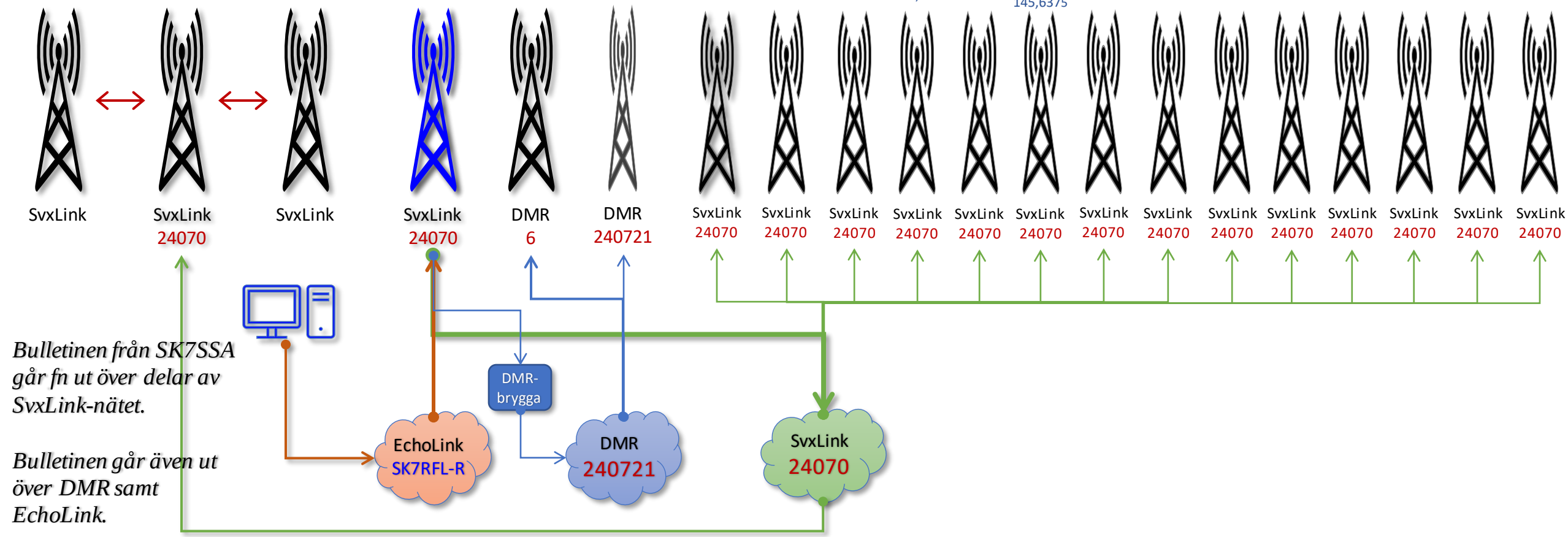
SSA-bulletin SK7SSA

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Böda	Borgholm	Mörbylånga	Algutsrum	Algutsrum
SK7RN-N	SK7RN-C	SK7RN-S	SK7RFL	SK7RFL
145,750	145,662s	145,625	145,600	434,550
			434,600	

Blekinge	Östergötland	Mark	Dalarna	Sundsvall	Lysekil	Halland	Stockholm	Mälaren	Gävle	Stenungsund	Alingsås	Göteborg	Skåne
SK7JL	SK5AS	SM6UNC	SA4THA	SK3RFG	SK6IF	SK6JX	SK0RMT	SK5LW-70	SK3GW	SK6QA	SK6RIC-70	SK6RFQ-2	SM7FLD
145,725	145,787s	145,337s	145,337s	145,725	145,600	145,625	433,525	434,850	434,875	145,712s	434,625	145,650	145,2375
	SK5BN	SM6TZL	SK4RGL	SK3RIN	434,800	SM6SXJ	SK0CT	SK5RHQ-70	SK3GK	SM6OEQ	SM6ZDO	SK6RFQ-70	SK7BQ
	434,600	434,225	145,625	145,700	145,675	434,887s	434,6625	434,775	145,700	434,500	145,237s	434,650	145,7375
	SM5GXQ	145,237s	SK4KO	SK3RQE	145,575			SM0SVX	434,825				
	145,237s	SA6GDS	145,600	145,600	SM6LNJ			433,475					
		145,287s	SK4RGO		434,950								
			434,750		SL6ZAQ								
					145,6375								



Bulletinen från SK7SSA går fn ut över delar av SvxLink-nätet.

Bulletinen går även ut över DMR samt EchoLink.

SK7RN
Ölands Radioamatörer
Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

SSA Bulletin SK7SSA

Sundays at 09:00

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Schedule (*deviations may occur*).

08:30 The Bulletin Mode is automatically activated on SK7RFL and SK7RN.
08:45 The Repeater Network is now switched over to SvxLink talk group 240721.
08:45 The operator will announce the bulletin transmission on all frequencies.
08:46 The operator will start taking a check-in list.
09:00 Bulletin transmission begins.
The operator will ask for any repetition requests.
The operator will listen for any local QTC's.
Stations on the list will be called up.
Further check-ins will be requested.
Conclusion
09:30+ The bulletin mode will be automatically deactivated.

- *All times, except those in bold, are not fixed.*

SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

NORRKÖPINGS RADIOKLUBB
SK5BN

What is needed?

Hardware

Software

Repeater

Users

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

For Users

NORRKÖPINGS RADIOKLUBB SK5BN

Just an ordinary 2m or 70cm FM transceiver!

Additions:

+ *CTCSS*
  - *if the repeater requires CTCSS for squelch.*
  - *if the repeater requires CTCSS for opening.*
  - *for manual selection of talk groups.*

+ *DTMF*
  - *for manual selection of talk groups.*
  - *EchoLink*
  - *for other commands.*

SvxLink

Each and everyone uses the system according to their own interest and ability.

SM5GXQ Peter Lindquist

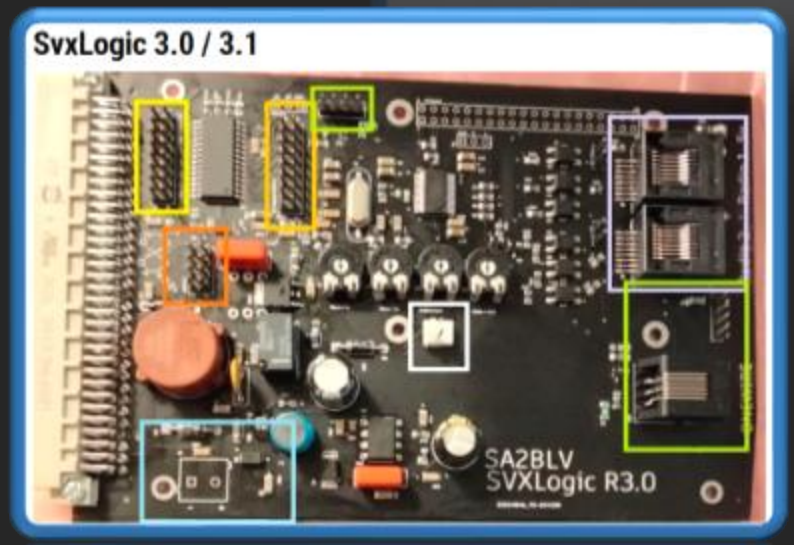
Repeaters

SK7RN
Ölands Radioamatörer

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

NORRKÖPINGS RADIOKLUBB SK5BN

- All existing repeaters can be converted to SvxLink.
  - The current repeater logic will be replaced by SvxLink on site.
- Computer
  - Raspberry Pi 3 or 4; Memory card; 5V PSU.
- Software
  - Raspberry Pi OS (Linux): https://www.raspberrypi.com/software/
  - Compile SvxLink from source: https://github.com/sm0svx/svxlink
- Interface
  - External audio device.
  - PTT control.
  - Squelch.
  - Interface by SA2BLV: https://radioinorr.se/?page_id=377
- Connection to Tx and Rx
  - Un-squelched ”discriminator” output.
  - Direct ”modulator” input.
  - Deemphasis | Preemphasis.
- Calibration
  - Audio levels (devcal).
  - Signal levels (siglevdetcal).
- Configuration
  - svxlink.conf
  - node_info.json
- CTCSS
  - Repeater start
  - Talk group activatiaon
  - Squelch
- ReflectorLogic
  - Monitored talk groups
  - Default talk group
- Connection to the Internet
- Connection to the Swedish Reflector
  - Registration: https://reflector-sm.svxlink.org/genpw?callsign=SM0XYZ
  - E-mail time-stamp to: reflector-sm-join@svxlink.org



SA2BLV’s interface for 2 Rx/Tx

12V->5V regulator, Audio device

Fits directly into a MTR2000 or F800 with an adapter.

Cables for Yaesu DR1/DR2 as well as Motorola GM3xx.

SK7RN
Ölands Radioamatörer

FAQ

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

Repeater Flitiga Lisa - SK7RFL
JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

- Can I start and use the repeater, just as before?
  - **Yes, absolutely!**
  - The traffic on any of our repeaters are automatically bridged between SK7RFL and SK7RN.
  - The link is activated after the first transmission.
- Do I need to know how SvxLink works?
  - No, in fact not.
  - You may wish to make use of only the functions that you are interested in.
- There seems to be an awful lot of talk groups and commands. Do I really need to know and understand this?
  - No. In fact, you don't need to understand any functions at all.
  - Start by learning to use the most common talk groups, such as 240.
  - Try to learn the commands that you are interested in.
- Will there now be a lot more traffic on the repeaters?
  - No, probably not. Any increase in traffic may also be wanted.
- Do I need to be able to transmit DTMF and/or CTSS to use the repeaters?
  - No, you can still activate the repeaters by using 1750 Hz tone burst.
  - The repeaters may also be activated with CTCSS 79,7 Hz.
  - You may use DTMF to activate certain functions.
- How can I reply to an incoming call from a talk group?
  - Just press your PTT and reply, as usual. Remember to do this while the repeater is still active.
- How do I know if any talk group is activated.
  - The repeater will announce this verbally.
  - Give the DTMF command **9***.
- How do I know, if the repeater is locked to a bulletin talk group.
  - This will be verbally announced every time the repeater starts.
- How can I find out if any station is connected via EchoLink (SK7RFL only)?
  - Give the DTMF command **2***.

Sources for further information

Documents

Web pages

FAQ

Repeater Flitiga Lisa — SK7RFL

JO86GQ — SvxLink — Echolink SK7RFL-R 353167 — DMR 240721

Välkommen till Repeater SK7RFL - QRV sedan 1972

Vi behöver ditt bidrag för att kunna fortsätta driva och utveckla SK7RFL (klicka!).

Tillsammans med SK7RNs tre repeatrar i Böda - Borgholm - Mörbylånga, täcker vi hela Öland samt stora delar av Östra Småland. Repeaternätet kan även nås från delar av Blekinge och Gotland.

QTH Jordtorpsåsen nära Algutsrum på Öland.

Vi sitter i Ölands högsta mast som står 50 meter över havet.

SvxLink (introduktion)
Nätverk av analoga repeatrar

SvxLink >•< DMR
Brandmeister talgrupp 240721

DMR-repeater
BM 240717 • DMR+ • TGIF

SK7RFL drivs som en neutral och oberoende repeater.

- Den är fristående från klubbtillhörighet.
- Det gäller även repeaterns webbplats.
- Alla är välkomna att använda SK7RFL, oberoende av klubbmedlemskap.
- Repeatern drivs av SM7CLM och SM7GMD.
- SM5GXQ bidrar med konfiguration av SvxLink och Pi-Star samt repeaterns webbplats.
- Repeatern behöver stöd i form av (frivilliga) bidrag.

Stöd driften av SK7RFL med ett bidrag!
Swisha till 0736-159836.
Eller gör överföring till bankkonto 9159-025.429-7.

SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

NORRKÖPINGS RADIOKLUBB SK5BN

Repeaterskolan

Lektioner

1. Allt är som vanligt
2. Våra länkade repeatrar
3. SvxLink
4. Svx-portalen
5. Talgrupper
6. Kommandon
7. Val av talgrupp
8. QSY-kommando
9. Lokalt QSO
10. Passning av extra talgrupp
11. EchoLink
12. Bulletin mode
13. Papegoja
14. Väder
15. ID & status
16. Tonkaraktärer
17. Vad är DMR?
18. DMR: Verifiera kontakt
19. DMR: Talgrupp 9
20. DMR: Talgrupper
21. DMR: Passning
22. DMR: Kodplugg
23. Hur låter jag?
24. Talgrupp 240 på SvxLink
25. Automatisk QSY från talgrupp 240
26. Verbala meddelanden från repeatern
27. D-Star på SK7RFL
28. Aktivera talgrupp 240 på SvxLink
29. Analog & Digital Radio (*bildspel*)

Välkommen till min nyrenoverade "Repeaterskola". Här belyser jag i första hand användandet av olika funktioner i SvxLink. Det finns även information om de digitala modena DMR | YSF | D-Star. Det finns delar som är specifika för de repeatrar som jag själv administrerar, och där funktionalitet avviker från SvxLink standard har detta markerats.

I viss mån beskrivs även hur man installerar och sätter upp en repeaterlogik, information som är överkurs för de flesta användare.

Det finns givetvis många andra aspekter på hur en repeater bör vara konstruerad - t ex när det gäller placering, antenner, kablage, radiostationer, bandbredd, filter etc. Jag har dock valt att låta detta ligga utanför ramen för denna repeaterskola, samt de artiklar jag publicerat i ämnet SvxLink. Främst pga att jag själv inte anser mig ha tillräcklig kompetens inom det området. Men det innebär förstås inte att dessa tekniska aspekter på något sätt skulle vara mindre viktiga.

Har man frågor inom det radiotekniska området, bör man istället vända sig till någon som har mångårig erfarenhet av repeaterbyggen - och då i synnerhet när det gäller regler och riktlinjer för repeatrar, till SSAs Repeaterfunktionär. Den officiella repeaternormen finns att ladda ner från SSAs webbplats.

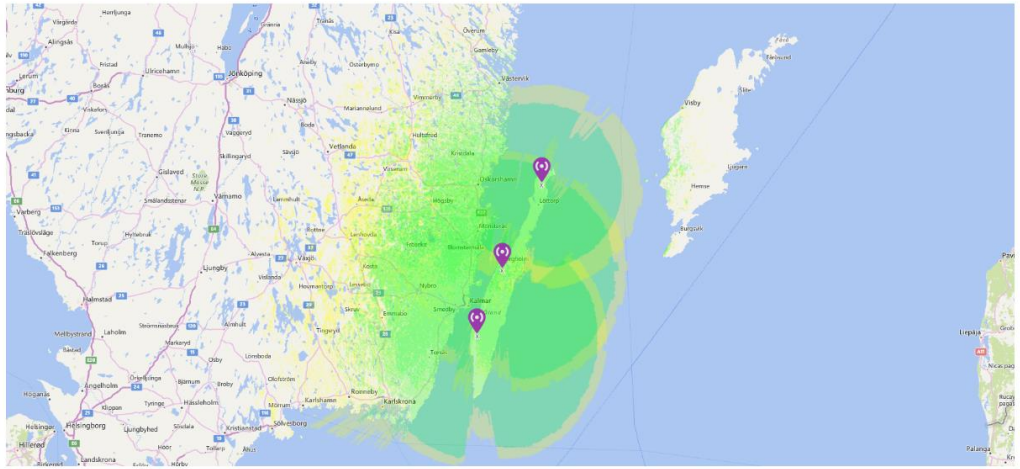
Supplement

1. Hur når jag Öland från andra noder på SvxLink?
2. SK7RFL och SK7RN är sammankopplade
3. Länkning av EchoLink mellan SK7RFL och SK7RN
4. Länkning mellan DMR och SvxLink
5. Regionala talgrupper 24073, 24078 samt 240717
6. Utvecklingar av SvxLink - avsteg från standard
7. Anslutning av repeater till SvxLink
8. DMR-brygga för SvxLink
9. Kombinerad squelch - signalstyrka eller subton
10. Equalizer för DMR
11. Länk-flöde
12. Förbättringar av Bulletin Mode
13. Olika DMR-nätverk
14. Repeatersystem Öland 2021
15. EchoLink och DMR.
16. SvxLink SK7RFL SK7RN SK5BN
17. EchoLink och DMR på SvxPortalens mottagarlista.
18. Introduktion till SvxLink (*bildspel*).
19. Introduction to SvxLink (*slide show*).
20. Repeaterskolan 2022 (*pdf*).
21. Förändringar i DMR-bryggan.
22. Talgrupper i SM7.
23. DMR, D-star och YSF på SM5GXQ Simplexnod
24. Sweden Hub - nu även på SvxLink.
25. Överkurs (länkar & bryggor mm).
26. Kortare introduktion till SvxLink (*bildspel*).

Granudden.info
Väderstation på Öland
Peter Lindquist SM5GXQ

Repeatrar

Uppdaterat 2020-06-28.



Täckningskarta för SK7RN:s tre repeatrar.

Radiosamband över hela Öland

Ölands Radioamatörer äger och driver repeatrar på tre platser: i Böda, Borgholm och Mörbylånga. Repeaternätet ger radiosamband över hela Öland.

RSS-feed

Närmaste aktiviteter

SK7RN Ölands Radioamatörer

Information om kommande aktiviteter meddelas så snart vi vet hur pandemin utvecklas.

Kontonummer för bidrag till Ölands nödradionät

Länk: **Läs om krisradionätet**
Bankgiro 413-4797
eller Swish 123 232 48 61
Märk talongen ”Nödradionät”

Documents

- Give new Life to analogue Repeaters! https://sk7rfl.se/doc/Give%20new%20life%20to%20analogue%20repeaters!.pdf
- Building a Repeater with SvxLink. https://sk7rfl.se/doc/Building%20a%20Repeater%20or%20Simplex%20node%20with%20SvxLink.pdf
- Using a Repeater With SvxLink https://sk7rfl.se/doc/Using%20a%20Repeater%20with%20SvxLink.pdf
- SvxLink towards new Heights https://sk7rfl.se/doc/SvxLink%20towards%20new%20heights.pdf
- SK7RFL SK7RN Repeater System Öland https://sk7rfl.se/doc/SK7RN-SK7RFL-Repeatersystem-Öland-2021-en.ppsx
- Analogue & Digital Radio https://sk7rfl.se/doc/SvxLink%20DMR%20D-Star%20YSF.ppsx
- SK7RN http://www.sk7rn.se/repeatrar/
- SK7RFL (in English) https://www.sk7rfl.se/start/english
- Repeaterskolan https://www.sk7rfl.se/repeaterskolan/
- SSA Bulletin https://www.sk7rfl.se/bulletin
- Svx Portal http://svxportal.sm2ampr.net/#
- SvxLink http://www.svxlink.org/
- National Reflector Network https://svxportal.sm2ampr.net/#Echolink
- SM5GXQ http://www.granudden.info/Ham/
- This slide show https://sk7rfl.se/doc/SK7RN-SK7RFL-Repeatersystem-Öland-2021-en.ppsx

SK7RN
Ölands
Radioamatörer

Repeater Flitiga Lisa - SK7RFL

JO86gq · SvxLink · EchoLink SK7RFL-R 353167 · DMR 240717

Granudden.info
Väderstation på Öland

Peter Lindquist SM5GXQ

The End