

**CT – Nokia FlexiHopper, FlexiHopper Plus**

## **Nokia FlexiHopper and FlexiHopper Plus antenna changes**

**Technical Note  
No. 95 version 1.0**

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## TN 95 NOKIA FLEXIHOPPER AND FLEXIHOPPER PLUS ANTENNA CHANGES

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### Validity: (Product Specific)

#### Software



#### Hardware



Nokia FlexiHopper

Nokia FlexiHopper Plus

**Keywords:** FlexiHopper, FlexiHopper Plus, antenna

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### Summary:

One of Nokia microwave antenna vendors has released new antenna line by the end of March 2005. The release concerns 0.3m and 0.6m antenna sizes, which will replace antenna deliveries from Nokia by April 2005. New release concerning antenna sizes 0.9m, 1.2m and 1.8m will occur during June 2005 (0.9m antenna size) and July 2005 (1.2m and 1.8m antenna sizes) and these will replace old release antenna deliveries from Nokia by September 2005.

Technical Note no. 77, Antenna Specifications Changes, describe the specification changes. Nokia FlexiHopper (Plus) Product Description Release 2.0 or later contains the new specifications.

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### Description:

New antenna releases concerns frequency bands 13, 15, 18, 23, 26, 28, 32 and 38 GHz.

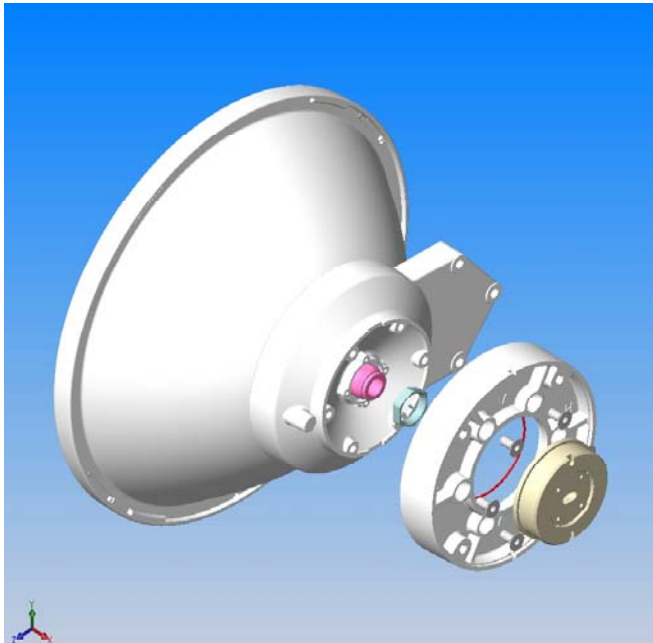
Dual polarization antenna release information will be noted once effective release date is available.

Mechanical changes in single polarization antennas:

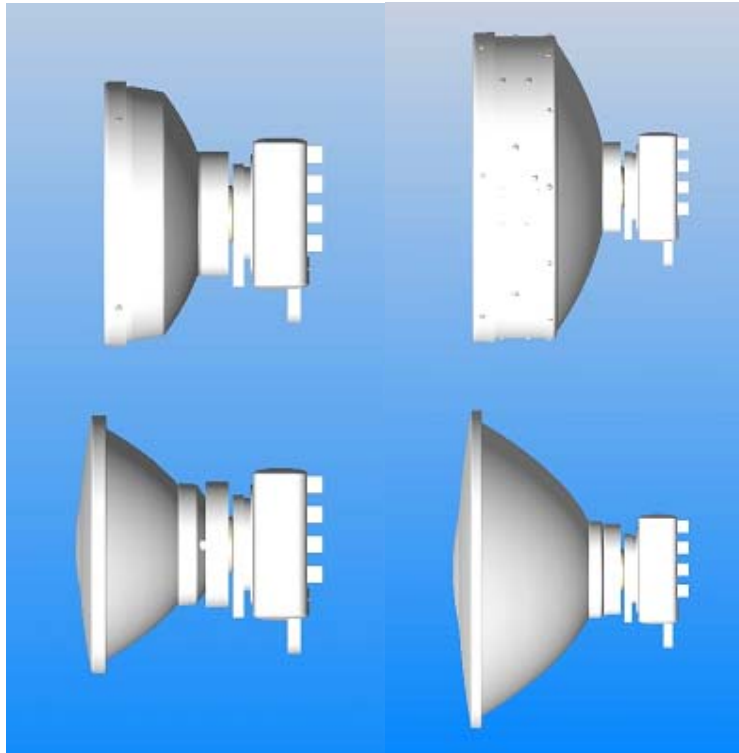
- Outlook is a bit different since the reflector design has changed
- Do not cause changes to antenna installation procedure
- Antennas have new universal interface design for Nokia FlexiHopper (see pictures 1.-2.)

Electrical changes in single polarization antennas:

- 0.3m and 0.6m antennas electrical changes are described in the Technical Note no. 77 ("Antenna Specifications Changes"). Also the latest Nokia FlexiHopper (Plus) Product Description Release 2.0 or later contains the new specifications
- 0.9m-1.8m antennas electrical changes will be described in the separate Technical Note once electrical data is available



*Picture 1: New 0.3m antenna*



*Picture 2: Single polarization 0.3m (upper left) and single polarization 0.6m (upper right) antenna with FlexiHopper microwave radio. Below the old 0.3m (bottom left) and 0.6m (bottom right) antennas are shown with Nokia FlexiHopper microwave radio.*

## Technical Note Revision History

DATE	VERSION	EDITOR	SUMMARY OF CHANGES
15.03.2005	Draft	HBa	
19.04.2005	1 <sup>st</sup> version	IKu	

## LIST OF ACTIVE TECHNICAL NOTES FOR CT:

No:	Title:	TN Version:	Valid in:
49	Nokia approved Flexbus Cables & Connectors	3.0	FlexiHopper, MetroHopper
50	FIU 19RJ	1.0	FlexiHopper, MetroHopper
51	A FIU 19E Hardware modification	1.0	FIU 19E A1 HW version
53	MetroHopper alarm Fault in Installation		MetroHopper
54	An Update on FlexiHopper SW Releases (E1)	1.0	FlexiHopper
55	Use of Fault Code 168 with FIU 19E Release C1.5	1.0	FIU 19E
56	Typographical Error In MetroHopper Stickers	1.0	MetroHopper
57	Remote SW Activation for Cellular Transmission Network Elements	1.0	FlexiHopper, MetroHopper, FIU 19
58	Transmission Loader C1.0	1.0	Transmission Loader
59	Removed Station Type Setting	1.0	Hopper Manager
60	Changes in FlexiHopper OU Performance Management alarm threshold setting window	1.0	Hopper Manager, FlexiHopper
61	An Update on MetroHopper releases (C3.0)	1.0	MetroHopper
63	An Update on Hopper Manager Releases (C4.5)	1.0	Hopper Manager
64	Using USB to Serial Port Converters with Hopper Manager and AXC-FB Hopper Manager	1.0	Hopper Manager
65	New improved system values introduced to Nokia FlexiHopper	1.0	FlexiHopper
66	Update on DMR Manager	1.0	DMR Manager
67	EOW/Service Telephone	1.0	FIU 19, FlexiHopper
68	Incoming signal level incorrent (FC59)	1.0	MetroHopper, FlexiHopper
69	Scrambling code setting in HopperManager C4.5	1.0	Hopper Manager
70	Commissioning FlexiHopper with RRIC	1.0	FlexiHopper, FlexiHopper Plus
71	FIU 19E C2.0	1.0	FIU 19E
72	Corrosion on Alignment Unit	1.0	FlexiHopper
73	An update on MetroHopper Releases C3.1	1.0	MetroHopper
74	Restoring of FlexiHopper Plus Radio Backup	1.0	FlexiHopper Plus
75	Application Note: Dual Polarisation Usage on FlexiHopper and FlexiHopper Plus Microwave Radio Links	1.0	FlexiHopper, FlexiHopper Plus
76	Excessive error rate alarm threshold change in FlexiHopper	1.0	FlexiHopper
77	FlexiHopper Antenna Specifications Changes	1.0	FlexiHopper
78	New PowerHopper hardware version	1.0	PowerHopper
79	ALCQ and Fading Margin Measurement in Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper, FlexiHopper Plus
80	ALCQ and Fading Margin Measurement in Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper Plus
81	Removal of Excessive error rate alarm (FC 96) in Nokia FlexiHopper and FlexiHopper Plus	2.0	FlexiHopper, FlexiHopper Plus
83	An Update on FlexiHopper 15GHz HW Releases	1.0	FlexiHopper, FlexiHopper Plus
84	Flexbus cable quality check	1.0	FlexiHopper, FlexiHopper Plus, FIU19, FIU19E
85	New codes for Transmission Loader and Hopper Manager	1.0	Transmission Loader, Hopper Manager
86	An update on FlexiHopper Plus 38GHz HW Releases	1.0	FlexiHopper, FlexiHopper Plus
87	New Grounding Kit for Flexbus cables	1.0	FlexiHopper, FlexiHopper Plus
88	Frequency Diversity and 7 GHz Circulator T55056.01 with Nokia FlexiHopper Microwave Radio	1.0	FlexiHopper
89	Installation Restrictions of Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper, FlexiHopper Plus
90	Distortion sensitivity of Nokia FlexiHopper and FlexiHopper Plus	1.0	FlexiHopper, FlexiHopper Plus
91	Dual Polarisation with Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper, FlexiHopper Plus
92	An update on FlexiHopper 38GHz HW Releases	1.0	FlexiHopper, FlexiHopper Plus
93	Error Correction and Scrambling in Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper, FlexiHopper Plus
94	Protection Methods in Nokia FlexiHopper and FlexiHopper Plus Microwave Radios	1.0	FlexiHopper, FlexiHopper Plus
95	Nokia FlexiHopper and FlexiHopper Plus Antenna changes	1.0	FlexiHopper, FlexiHopper Plus, Antenna