

# **NOKIA**

***DX 200***

**BSC3i S10.5**

## **Unpacking the i-series Cabinet**

**Site Documents**

**BSC3018\_P**

The information in this documentation is subject to change without notice and describes only the product defined in the introduction of this documentation. This documentation is intended for the use of Nokia's customers only for the purposes of the agreement under which the documentation is submitted, and no part of it may be reproduced or transmitted in any form or means without the prior written permission of Nokia. The documentation has been prepared to be used by professional and properly trained personnel, and the customer assumes full responsibility when using it. Nokia welcomes customer comments as part of the process of continuous development and improvement of the documentation.

The information or statements given in this documentation concerning the suitability, capacity, or performance of the mentioned hardware or software products cannot be considered binding but shall be defined in the agreement made between Nokia and the customer. However, Nokia has made all reasonable efforts to ensure that the instructions contained in the documentation are adequate and free of material errors and omissions. Nokia will, if necessary, explain issues which may not be covered by the documentation.

Nokia's liability for any errors in the documentation is limited to the documentary correction of errors. NOKIA WILL NOT BE RESPONSIBLE IN ANY EVENT FOR ERRORS IN THIS DOCUMENTATION OR FOR ANY DAMAGES, INCIDENTAL OR CONSEQUENTIAL (INCLUDING MONETARY LOSSES), that might arise from the use of this documentation or the information in it.

This documentation and the product it describes are considered protected by copyright according to the applicable laws.

NOKIA logo is a registered trademark of Nokia Corporation.

Other product names mentioned in this documentation may be trademarks of their respective companies, and they are mentioned for identification purposes only.

Copyright © Nokia Corporation 1996. All rights reserved.

## Contents

	<b>Contents</b>	<b>3</b>
	<b>List of tables</b>	<b>4</b>
	<b>List of figures</b>	<b>5</b>
	<b>Summary of changes</b>	<b>7</b>
<b>1</b>	<b>About this manual</b>	<b>9</b>
1.1	Where to find more	9
1.2	Tools needed for unpacking	9
1.3	Dimensions and weights of the packages	9
1.4	Conversion factors	12
<b>2</b>	<b>Removal procedures</b>	<b>15</b>
2.1	Package removed in prone position	15
2.2	Package removed in standing position	21

**List of tables**

Table 1.	Dimensions and weights of cabinet packages.	<b>10</b>
Table 2.	Conversion factors.	<b>12</b>
Table 3.	Conversions from decimals to fractions.	<b>13</b>



## List of figures

- Figure 1. Three cabinet packages in a pile. The width and length are the same, but the height for cabinets without cabling cabinets (A), and cabinets with cabling cabinets (B). **11**
- Figure 2. A closed latch. **15**
- Figure 3. Open the latches with a hammer (or a screw driver). **16**
- Figure 4. Remove the cover. **16**
- Figure 5. Remove the exposed EPE paddings. **17**
- Figure 6. Open the latches binding the side plates to the bottom plate. Lift and remove the side plates (still connected together). Two persons are required for removal. **17**
- Figure 7. Remove the loose EPE paddings. **18**
- Figure 8. Cut the protective foil with a knife, and remove it. **18**
- Figure 9. Lift the package to upright position. Two persons lift and one helps at the other end. **19**
- Figure 10. Remove the bottom plate and the EPE paddings and foil remnants. **19**
- Figure 11. Carefully remove the last loose EPE padding. **20**
- Figure 12. Unpacked cabinet. **20**
- Figure 13. A closed latch. **21**
- Figure 14. Open the latches with a hammer (or a screw driver). **21**
- Figure 15. Remove the top cover when the latches are removed. Check where the cabinet's bottom end lies, if not marked on outer surface of the package. **22**
- Figure 16. Lift the package to upright position. Be sure that the cabinet's bottom end (wheels) is facing the floor. Note that the package is heavy, so at least two persons are required for manual lifting. **22**
- Figure 17. Remove the latches of the bottom plate. To remove the bottom plate bend and remove the latches by using a hammer (or a screw driver). **23**
- Figure 18. When latches are opened, remove the bottom plate. Note that the plate is quite heavy. **23**
- Figure 19. Remove the EPE paddings, first upper, then middle. **24**
- Figure 20. Cut the foil of the inner protective bag with a knife or scissors. **24**
- Figure 21. Remove the lower EPE paddings. **25**
- Figure 22. Remove the EPE padding inside the package with a long stick. **25**

- Figure 23. Push the cabinet from the other end. **26**
- Figure 24. Cut the foil open at the bottom plate end. **26**
- Figure 25. Pull the cabinet from the bottom plate end. **27**
- Figure 26. Pull the cabinet out of the package. Note that at least two persons are required. **27**
- Figure 27. Lift the cabinet and remove it from the package. **28**
- Figure 28. Remove the package totally. **28**
- Figure 29. Remove the protective bag altogether. **29**
- Figure 30. The cabinet is provided with wheels, so it is easy to move around. Use the opening bridges for pulling. **29**

## Summary of changes

Changes between document issues are cumulative. Therefore, the latest document issue contains all changes made to previous issues.

### Changes for Issue 1

The first version for M9 release.



# 1

## About this manual

This document provides the basic information needed for unpacking the cabinets of the i-series DX 200 network elements (MSCi/HLRi, SRRi and SGSN) from their carrier packages.

### 1.1 Where to find more

For information on the site requirements, dimensioning principles, power distribution and cabling of the network element concerned, see the *Engineering Descriptions* manuals (Document Class 1.2) of the network element concerned.

For information on the actual delivery of the network element unit, see the *Site Documents* manual of the network element concerned (Document Class 0.1/3.20).

### 1.2 Tools needed for unpacking

Tools needed for unpacking are standard tools as listed below.

- Hammer (or screw driver) for opening the latches
- Knife or scissors for cutting the internal packages

### 1.3 Dimensions and weights of the packages

The i-series cabinets are delivered in plywood packages; one type is suitable for a cabinet without a cabling cabinet, and one for a cabinet with a cabling cabinet. Weights of the cabinets vary depending on the cartridges and intracabinet cablings installed.

Table 1. Dimensions and weights of cabinet packages.

Cabinet type	Dimensions (H x W x L)	Weight
Cabinet with cabling cabinet (B)	152 x 83 x 218 cm (59.8 x 32.7 x 85.8 in)	280 - 310 kg (859 - 926 lb)
Cabinet without cabling cabinet (A)	123 x 83 x 218 cm (48.4 x 32.7 x 85.8 in)	390 - 420 kg (617 - 705 lb)

Note that three cabinet packages can be piled on top of each other, as shown in the figure below.

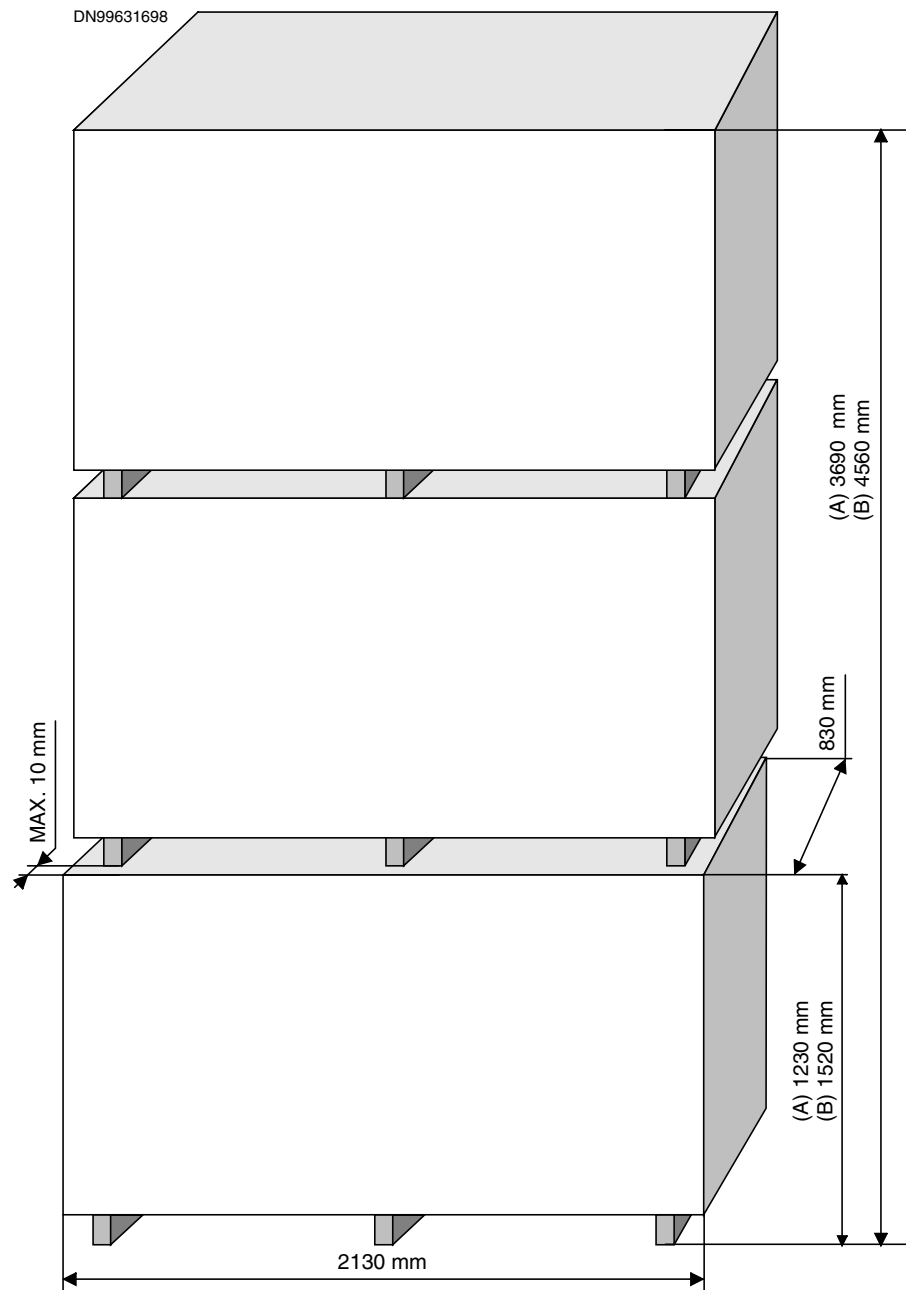


Figure 1. Three cabinet packages in a pile. The width and length are the same, but the height for cabinets without cabling cabinets (A), and cabinets with cabling cabinets (B).

## 1.4 Conversion factors

The following conversion factors should be used when installing Nokia's DX 200 and associated equipment:

Table 2. Conversion factors.

Metric		American
1 kilogram (kg)	=	2.2046 lb
1 meter (m)	=	3.2808 ft
2.54 centimeters (cm)	=	1 inch

The following table can be used for converting decimals to fractions, where the first column gives the number of inches in decimals and the second column contains the corresponding number of inches in fractional form. The third column gives the number of feet in decimals, and the fourth column gives the corresponding number of inches in fractional form.



Table 3. Conversions from decimals to fractions.

Decimals (inches)	Fractions (Inches)	Decimals (feet)	Fractions (Inches)
.1	1/8	.1	1 1/2
.2	1/4	.2	3
.3	3/8	.3	4 1/2
.4	7/16	.4	5 1/4
.5	1/2	.5	6
.6	5/8	.6	7 1/2
.7	11/16	.7	8 1/4
.8	13/16	.8	9 3/4
.9	7/8	.9	10 1/2
1.0	1	1.0	12

Note

For the purposes of installation and construction, an allowance of 1/16th of an inch is tolerated between the physical conditions found on any particular site and the Blue Print drawings provided with the installation instructions. Also, an allowance of 1/16th of an inch will be permitted when converting directly from European measurement to the American standard feet and inches.



## 2 Removal procedures

### 2.1 Package removed in prone position

Start the unpacking of the delivery package when it is laying on its bottom plate, in prone position.

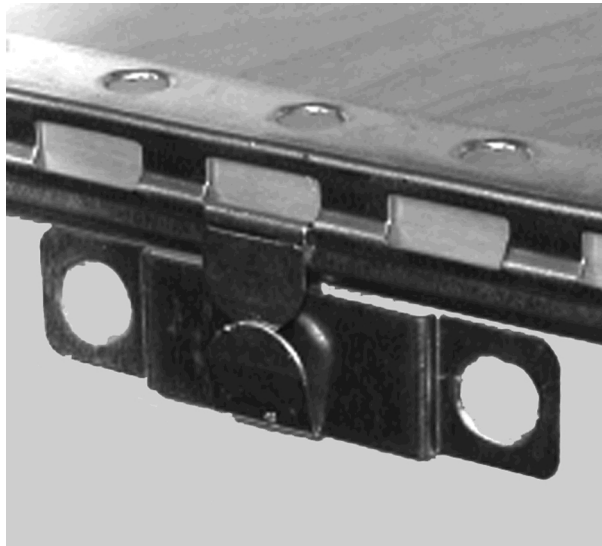


Figure 2. A closed latch.



Figure 3. Open the latches with a hammer (or a screw driver).



Figure 4. Remove the cover.



Figure 5. Remove the exposed EPE paddings.

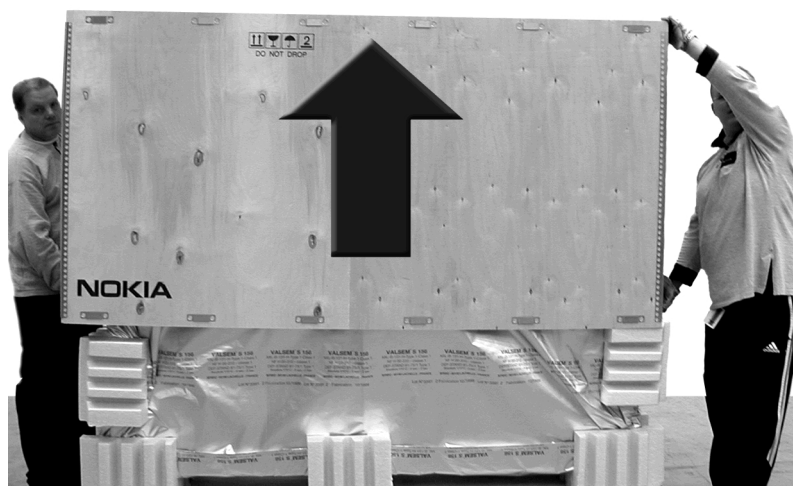


Figure 6. Open the latches binding the side plates to the bottom plate. Lift and remove the side plates (still connected together). Two persons are required for removal.



Figure 7. Remove the loose EPE paddings.



Figure 8. Cut the protective foil with a knife, and remove it.

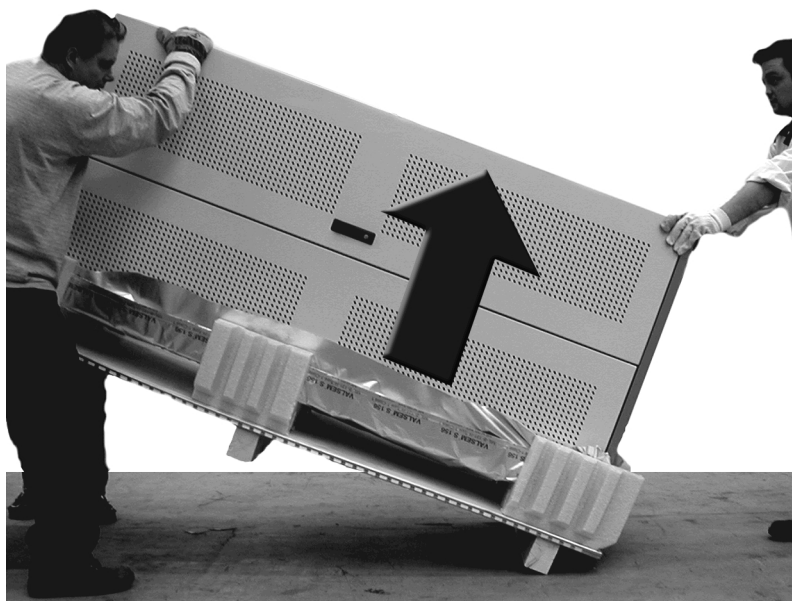


Figure 9. Lift the package to upright position. Two persons lift and one helps at the other end.

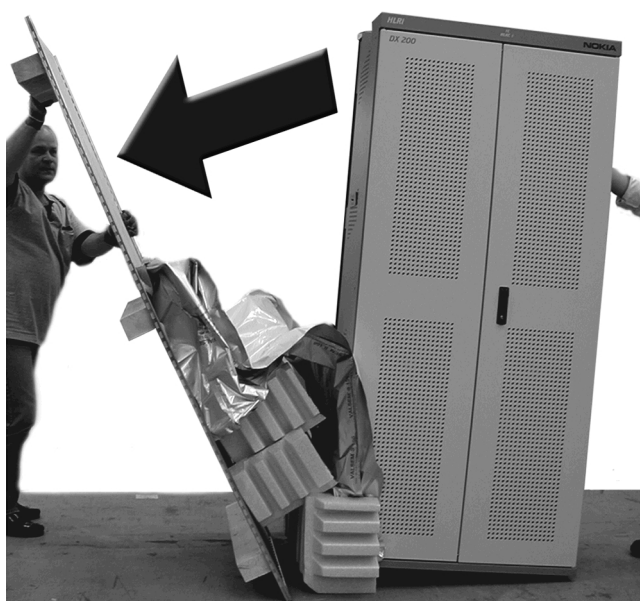


Figure 10. Remove the bottom plate and the EPE paddings and foil remnants.



Figure 11. Carefully remove the last loose EPE padding.

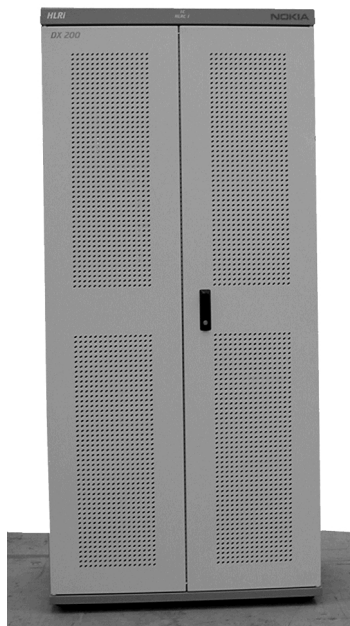


Figure 12. Unpacked cabinet.



## 2.2 Package removed in standing position

Start the unpacking of the delivery package when it is laying on its bottom plate, then turned to standing position.

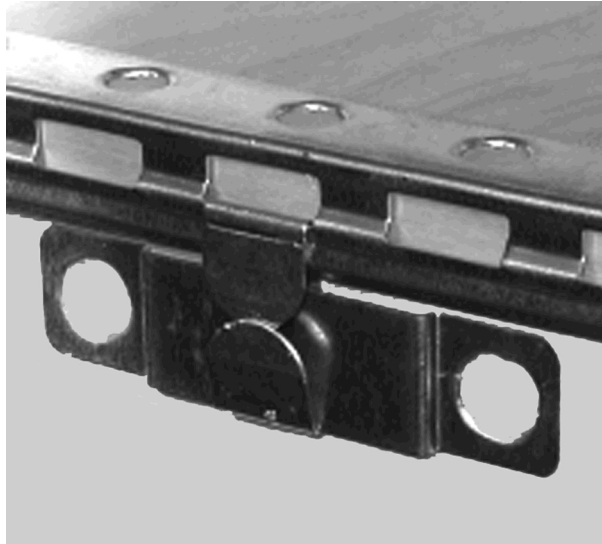


Figure 13. A closed latch.



Figure 14. Open the latches with a hammer (or a screw driver).



Figure 15. Remove the top cover when the latches are removed. Check where the cabinet's bottom end lies, if not marked on outer surface of the package.



Figure 16. Lift the package to upright position. Be sure that the cabinet's bottom end (wheels) is facing the floor. Note that the package is heavy, so at least two persons are required for manual lifting.



Figure 17. Remove the latches of the bottom plate. To remove the bottom plate bend and remove the latches by using a hammer (or a screw driver).

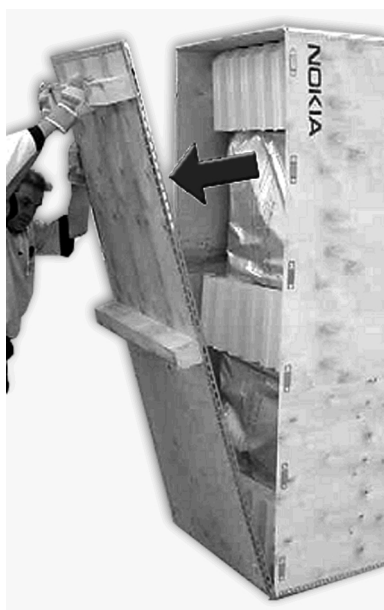


Figure 18. When latches are opened, remove the bottom plate. Note that the plate is quite heavy.



Figure 19. Remove the EPE paddings, first upper, then middle.



Figure 20. Cut the foil of the inner protective bag with a knife or scissors.



Figure 21. Remove the lower EPE paddings.



Figure 22. Remove the EPE padding inside the package with a long stick.

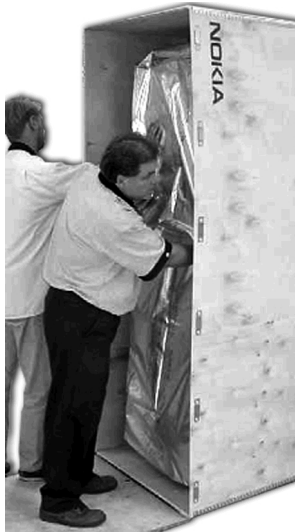


Figure 23. Push the cabinet from the other end.



Figure 24. Cut the foil open at the bottom plate end.



Figure 25. Pull the cabinet from the bottom plate end.



Figure 26. Pull the cabinet out of the package. Note that at least two persons are required.



Figure 27. Lift the cabinet and remove it from the package.



Figure 28. Remove the package totally.





Figure 29. Remove the protective bag altogether.



Figure 30. The cabinet is provided with wheels, so it is easy to move around. Use the opening bridges for pulling.

