



## Nordic mobile telephone system NMT 900 – Technical specification for the mobile station (Doc. 900-3)

*Nordiskt mobiltelefonsystem NMT 900 – Tekniska krav för den mobila enheten (Doc. 900-3)*

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### Introduction

The Nordic mobile telephone system NMT 900 is a joint effort by operators and telecom agencies in the Nordic countries. The system is also widely used elsewhere. It operates in the frequency ranges 890 – 915 and 935 – 960 MHz.

This edition refers to NMT Doc. 900-3, edition 1998-04-03 v.3.0.0, which has been changed in specification of essential requirements, by the Nordic Mobile Telephone Group.

## 1 Scope

This standard covers the mobile part, including accessories, of the Nordic mobile telephone system NMT 900. The standard contains a list of requirements which, through reference in technical regulations issued by the Swedish National Post and Telecom Agency, have been made mandatory in line with the essential requirements of the teleterminal directive (91/263/EEC).

For the convenience of the user, the standard contains additional specifications to complete the technical requirements. These parts are system requirements to enable operation.

## 2 Normative reference

NMT Doc. 900-3, edition 1998-04-03 v.3.0.0, Technical specifications for Mobile Stations

## 3 Requirements

The equipment shall fulfil the requirements of Annex A, edition 1998-04-03, as specified in Table 1. All other parts of that specification are for information and given as design advice.

**Table 1 – Normative clauses in NMT Doc. 900-3**

Clause	Heading	Subclauses exempted	Note
1.3	General conditions	1.3.1.1; 1.3.10; 1.3.12	
2.2.1	Frequency range and channel separation		
2.2.2	Number of channels		
2.2.3	Frequency error		
2.2.4	Transmitter carrier power	2.2.4.4	
2.2.5	Transmitter carrier power control		
2.2.6	Carrier on/of condition and carrier rise/decay time		
2.2.7	Transmitter channel switching time		
2.2.8	Spurious emissions		
2.2.9	Frequency deviation		
2.2.11	Adjacent channel power		
2.3.1	Frequency range and channel separation		
2.3.2	Number of channels		
2.3.3	Duplex separation		
2.3.4	Receiver detection and switching time		
2.3.7.1	RF-sensitivity		
2.3.7.2	Receiver duplex sensitivity degradation		
2.3.8	Co-channel rejection		
2.3.9	Adjacent channel selectivity		
2.3.10	Adjacent channel selectivity in the interleaved channel (12,5 kHz)		

**Table 1 (continued) – Normative clauses in NMT Doc. 900-3**

Clause	Heading	Subclauses exempted	Note
2.3.11	Spurious response rejection		
2.3.12	Intermodulation rejection		
2.3.13	Blocking		
2.3.14	Spurious emissions		
2.3.17	Amplitude characteristics of the receiver limiter		
2.4	$\phi$ -signal loop and transceiver coupling		
2.5	Voice processing requirements, transmitting		
2.6	Voice processing requirements, receiving	2.6.8; 2.6.9	
2.7	Stability loss		
3	Operational controls unit (OCU)		
4	Operational procedures		
5	Logic and control unit (LCU) and signalling equipment		
6	System tests		
Annex			
2	Portable mobile station	B.1.3.10; B.5.2.1.3; C.3	
3	Handheld mobile station (HMS)	B.1.3.10; B.5.2.1.3; C.3	
12	Handheld mobile station with battery saving function		1
14	Alternative procedure for call set-up from MS		
17	Combined NMT-450/900 (CMS)		1
20	Requirements for NMT-mobile station equipped with a cordless handset		1
29	Specification for added subscriber identification security in NMT-900/450.NMT-SIS		
NOTE 1 – If installed			