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Services and Protocols for Advanced Networks (SPAN); Result of the PNOs and Equipment Manufacturers questionnaires for identification of Equipment Unit

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Technical Report

Services and Protocols for Advanced Networks (SPAN); Result of the PNOs and Equipment Manufacturers questionnaires for identification of Equipment Unit

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

Introduction

Public Network Operators (PNOs) and telecom equipment manufacturers have a common interest in the area of the Identification of Telecommunication Equipment. This common interest stems from the fact that equipment is the subject of numerous interactions between these business entities. In order to improve the understanding and exchange of information needed in this area, ETSI TC SPAN15 decided to conduct a survey within its membership. This survey was implemented by means of two questionnaires: one aimed/at the PNOs and one aimed at the manufacturers.

The present document contains the results of this survey. Clause 4 lists the answers given by PNOs; clause 5 lists the answers given by manufacturers. The two questionnaires were developed by different entities and use different terminologies. Therefore it was needed to construct a cross-reference table which maps the terminology from both questionnaires. This table is provided in clause 6. The original questionnaires are given in the annexes A and B. https://standards.itch.ai/catalog/standards/sist/759e5a53-229b-4c8a-9db5-

32f899dad08b/sist-tp-etsi-tr-102-214-v1-1-1-2005

1 Scope

The present document is the result of a survey which was conducted in the fourth quarter of 2002 to evaluate and list the information needed by the PNOs and Manufacturers regarding Equipment Identification.

2 References

For the purposes of this Technical Report (TR) the following references apply:

[1] ETSI TS 102 209: "Services and Protocols for Advanced Networks (SPAN); Telecommunication Equipment Identification".

3 **Abbreviations**

For the purposes of the present document, the following abbreviations apply:

Additional Α

ΕI **Equipment Identity**

MIB Management Information Base

Not Requested NR

Public Network Operator(s) PNO(s)

Requested Teh STANDARD PREVIEW
Suppliers Declaration of Conformity R

SDoC

standards.iteh.ai)

PNOs' resultssist-tp etsi/tr 102 214 V1.1.12005 4

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The answers given by PNOs are shown in table 1/sist-tp-etsi-tr-102-214-v1-1-1-2005

Table 1: PNOs' results

Description of equipment information needed by PNO		вт	TI	В	Т
1) Manufacturer's name: The Manufacturer's name responsible for the		R	R	R	R
assembly, construction, and testing of the equipment unit	R	I.	IX.	K	K
2) Manufacturer part number: The Manufacturer's part number that is	R	R	R	R	R
physically stamped or marked on the equipment unit	11	11	11	11	11
3) Manufacturer's equipment version number: This is in regards to the					
hardware version. Also referred to as series, release, or issue and is					
associated to the part number. Used to identify the assembly and wiring	Α	R	R	R	R
processes used to construct the equipment unit (physically stamped on the					
equipment unit)					
4) Manufacturing Ordering Code: Reference the Manufacturer's					
recommended or preferred equipment ordering codes (normally not	Α	Α	Α	Α	Α
stamped on the equipment). This is a commercial type of code					
5) Equipment tracking: The EI should provide a single source of	R	R	R	R	Α
information for identifying Manufacturer's equipment version	IX	IX	11	11	^
6) Port or circuit rate: Identify the all the bit rates, speed, or other special	NR	R	R	R	R
engineering features associated with the equipment unit	INIX	IX	11	11	IX
7) Physical dimensions: Identify the metric length, height, width and shape	Α	R	R	R	R
of the equipment unit	Α	K	IX.	K	K
8) Physical description: Describe the type of assets, and if the equipment	Α	R	R	R	R
unit is a plug-in, plug-on, mounting, shelf, bay, rack, cabinet, etc.		IX.	11	11	11
9) Physical weight: Provide the metric weight of the unit (less shipping	Α	R	R	Α	R
container) > (this is for human and/or structural limit)		K	IX.	Υ	K
10) Electrical requirements: Reference the manufacturers specifications					
for current type, cycles per second, voltage, power consumption, fusing	Α	R	R	R	R
requirements, etc.					

Description of equipment information needed by PNO	FT	вт	TI	В	Т
11) Alarm features: Reference the Manufacturer's recommended	Α	Α	R	Α	R
specifications for alarming equipment units			- 1		11
12) Testing information: Reference the Manufacturer's specifications for testing each equipment unit or item	Α	Α	Α	Α	R
13) Hazardous materials: Alert the PNO that there is a Manufacturers	Α	В	۸	R	R
hazardous material warning	А	R	Α	K	Γ.
14) Downloadable software feature: This would identify that the	_	_		_	-
equipment unit is capable of receiving down loadable software from an external source	R	R	Α	R	R
15) Equipment slot requirements: Specify the quantity of slots required to		-	-	_	-
install the equipment unit	Α	R	R	R	R
16) Equipment slot locations: Specify the slot locations on the shelf where	Α	R	R	R	R
specific equipment can be mounted 17) Maximum allowable quantities: Identify how many shelves,					
magazines, etc. can be equipped in a cabinet, bay or rack. (This is different	Α	R	R	R	R
than circuit capacity)	'`	'`	'`		
18) Total quantity of equipment slots: Identify the total number of slots	Α	R	R	Α	R
being provided by the equipment mounting	, · ·	11	11	/\	- 1
19) System information: How many equipment units and shelves are required to initiate a system (i.e. DBM2000 - one shelf, Titan 5500-multiple	NR	R	R	Α	R
shelves, etc.). NB: a system is beyond the scope of this work item	INIX		I N	^	K
20) Installation environmental: Identifies acceptable conditions for	NR	R	۸	^	R
equipment installation application (exterior, interior, dry, wet, dust free, etc.)	INK	ĸ	Α	Α	ĸ
21) Equipment installation: Identifies if the equipment is designed for pole	Α	R	Α	Α	R
mounts, ground level, cabinet, etc. installations 22) Installation, wiring and cabling: Reference Manufacturer's					
recommended wiring and cross-connects for the equipment. Examples are	A	- A	R	Α	R
coaxial cabling fiber-in/fiber-out, distributing frame connections, etc.	ÊV	V	'`		
23) Product description: A brief description of the equipment unit	Α	R	R	R	R
(i.e. power, alarm, interface, etc. (Standards.iteh.al) 24) Equipment function or features: Engineering and design information	, ,	• •			
that describes the specific roles, functions, or multi-functions of the	Α	R	R	R	R
equipment unit. Examples are PDH or SDH multiplexing, connectors, etc.	^\	'`	'`	1	1
25) General application of Equipment Units: Identifies the general 333-229		9db5-			
application or asset grouping for the equipment unit Examples would be -1-20	05A	Α	Α	Α	R
general power, transmission/transport, switching, access, etc. 26) Manufacturer reconditioned or repaired equipment: Reconditioned					
or repaired equipment should be "flag" by the Manufacturer before it is					
returned to the PNO. NB: this is not appropriate in the context of this work	Α	Α	NR	NR	Α
item					
27) Technical Information: Reference to equipment and assembly	NR	R	Α	Α	R
drawings, circuit schematics, circuit description, etc. 28) Information stability: Equipment unit relationship should be					
permanent/stable that means having the same part number and version	R	R	R	R	Α
29) Change Management: Provide information needed to identify and track					
minor and major equipment changes made during the production of	R	R	R	R	R
equipment					
30) Interchangeable equipment: Provide the ability to easily identify interchangeable "like-for-like" equipment within the same manufacturer. This					
question is referring only to the equipment units. Across manufacturers	R	R	R	R	R
could be considered					
31) Compatible equipment: Identify the 'downward" compatibility of					
equipment within the same manufacturer. Downward is a single direction, and implies that only a newer version can be used to replace a prior version,	R	R	R	R	R
and not vice versa. This question is referring only to the equipment units.	'`	'`	'`	'`	13
Across manufacturers could be considered					
32) El information should be human readable: The El information should					
be in a human readable format that is in visible location when the equipment	R	R	R	Α	R
is in service. This question is related to the format or the support and therefore will be discussed in detail in the next WI					
33) El should be machine-readable (can be scanned): The El information					
should be in a machine-readable format that can be scanned when the	R	R	R	Α	Α
equipment is in service. This question is related to the format or the support	'`	``	``	'`	, · ·
and therefore will be discussed in detail in the next WI		<u> </u>			

Description of equipment information							
needed by PNO	FT	ВТ	TI	В	T		
34) Management Information Base (MIB): El information should be							
embedded with other manufacturer information that is stored within an	_		_		_		
equipment unit MIB. This question is related to the format or the support and	R	-	R	-	R		
therefore will be discussed in detail in the next WI							
35) Application: A unique El code is assigned to each equipment class							
(part number and version) with global uniqueness across equipment	-	R	R	R	Α		
suppliers. Serial number is not taken into consideration							
36) Benefits: which type of PNO process will benefit the information of the							
El (see list below)							
36 a) Network Planning/Development	Α	R	R	Α	R		
36 b) Network Provisioning	R	R	R	R	R		
36 c) Network Inventory Management	R	R	R	R	R		
36 d) Network Maintenance & Restoration	R	R	R	R	R		
36 e) Network Monitoring	Α	R	R	Α	R		
36 f) Acquisition: purchase of new equipment	R	R	R	R	-		
37) Additional question: Manufacturer's equipment software version		- `		- `			
number. Also referred to as series, release, or issue and is possibly	R	R	R	R	_		
associated to the part number							
38) Additional question: Compatible equipment software. Identify the							
'downward" compatibility of equipment software. Downward is a single	_		_				
direction, and implies that only a newer version can be used to replace a	R	R	R	R	-		
prior version, and not vice versa							
39) Additional question: Manufacturer's equipment unit firmware version							
number. Also referred to as series, release, or issue and is possibly	R	R	R	R	-		
associated to the part number							
40) Additional question: Compatible equipment unit firmware. Identify the							
'downward" compatibility of equipment unit firmware. Downward is a single	1611	(7 D	R	R			
direction, and implies that only a newer version can be used to replace a	R	√R	K	K	-		
prior version, and not vice versa							
41) Additional question: End of warranty period ards. Iteh. all)	R	Α	Α	R			
42) Additional question: End of Equipment supplier serviceability	R	Α	Α	Α			
43) Additional question: Existence of MIB associated with an equipment	R	Α	Α	Α			
and/or equipment unit Yes/No	4.0	0.11.77	A	_ A			
44) Additional question: Product Name given by the Equipment supplier 229)-4 6 8a-	ags-	R	R			
45) Additional question: Is it still possible to order the equipment to the 1-20	05 A	Α	R	Α			
Equipment supplier	Α	А	K	А			
46) Additional question: compliance with applicable standards (standard is							
independent of the country,	Α	Α	Α	R			
i.e.: ITU, ETSI, etc.)							
47) Additional question: compliance with applicable certification (can be	Α	Α	Α	R			
national, global, etc.)		_ ^	^	'`			

- NOTE 1: "FT" stands for "France Telecom".
- NOTE 2: "BT" stands for "British Telecom".
- NOTE 3: "TI" stands for "Telecom Italia".
- NOTE 4: "B" stands for "Belgacom".

- NOTE 5: "T" stands for "Telefonica".

 NOTE 6: "A" stands for "Additional" meaning the PNO considers this information to be optional.

 NOTE 7: "NR" stands for "Not Requested" meaning this information is not requested by PNOs' organizations for internal or external use.
- NOTE 8: "R" stands for "Requested" meaning the PNO requests that this information be available on the equipment unit and/or associated EI databases.
- NOTE 9: Telefonica's answers were copied from the file they sent prior to the meeting according to the original questionnaire. All other operators replied taking into account information precision.

 NOTE 10: The questions quoted as "Additional" were added during the December 2002 meeting.

5 Manufacturers' results

This clause lists the answers given by the manufacturers (table 2).

Table 2: Manufacturers' results

1) Product number		Lucent	Siemens	Ericsson	Cisco
2) Product revision	Identification of equipment				
3 Product name	1) Product number	R	R	R	R
A	2) Product revision	R	R	R	R
National color of the color o	3) Product name	R	R	R	R
Manufacturer	4) Product serial number	NR	R	R	R
NR	5) Manufacturing time	NR	R	R	NR
8 Additional information	6) Manufacturer	R	R	R	R
Additional information	7) Certification marks	NR	R	Α	R
9 Product structure	8) Additional information				
10) Traceability structure NR NR R NR R NR 11) External product information R NR NR A NR 12) External serial number information NR NR NR A NR 13) Exemption indicator NR NR NR A NR 14) Scrap indicator NR NR NR A NR 15) Order number NR NR NR R NR 16) Shipment identification NR NR NR R NR 17) Shipment date NR NR NR R NR 18) Repair centre NR NR NR R NR 19) Customer ID NR NR NR R NR 20) Customer ID NR NR R NR 21) Customer location Standards NR 22) Site location ID NR NR R R NR 23) Installation date SIST TP EBI/TR 10 2 NR 26) Additional information Documents 27) User guide NR NR NR A NR A NR 28) Installation guide NR NR NR A NR 29) SDOC NR NR NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR A NR B NR A NR A NR A NR A NR A NR A NR B NR A NR B NR	Additional information	•	•		•
11 External product information	9) Product structure	R	NR	R	NR
12) External serial number information NR NR A NR 13) Exemption indicator NR NR NR A NR 14) Scrap indicator NR NR NR A NR 15) Order number NR NR NR R NR 16) Shipment identification NR NR R NR 17) Shipment date NR NR NR R NR 17) Shipment date NR NR NR A NR 18) Repair centre NR NR NR A NR 19) Customer NR NR NR NR NR NR 20) Customer ID NR NR NR R NR 21) Customer location Standard NR NR NR R NR 22) Site location ID NR NR NR R NR 23) Installation date Standard NR NR NR NR NR	10) Traceability structure	NR	NR	R	NR
13) Exemption indicator	11) External product information	R	NR	Α	NR
14) Scrap indicator NR NR A NR 15) Order number NR NR NR R NR 16) Shipment identification NR NR NR R NR 17) Shipment date NR NR NR A NR 18) Repair centre NR NR NR A NR 19) Customer Ten STANDAFIRE WR A NR NR NR NR 20) Customer ID NR	12) External serial number information	NR	NR	Α	NR
15) Order number	13) Exemption indicator	NR	NR	Α	NR
16) Shipment identification	14) Scrap indicator	NR	NR	Α	NR
17) Shipment date NR	15) Order number	NR	NR		NR
18) Repair centre	16) Shipment identification	NR	NR	R	NR
19) Customer	17) Shipment date	NR	NR	Α	NR
20) Customer ID	18) Repair centre	NR	NR.	, A	NR
21) Customer location Standard S.NR. A NR 22) Site location ID NR NR R NR 23) Installation date NR NR NR A NR 24) Acceptance date SIST-TP ETSI/TR 102 2 NR NR A NR 25) Warranty Intips//standards.itch.ai/catalog/standards/sNR59e_a53-NR*b-4c-a-9db5-R NR 26) Additional information 32/899dad08b/sist-tp-etsi-ti-102-214-V1-1-1-2005 NR Documents 27) User guide NR NR A NR 28) Installation guide NR NR A NR 29) SDoC NR NR A NR Added questions R A NR 30) Added question: product description R A A 31) Added question: System name R A A	19) Customer II en STANDAI	NR	LNR	VV R	NR
22) Site location ID NR NR R NR 23) Installation date SIST-TP ETSI/TR 10 2 NR 1.1 120 NR R A NR 24) Acceptance date SIST-TP ETSI/TR 10 2 NR 1.1 120 NR R R NR 25) Warranty https://standards.itch.ai/catalog/standards/siNR 59c a53 NR b-4c a-9db5 R NR 26) Additional information 321899dad08b/sist-tp-etsi-ti-102-214-v1-1-1-2005 Documents 27) User guide NR NR A NR 28) Installation guide NR NR A NR 29) SDoC NR NR A NR Added questions R A NR 30) Added question: product description R A A 31) Added question: System name R A A	20) Customer ID		NR	R	NR
23) Installation date 24) Acceptance date 25) Warranty 26) Additional information 27) User guide 28) Installation guide 29) SDoC 29) NR 20) NR 20) NR 21) NR 21) NR 22) NR 23) Installation guide 24) NR 25) Warranty 26) Additional information 27) User guide 27) User guide 28) Installation guide 29) SDoC 20) NR 29) NR 20) N	21) Customer location (Standard	s. NReh	.alnr	Α	NR
24) Acceptance date \$181-11 E181/1R 10 2 NR R NR 25) Warranty https://standards.iieh.ai/catalog/standards/siNR 59c a53 NR b-4ct a-9db5 R NR 26) Additional information 321899dad08b/sist-tp-etsi-102-214-V1-1-1-2005 Documents 27) User guide NR NR A NR 28) Installation guide NR NR A NR 29) SDoC NR NR A NR Added questions 30) Added question: product description R A 31) Added question: System name R A	22) Site location ID			R	NR
25) Warranty https://standards.lieh.ai/catalog/standards/siNR59e-a53-NR6-4cta-9db5-R NR 26) Additional information 321899dad08b/sist-tp-etsi-t-102-214-v1-1-1-2005 Documents 27) User guide NR NR A NR A NR 28) Installation guide NR NR NR A NR A NR A NR A NR A NR A NR	23) Installation date	NR,	NR	Α	NR
26) Additional information 32/899dad08b/sist-tp-etsi-ti-102-214-v1-1-1-2005 Documents 27) User guide	24) Acceptance date			R	NR
Documents	(25) Warranty	IS/SINR ^{39e3}		¹⁸⁻⁹⁰⁰⁵ -R	NR
27) User guide NR NR A NR 28) Installation guide NR NR NR A NR 29) SDoC NR NR A NR Added questions R A A 30) Added question: System name R A A	26) Additional information 321899dad08b/sist-tp-etsi-t	r-102-214-v	71-1-1-2005		
28) Installation guide NR NR A NR 29) SDoC NR NR NR A NR Added questions 8 A A NR	Documents				
29) SDoC NR NR A NR Added questions 30) Added question: product description R A 31) Added question: System name R A	27) User guide	NR	NR	Α	NR
Added questions 30) Added question: product description R A 31) Added question: System name R A				A	
30) Added question: product description R A 31) Added question: System name R A		NR	NR	Α	NR
31) Added question: System name R A	Added questions				

- NOTE 1: "A" stands for "Additional" meaning the Manufacturer considers this information to be optional.
- NOTE 2: "NR" stands for "Not Requested" meaning this information is not requested by the Manufacturer's organizations for internal or external use.
- NOTE 3: "R" stands for "Requested" meaning the Manufacturer requests that this information be available on the equipment unit and/or associated EI databases.
- NOTE 4: Cisco and Ericsson's answers were copied from the file they sent prior to the meeting. Lucent and Siemens filled the questionnaire with the assumption that the additional information is available but not required as part of the Equipment Identity (Q9-25).

6 Cross reference table

Since the questionnaires were developed by different entities, there was the need to map the meaning of each item. Table 3 is a cross reference table between the PNOs and Manufacturers interpretation.

Table 3: Cross reference table

Description of equipment information needed by PNO	Information needed by vendors
Manufacturer's name: The Manufacturer's name responsible for	Manufacturer
the assembly, construction, and testing of the equipment unit	Manufacturer
Manufacturer's equipment part number: The Manufacturer's	
part number that is physically stamped or marked on the	Product number
equipment unit	
Manufacturer's equipment version number: Also referred to as	
series, release, or issue and is associated to the part number.	
Used to identify the assembly and wiring processes used to	Product revision
construct the equipment unit (physically stamped on the	
equipment unit)	
Manufacturing ordering code: Reference the Manufacturer's	Order number: E.g. customer order number,
recommended or preferred equipment ordering codes (normally	purchase order number and/or delivery number
not stamped on the equipment)	can be used
Equipment tracking: The EI should provide a single source of	
information for identifying Manufacturer's equipment version (for	See product equipment version number
example part number and equipment version number)	
Port or circuit rate: Identify the all the bit rates, speed, or other	Technical Specifications
special engineering features associated with the equipment unit	•
Physical dimensions: Identify the metric length, height, width	Technical Specifications
and shape of the equipment unit	PREVIEW
Physical description: Describe the type of assets, and if the	Product name (description)
equipment unit is a plug-in, plug-on, mounting, shelf, bay, rack,	Product name (description)
cabinet, etc. Physical weight: Provide the metric weight of the unit (less	
	Technical Specifications
shipping container) SIST-TP FTSI/TR 102 214 V Electrical requirements: Reference the manufacturers dards/sist/75	L.L.1.2005
specifications for current type, cycles per second, voltage, power	9e5a53-229b-4e8a-9db5- Technical Specifications
consumption, fusing requirements, etc.	4-VI-1-1-2005
Alarm features: Reference the Manufacturer's recommended	
specifications for alarming equipment units	Technical Specifications
Testing information: Reference the Manufacturer's	
specifications for testing each equipment unit or item	Technical Specifications
Hazardous materials: Alert the PNO that there is a	
Manufacturers hazardous material warning and recommendations	SDoC and certification marks
for product disposal	
Downloadable software feature: This would identify that the	
equipment unit is capable of receiving down loadable software	Product structure/Technical Specifications
from an external source	·
Equipment slot requirements: Specify the quantity of slots	Due done to a tomostome (Tomboulous) Our anification of
required to install the equipment unit	Product structure/Technical Specifications
Equipment slot locations: Specify the slot locations on an	Tachnical Cresifications
associated shelf where this equipment unit can be mounted	Technical Specifications
Maximum allowable quantities: Identify how many shelves,	
magazines, etc. can be equipped in a cabinet, bay or rack. (This	Technical Specifications
is different than circuit capacity)	
Total quantity of equipment slots: Identify the total number of	Technical Specifications
slots being provided by the equipment mounting	recinical Specifications
System information: How many equipment units and shelves	
are required to initiate a system (i.e. DBM2000 - one shelf, Titan	Product structure
5500-multiple shelves, etc.)	
Installation environmental: Identifies acceptable conditions for	
equipment installation application (exterior, interior, dry, wet, dust	Installation guide
free, etc.)	
Equipment installation: Identifies if the equipment is designed	Installation guide
for pole mounts, ground level, cabinet, etc. installations	