



- ADSL
- VDSL
- SHDSL
- GigE
- LTE
- ISDN
- POTS
- Cu
- TDR
- Copper Box
- Data
- IP TV
- Vo IP
- MOS
- PESQ
- PC
- USB
- WLAN

# ARGUS<sup>®</sup> 155

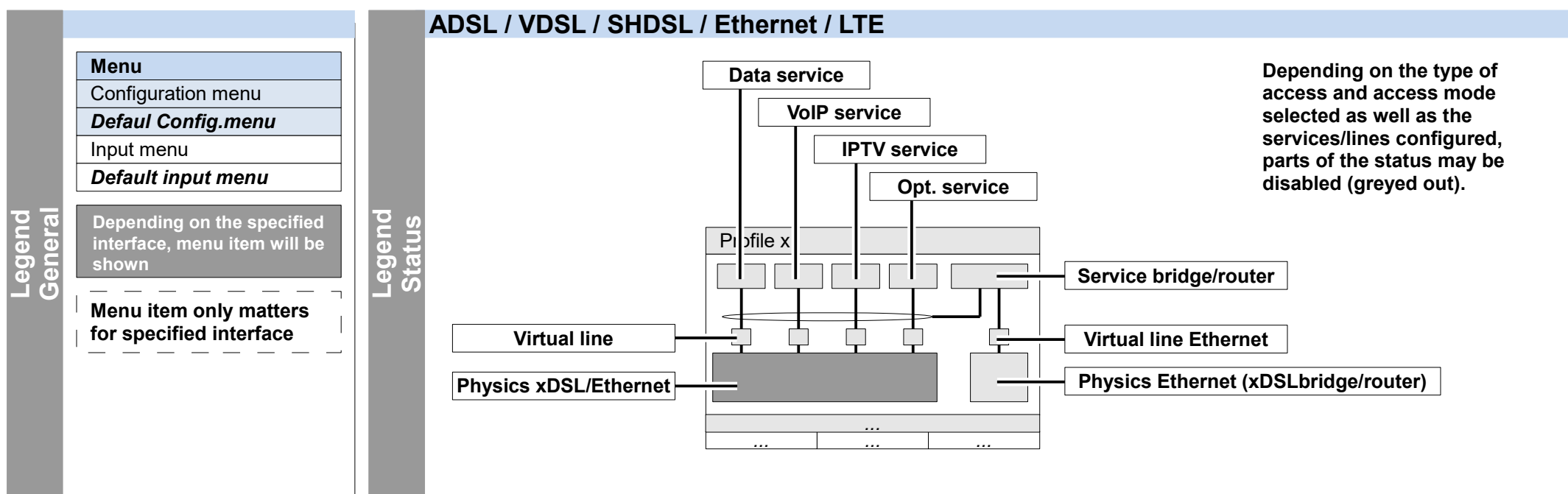
» *Overview of menu  
and test leads*

*valid from firmware version R2.90.00*



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IPTV / passive / scan	28
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ADSL / VDSL / SHDSL / Ethernet / LTE

Access	ADSL				VDSL				SHDSL						ETH			LTE						
	ATM		EFM		TDM		ITC		HDLC															
Mode	ATU-R	ATU-R bridge	ATU-R router	2 port access	VTU-R	VTU-R bridge	VTU-R router	2 port access	STU-R	STU-C	STU-R bridge	STU-R router	2 port access	STU-R	STU-C	STU-R	STU-C	STU-R	STU-C					
Socket	Line	Line	LAN/SFP	Line	LAN/SFP	LAN/SFP	Line	Line	Line	LAN/SFP	Line	LAN/SFP	LAN/SFP	Line	Line	Line	Line	Line	Line	LAN 1	LAN 2	SFP 1	USB	
Protocol	ATM/Ethernet																							
without	-	without	a	a					a	a	a													
IP	-	IP			a																			
	Yes	EoA	•		•				•		•			•										
PPP	No	IPoA	•		•																			
	Yes	PPPoE	•		•				•		•			•										
PPTP	No	PPPoA	•		•																			
	-	PPTP																			•	•	•	

• – Protocol configurable (see page 19)  
a – Protocol set automatically

**Note** The basic ARGUS 155 package includes support for at least one DSL interface (ADSL, VDSL or SHDSL) with a variety of functions and tests for the interface(s). Support for other interfaces and functions is optional (see the options in the data sheet). Consequently, depending on the scope of the functions delivered, certain menu items may be hidden. The type of access and access mode can affect this, too.

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### Menu Hotkeys

ADSL / VDSL / SHDSL / Ethernet / LTE					BRI S / BRI U / PRI / POTS				Copper tests		
Key	ADSL / SHDSL ATM	VDSL / SHDSL EFM	Ethernet	LTE	Key	BRI S / BRI U	PRI	POTS	Key	Copper tests	Copper Box autotest
0	ARGUS status				0	ARGUS status			0	ARGUS status	-
1	Help hotkeys				1	Help hotkeys			1	Help hotkeys	-
2	VPI/VCI scan		-		2	Service check		-	2	-	-
3	IP ping				3	Supp. Serv. test		-	3	-	-
4	Trace route				4	Auto. Test		-	4	-	-
5	HTTP download				5	Test data to PC			5	Test data to PC	-
6	Test status				6	Test manager		-	6	-	-
7	FTP download				7	Numbers			7	-	QR code
8	Copper Box			-	8	-			8	Copper Box	-
9	IPTV				9	BERT start			9	-	-
⌂	Status				⌂	Level measuring	L1 status	Voltage measuring	⌂	-	-
⏪	VoIP call				⏪	Connection			⏪	-	-
* then 0	Access				* then 0	Access			* then 0	Access	-
* then 1	ARGUS info				* then 1	ARGUS info			* then 1	ARGUS info	-
* then 2	Restore config.				* then 2	Restore config.			* then 2	Restore config.	-
* then 3	Factory setting				* then 3	Factory setting			* then 3	Factory setting	-
* then 5	Test result upload (FTP)				* then 5	-			* then 5	-	-
* then 6	Test status				* then 6	Test manager		-	* then 6	-	-
* then 7	Store				* then 7	-			* then 7	-	Store
* then 8	Configuration import				* then 8	-			* then 8	-	-
* then 9	Firmware update				* then 9	-			* then 8	-	-

### Graphic hotkeys

ADSL / VDSL / RFC / xDSL trace		
Key	ADSL / VDSL	xDSL trace
0	-	-
1	-	Legend
2	Zoom	-
3	Cursor	
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	x-axis setting	-
0	-	-
#	-	-
✓	Continue	-
⌂	-	-
* then 0	-	-
* then 7	Store	-

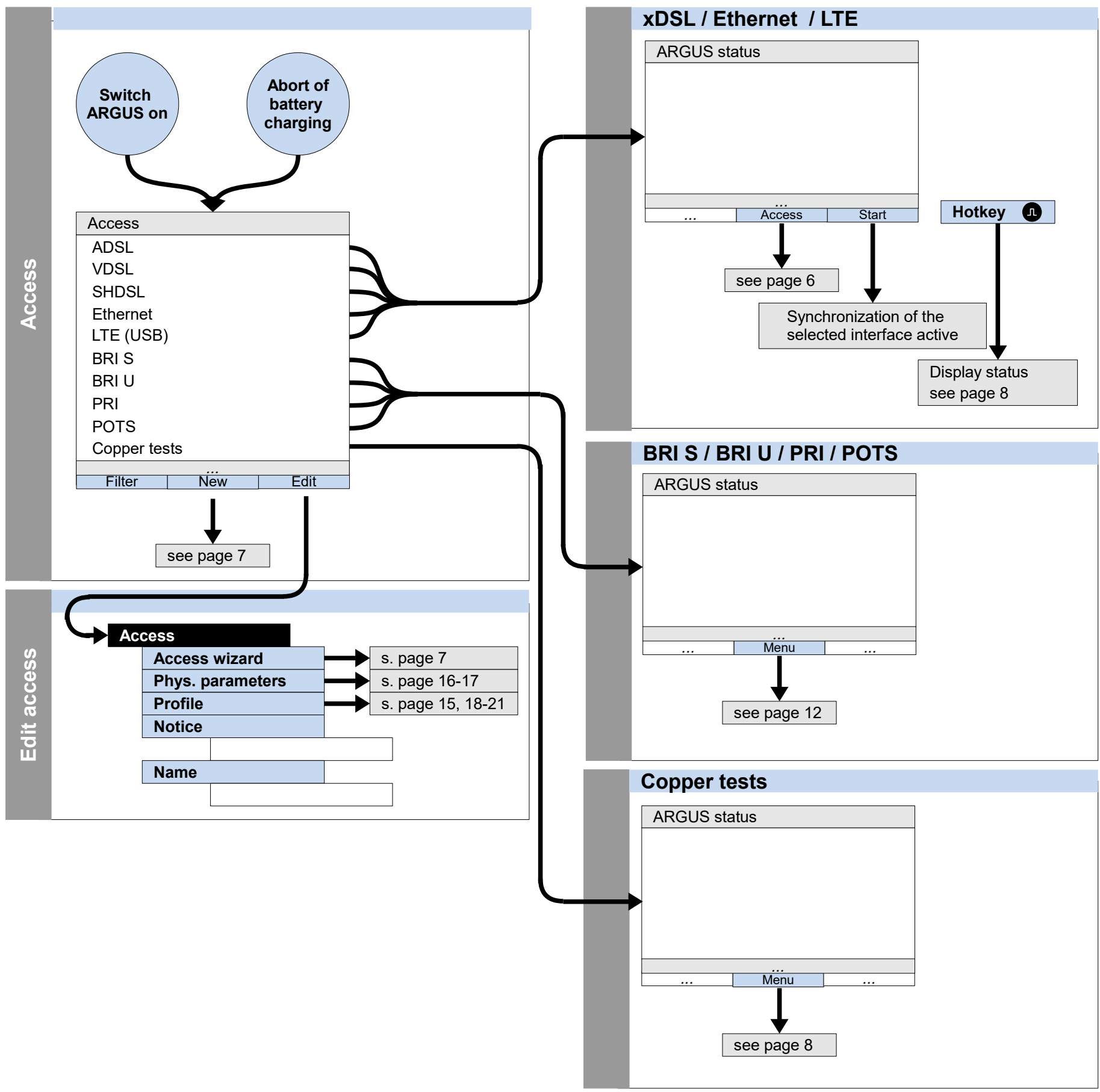
### Test hotkeys

Copper tests			
Key	Line scope (Frequency domain)	Line scope (Time domain)	TDR
0	-	-	-
1	-	-	-
2	Zoom	-	Zoom
3	Cursor		
4	Measurement range		
5	Total power	-	Pulse width/height
6	-	-	Wire type/VoP
7	Probe		
8	Symmetry		
9	Time domain	Frequency domain	-
0	Peak hold (min/max)		
#	100 Ohm Input resistance		
✓	-	-	-
⌂	Run/Hold		
* then 0	Reference curve		
* then 7	Store		



### Cross reference:

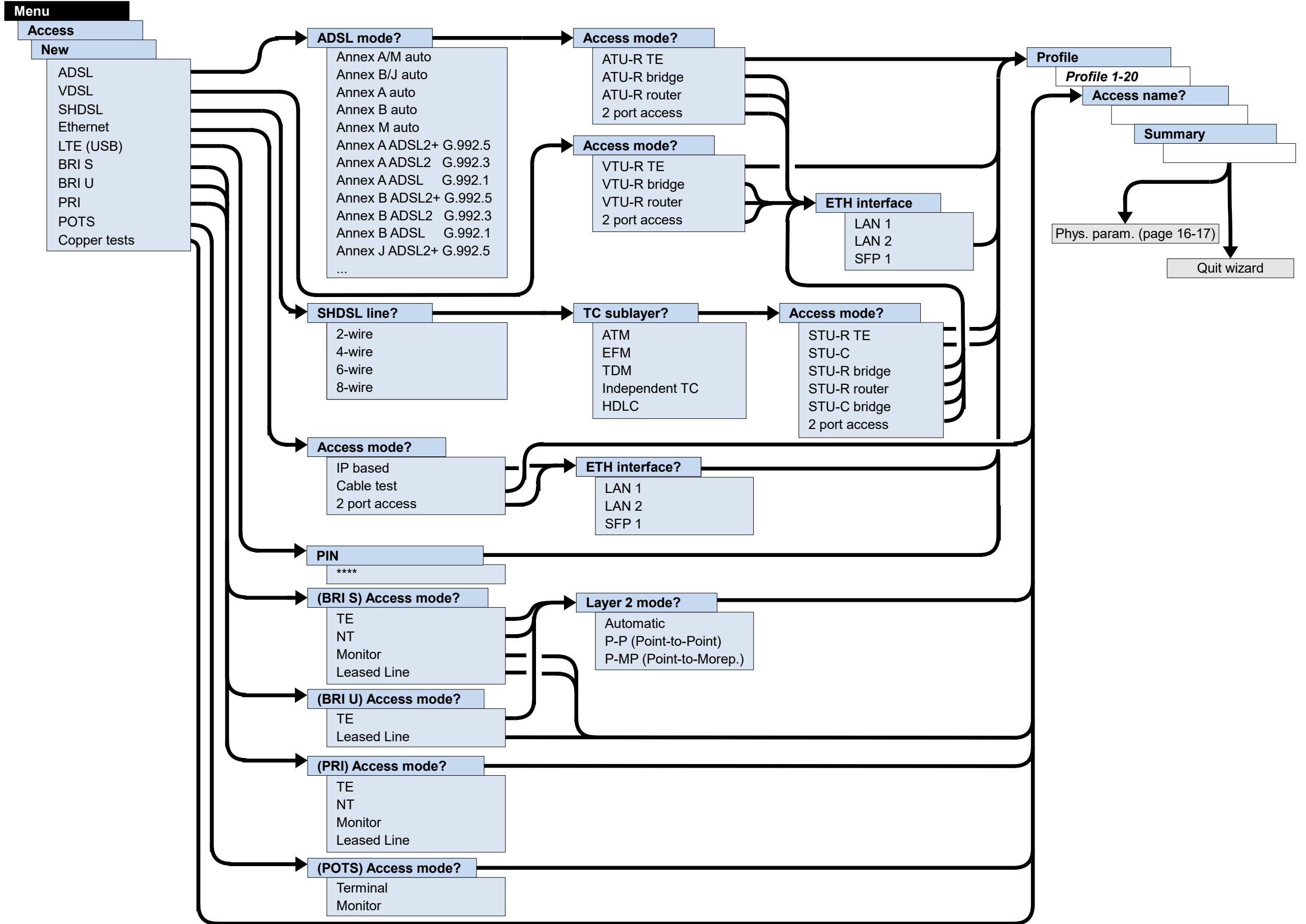
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Access wizard

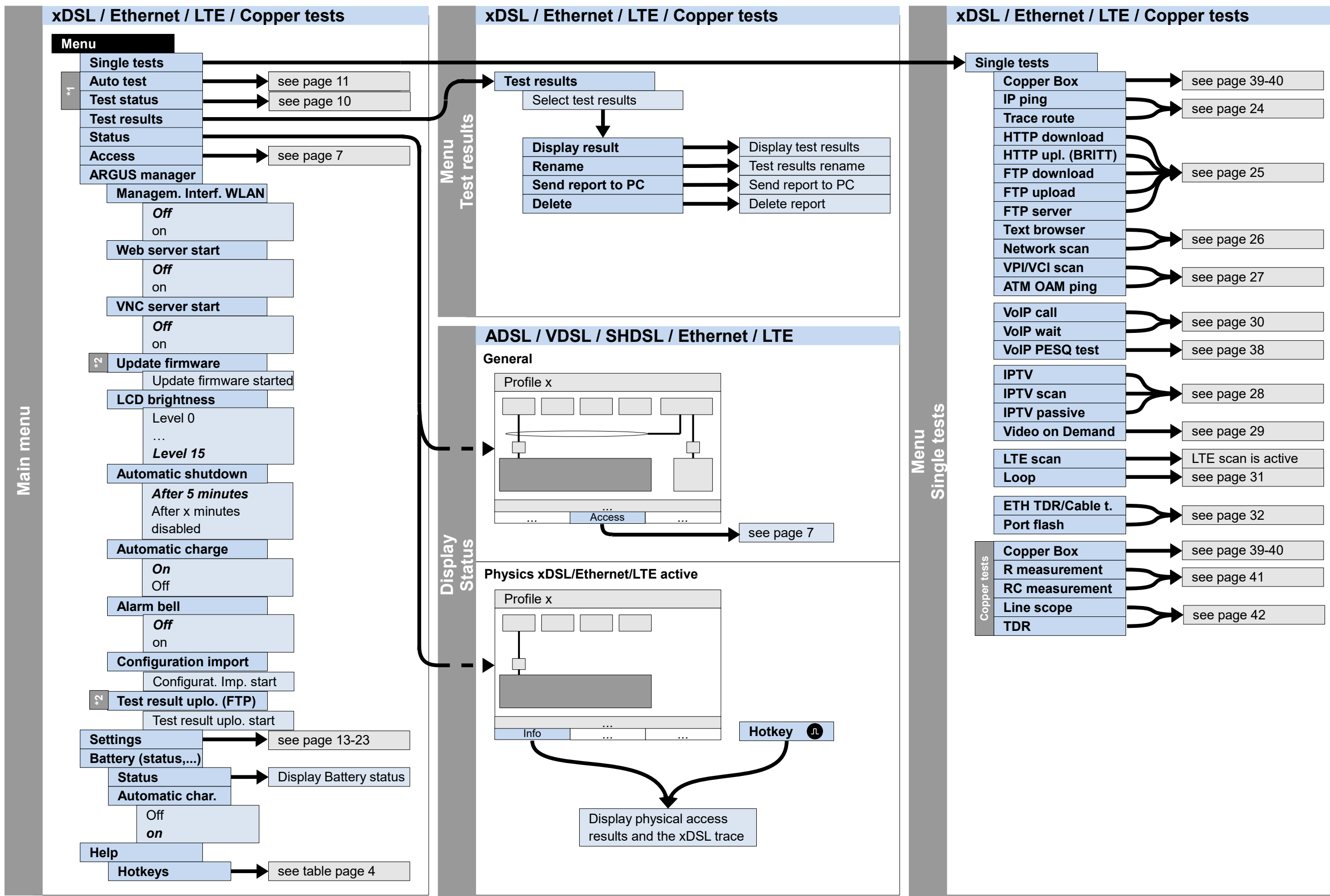


# Main menu, Single tests, Test results, Status

(Access: ADSL, VDSL, SHDSL, Ethernet, LTE, Copper tests)

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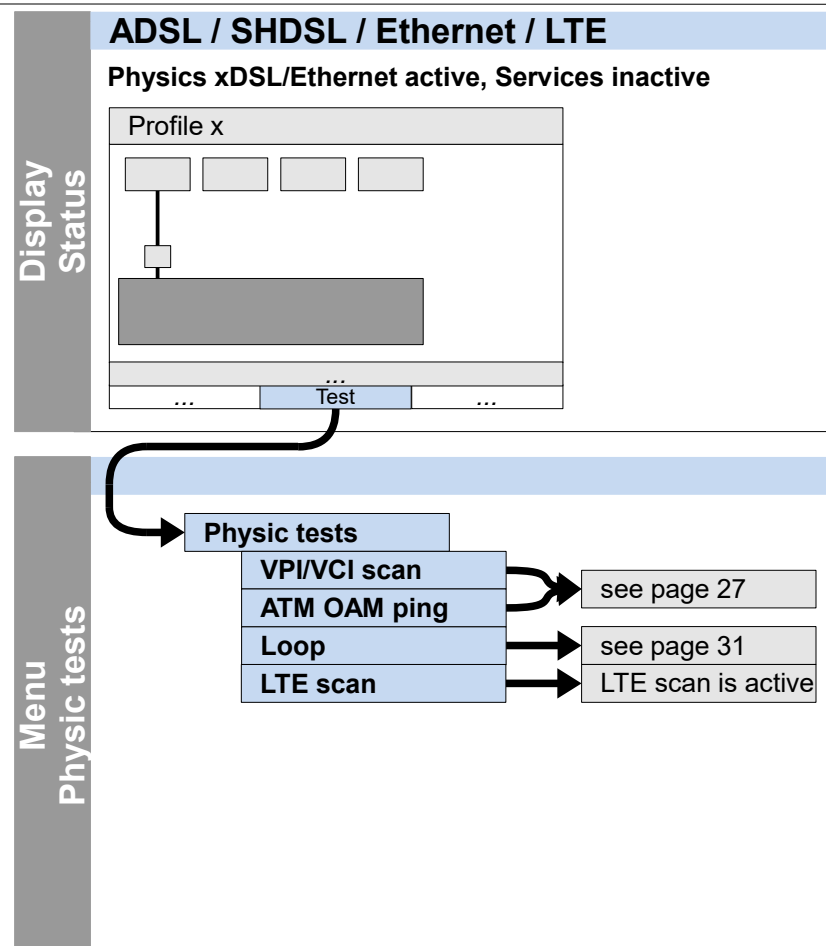
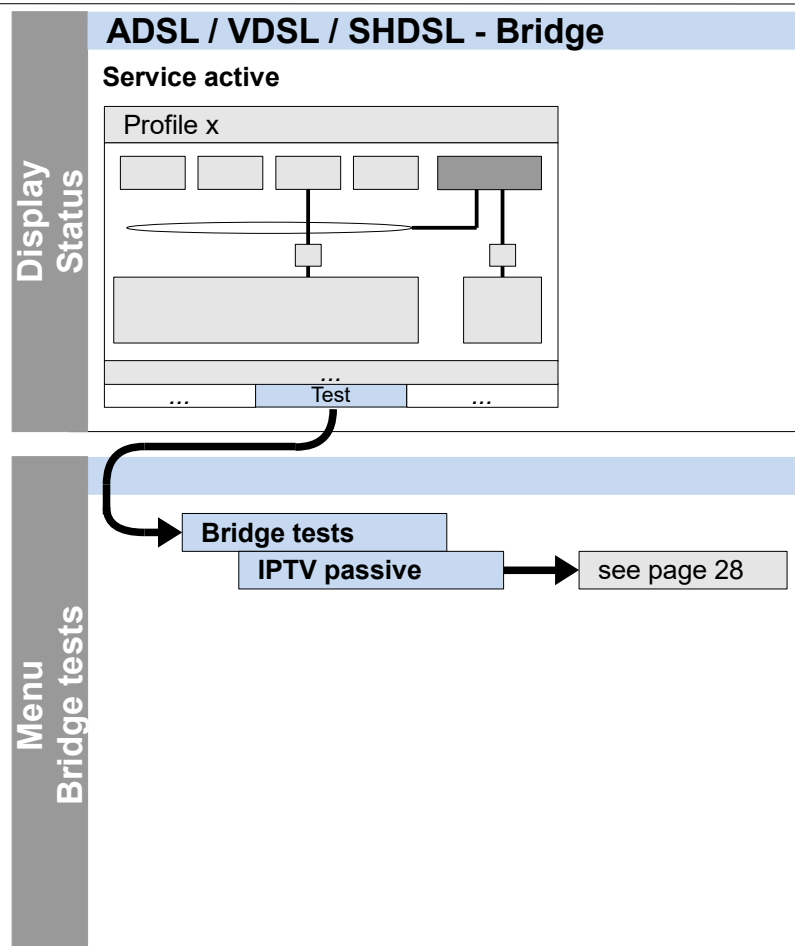
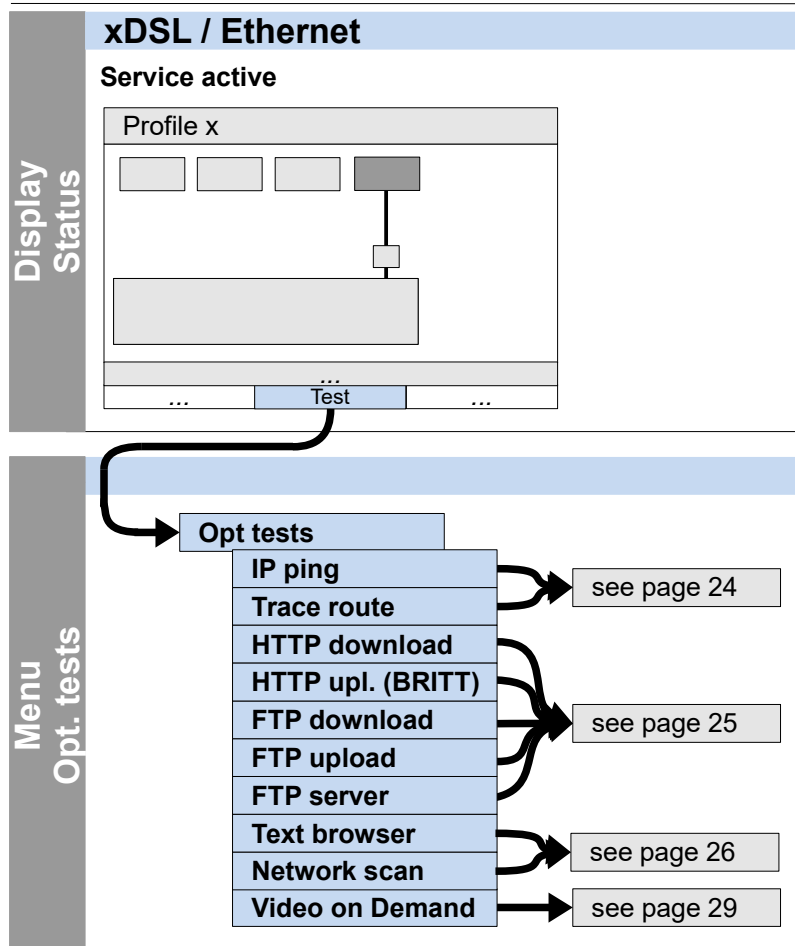
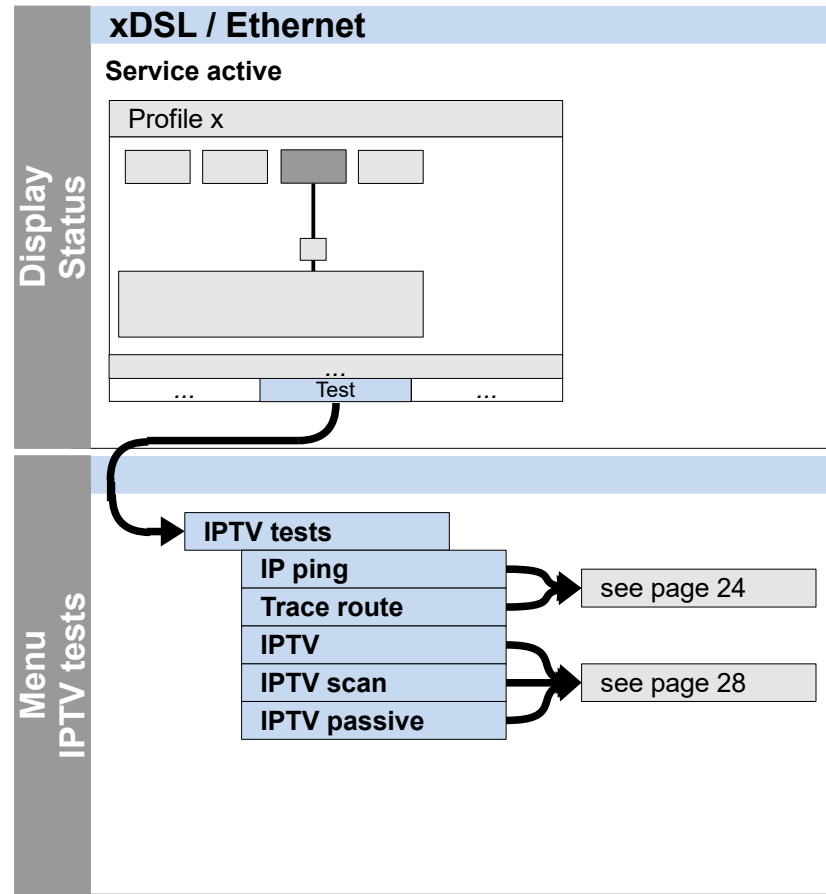
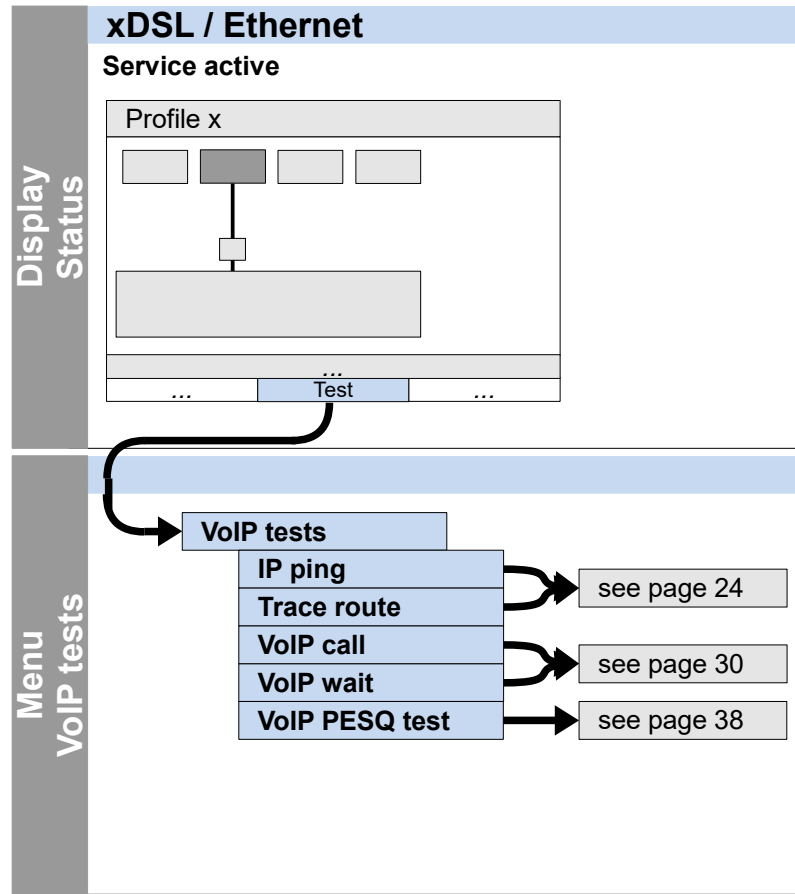
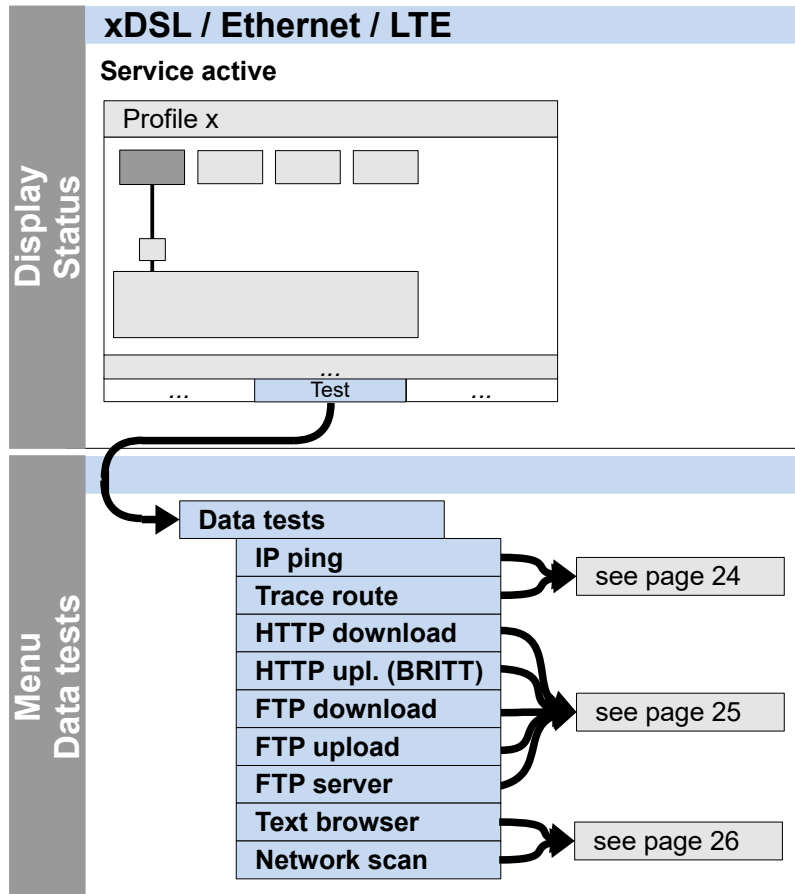


**Note**

- \*1 = ADSL, VDSL, SHDSL, Ethernet
- \*2 = not for Copper tests

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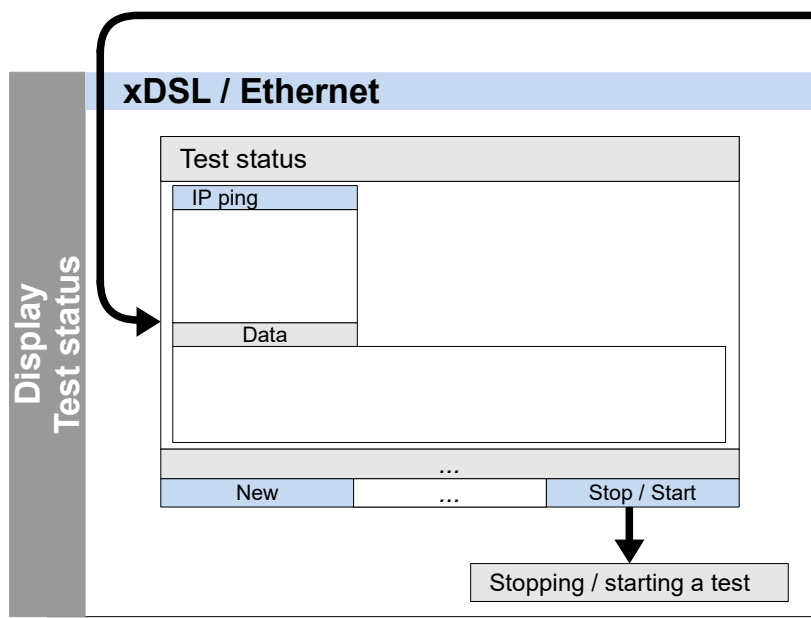
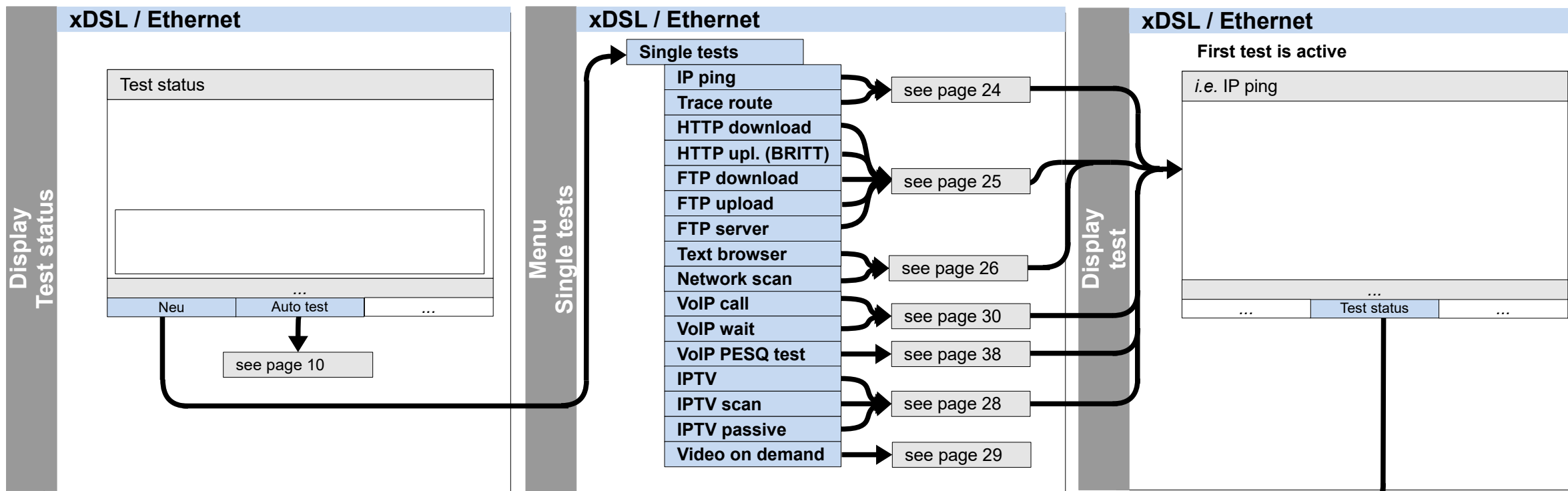


# Service tests: Parallel tests

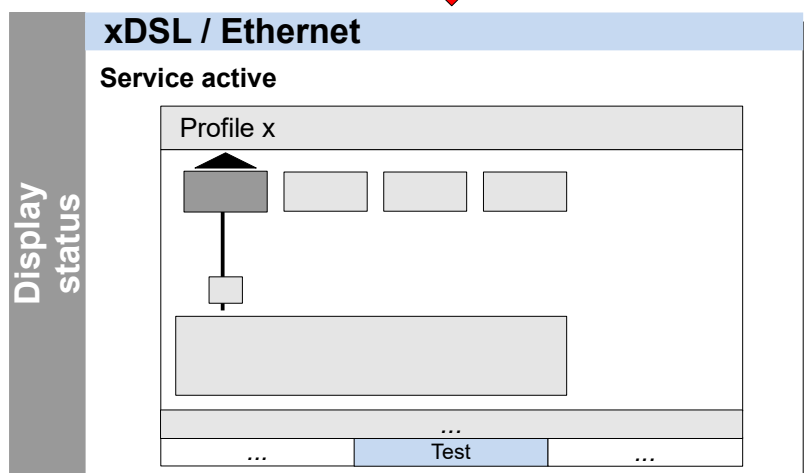
## Test status

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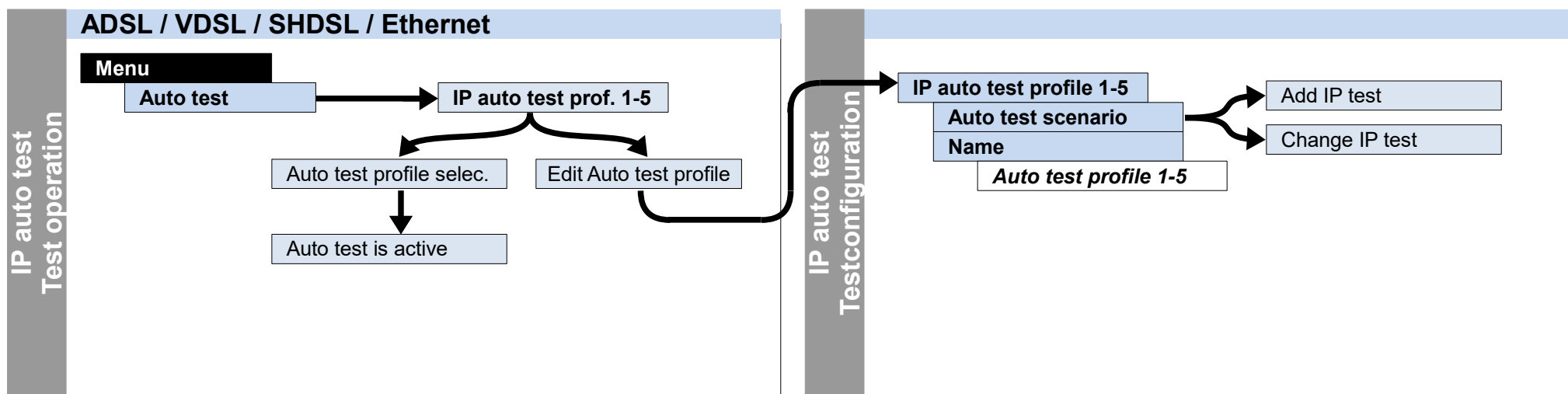
Using the cursor keys for switching between status and Test status.



**Note** The display and operation of VoIP and IPTV tests are presented in the same way as for Data tests.

**Cross reference:**

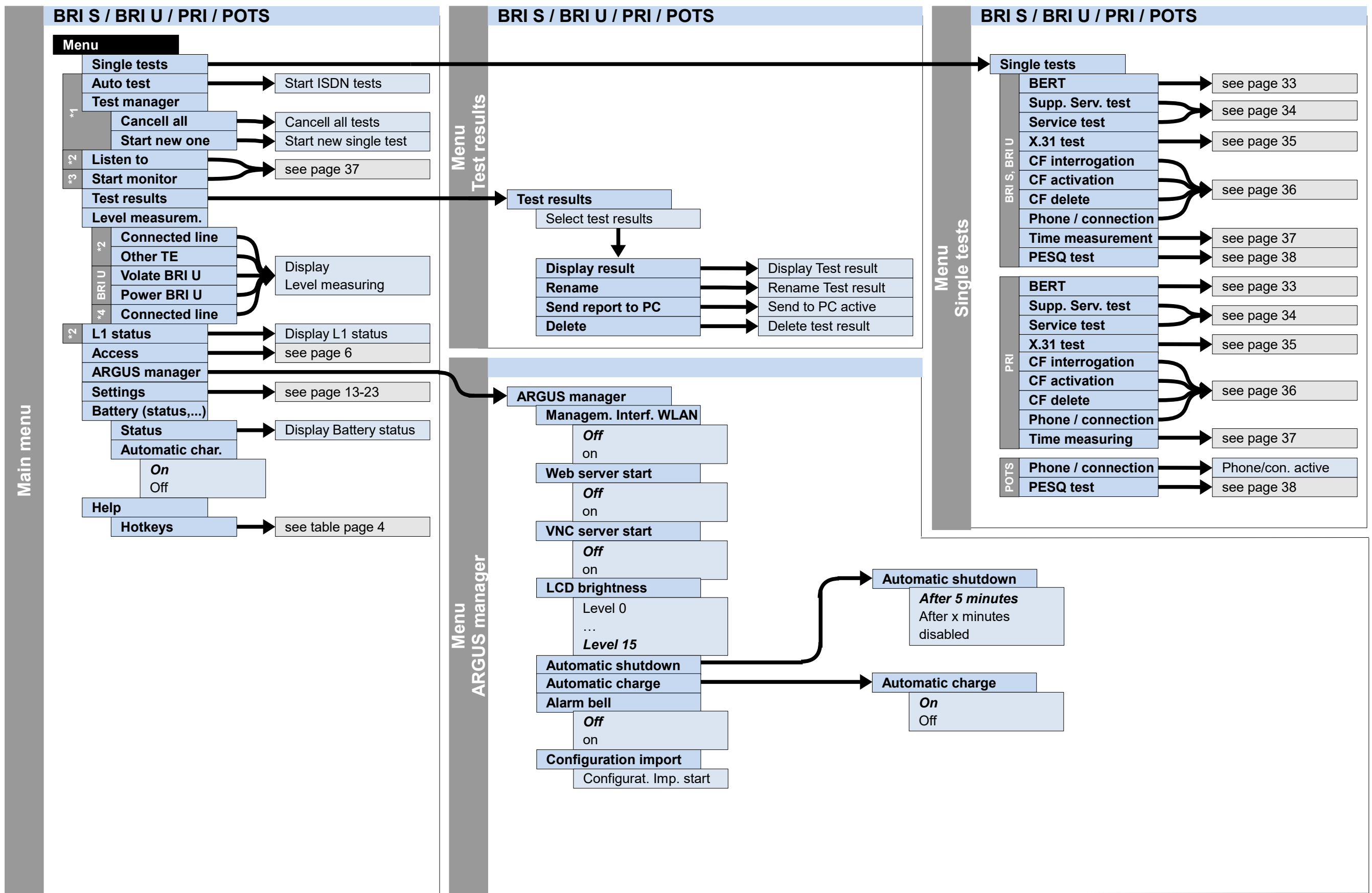
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Main menu, Single tests, Test results  
(Access: BRI S, BRI U, PRI, POTS)

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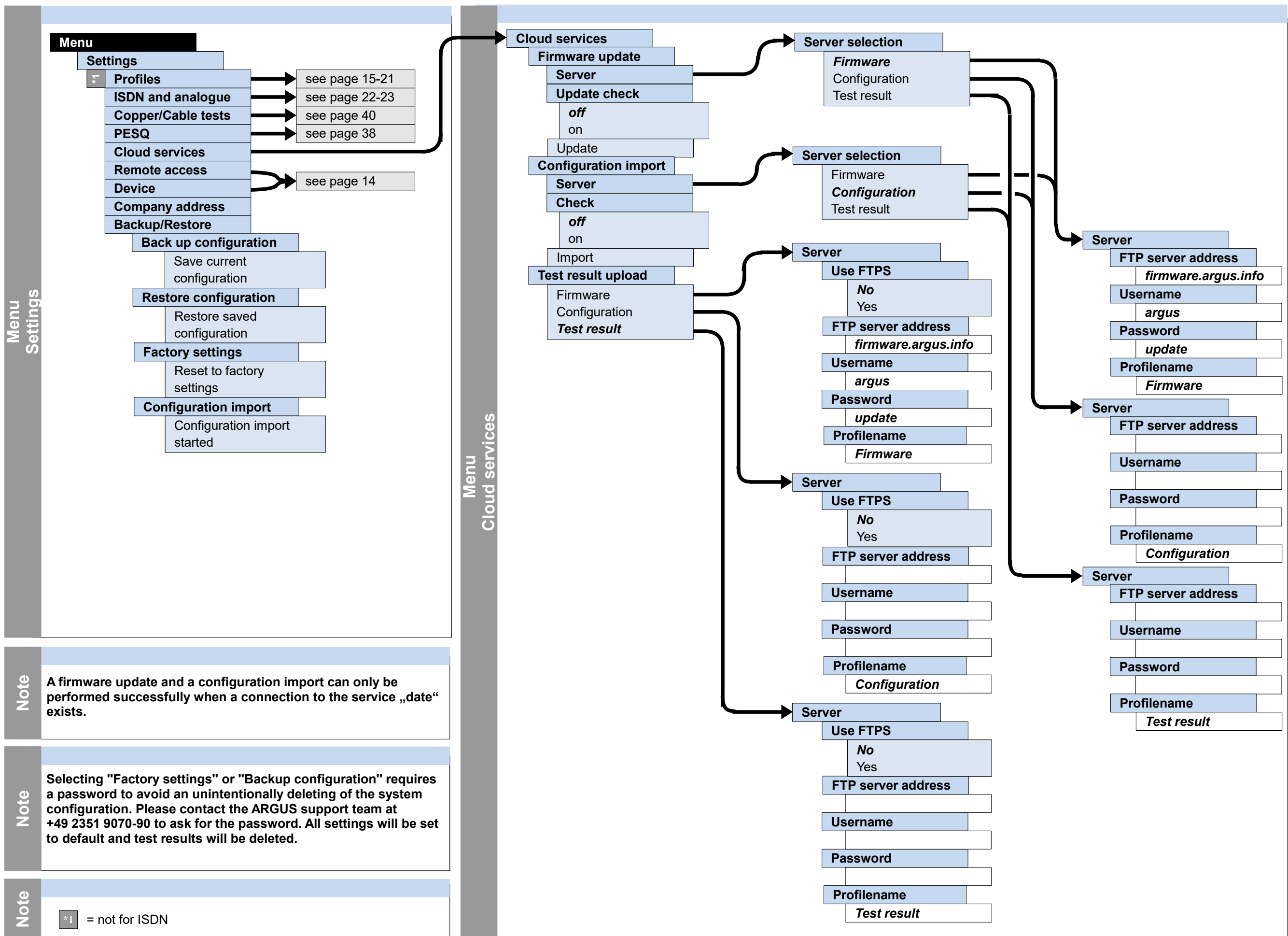
**Note**

\*1 = BRI S, BRI U, PRI    \*4 = POTS  
 \*2 = BRI S, PRI  
 \*3 = BRI S, PRI, POTS

# Settings and reset Numbers, Backup/Restore, Cloud services

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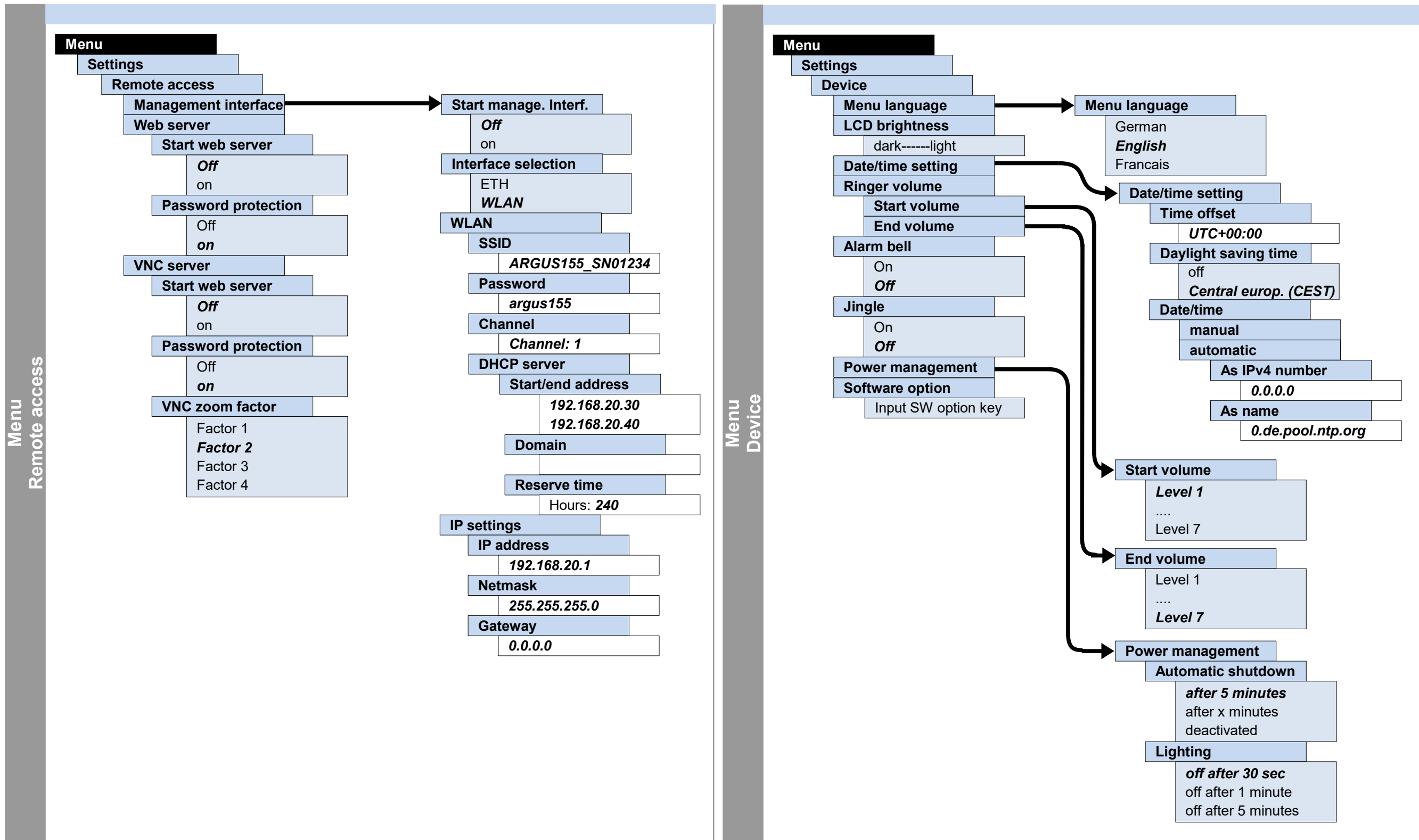


# Settings and reset

## Remote access, Device

### Cross reference:

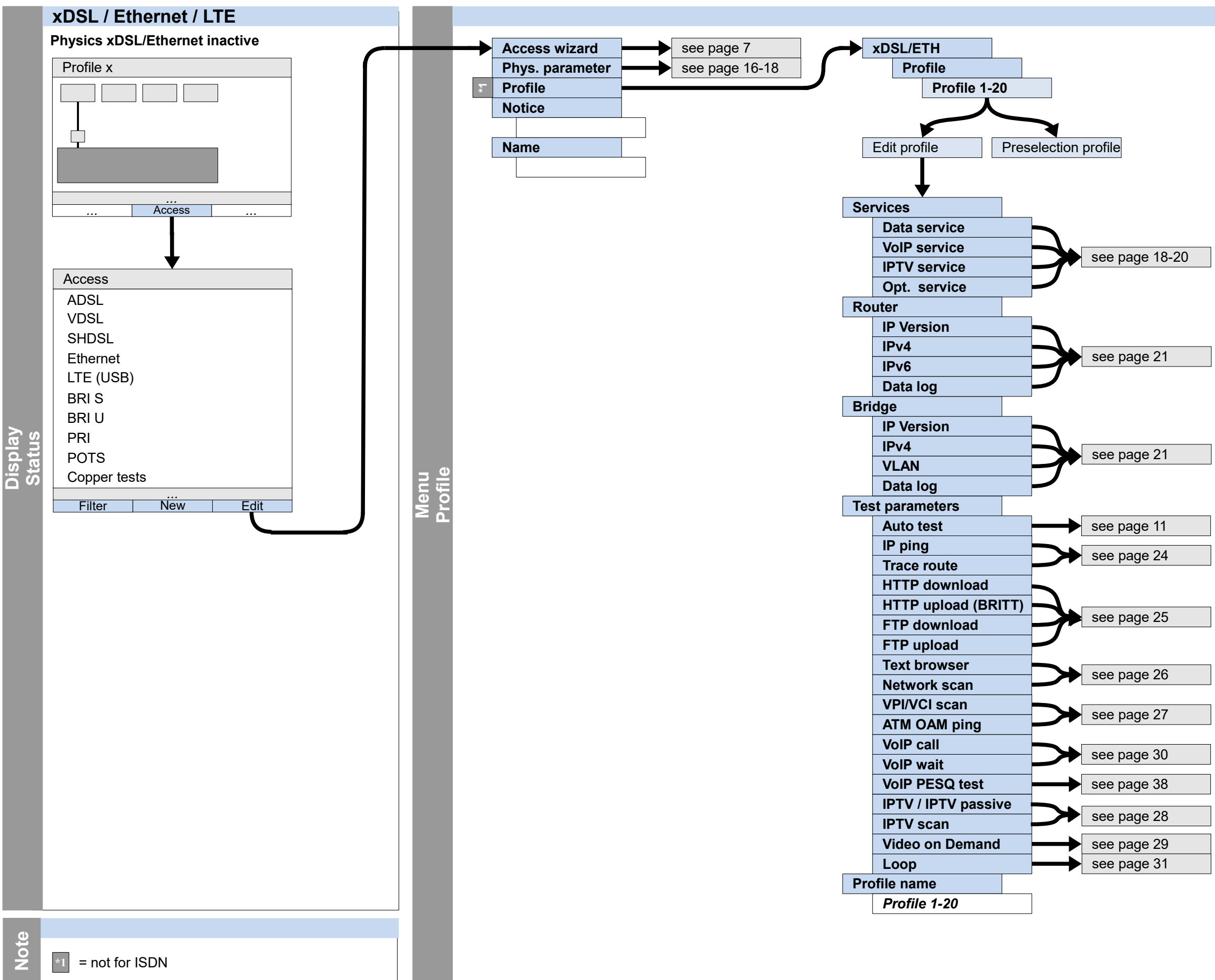
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# Settings Profile

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## Phys. parameters: ADSL, VDSL, Ethernet, LTE

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**ADSL**  
Physics ADSL inactive

Profile x

Display ADSL Status

Edit ...

**VDSL**  
Physics VDSL inactive

Profile x

Display VDSL Status

Edit ...

**Ethernet**  
Physics Ethernet inactive

Profile x

Display ETH Status

Edit ...

**LTE**  
LTE inactive

Profile x

Display LTE - Status

Edit ...

**Menu ADSL**

- ADSL
  - Rated/threshold values
    - Bitrate
      - Downstream: 0 kbit/s
      - Upstream: 0 kbit/s
    - CRC
      - far: \*
      - near: \*
    - FEC
      - far: \*
      - near: \*
    - HEC
      - far: \*
      - near: \*
    - INP/SNRM
      - Favour DS INP
      - Favour DS SNRM
    - Retransmission (G.INP)
      - off
      - Downstream
      - Upstream
      - Down- & upstream
    - MAC address
      - Default MAC address
      - Dynamic MAC address 00:00:00:00:00:00
      - free definable 00 00 00 00 00 00

**Menu VDSL**

- VDSL
  - Rated/threshold values
    - Bitrate
      - downstream: 0 kbit/s
      - upstream: 0 kbit/s
    - CRC
      - far: \*
      - near: \*
    - FEC
      - far: \*
      - near: \*
    - Firmware
      - A
      - B
    - Carrier Set
      - B 43
      - A 43
      - V 43
    - Vectoring mode
      - Off
      - Full vectoring
    - Retransmission (G.INP)
      - off
      - Downstream
      - Upstream
      - Down- & upstream
    - Suppress profile 30a
      - No
      - Yes
    - MAC address
      - Default MAC address
      - Dynamic MAC address 00:00:00:00:00:00
      - free definable 00 00 00 00 00 00

**Menu Ethernet**

- Ethernet
  - Autonegotiation
    - On
    - Off
    - MAC address
      - Default MAC address
      - Dynamic MAC address 00:00:00:00:00:00
      - free definable 00 00 00 00 00 00
  - Autonegotiation Off
    - Speed
      - 1000 Mbit/s
      - 100 Mbit/s
      - 10 Mbit/s
    - Duplex
      - Full
      - Half
    - Flow control
      - On
      - Off

**Menu LTE**

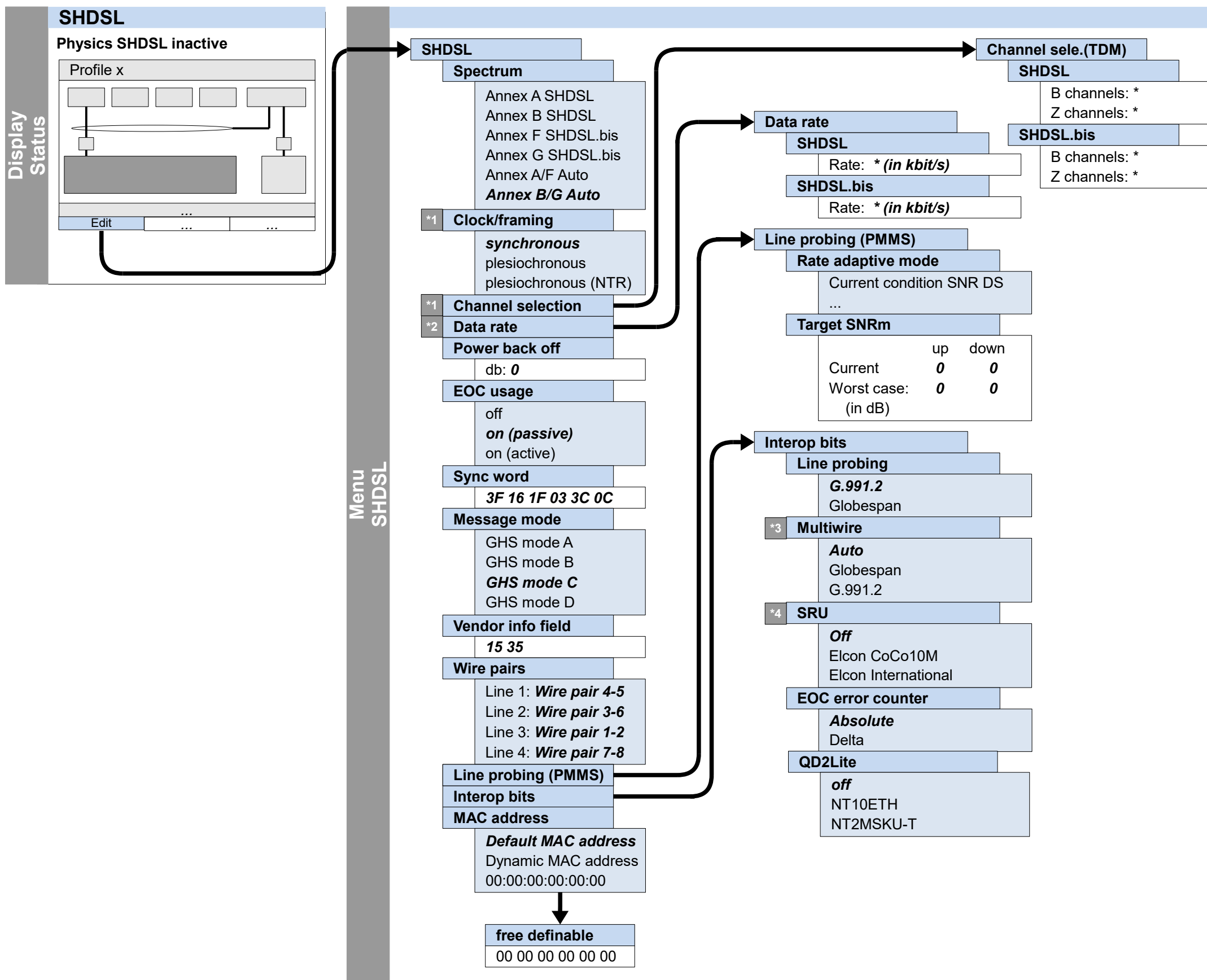
- LTE
  - Frequency band
    - Automatic
    - 800 MHz
    - 1800 MHz
    - 2600 MHz
  - PIN
    - \*\*\*\*

# Settings

## Phys. parameters: SHDSL

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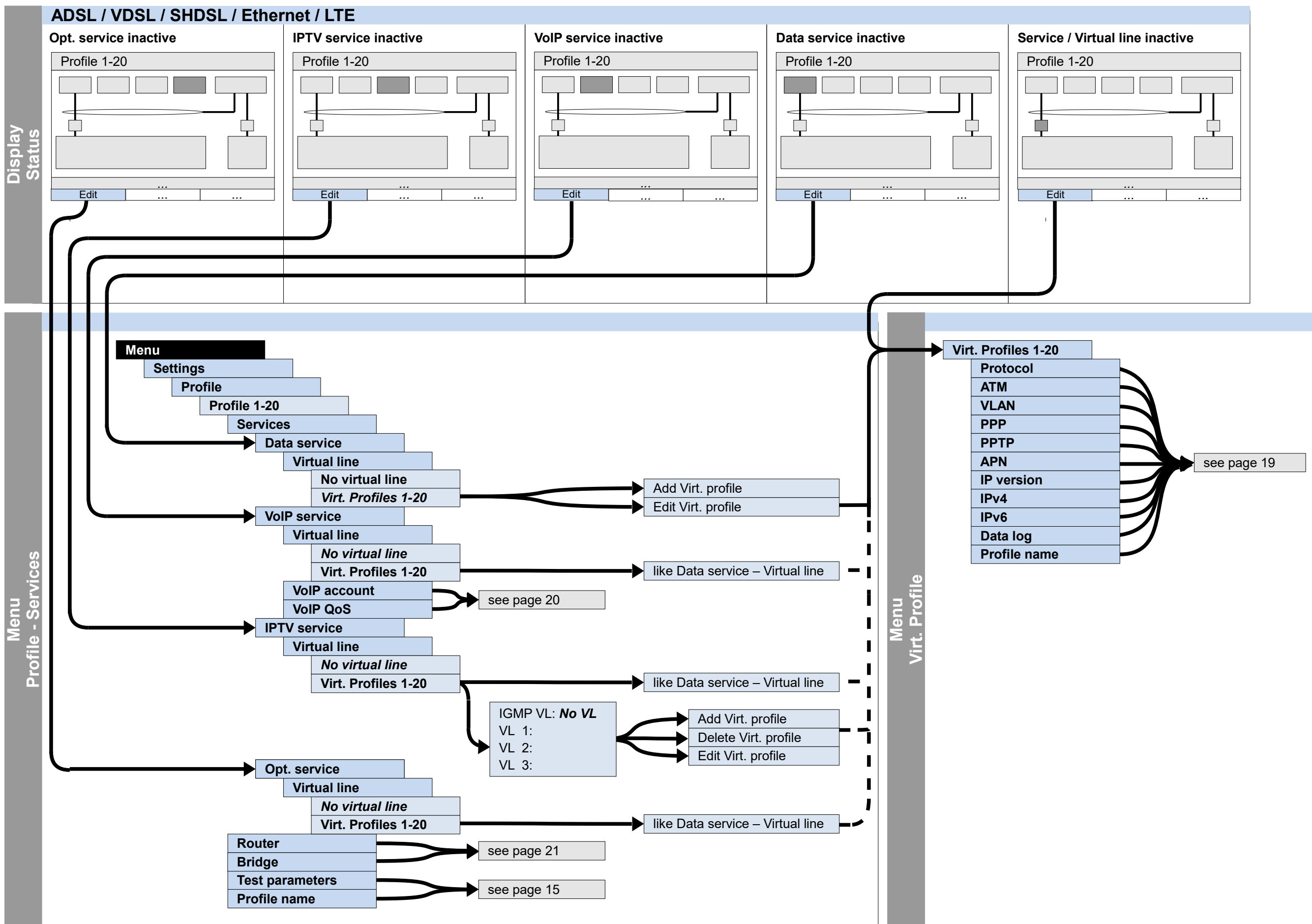
Note		
*1	= TDM, Independent TC, HDLC	*4 = EFM, Independent TC
*2	= ATM, EFM	
*3	= ATM, TDM	

# Settings

## Profile – Services (Data service, VoIP service, IPTV service, Opt. service), Virt. Profile

### Cross reference:

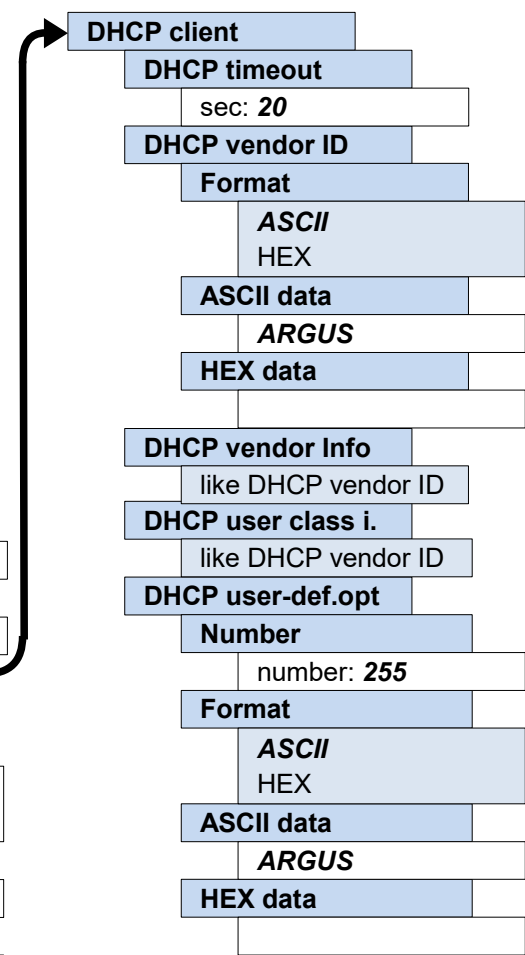
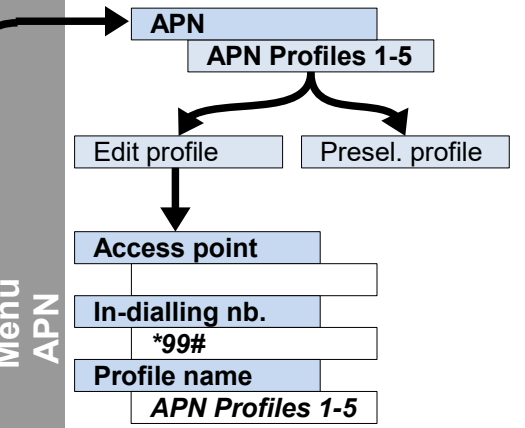
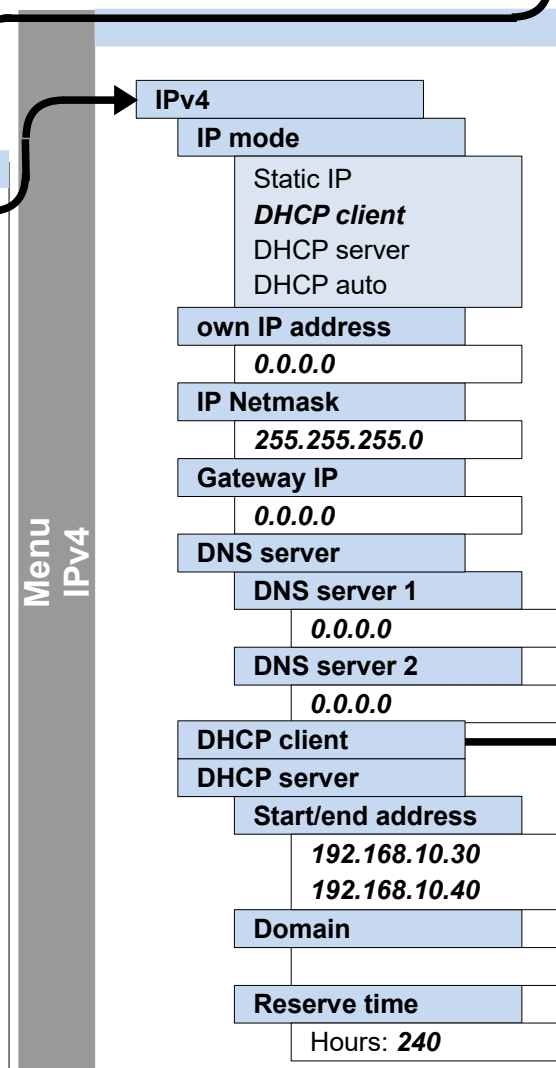
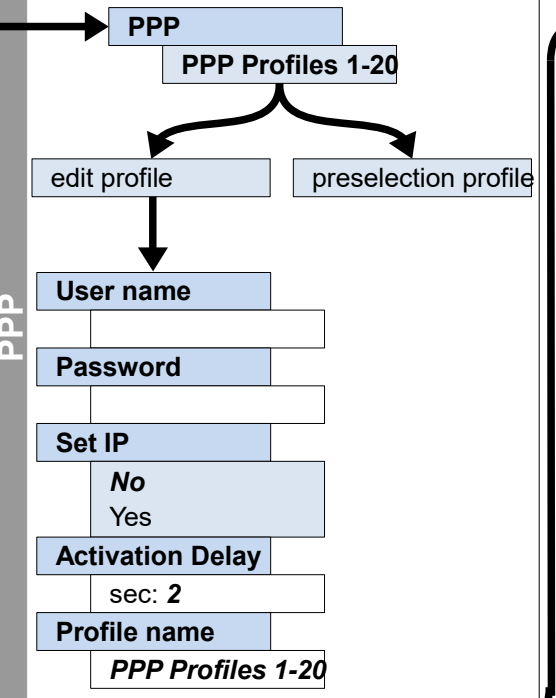
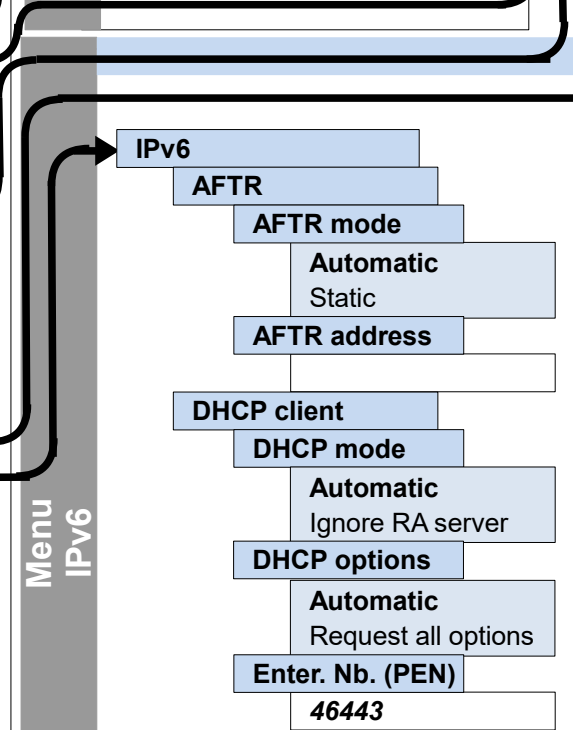
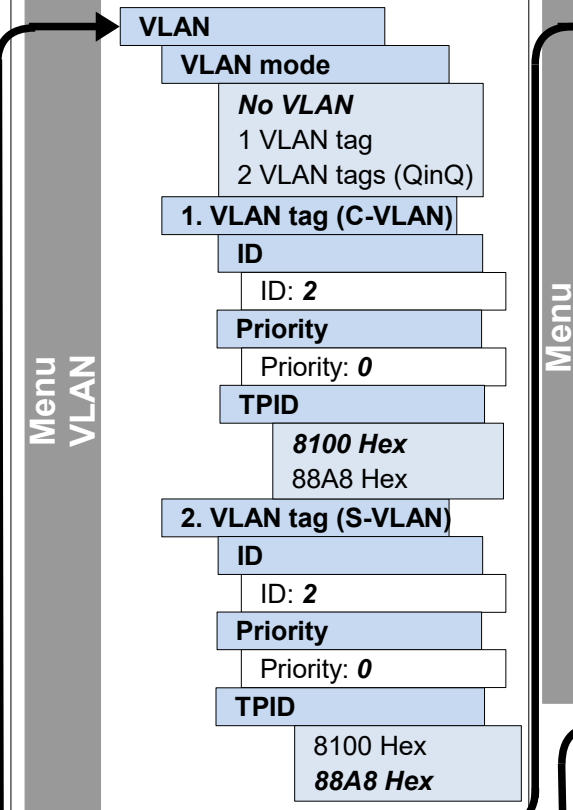
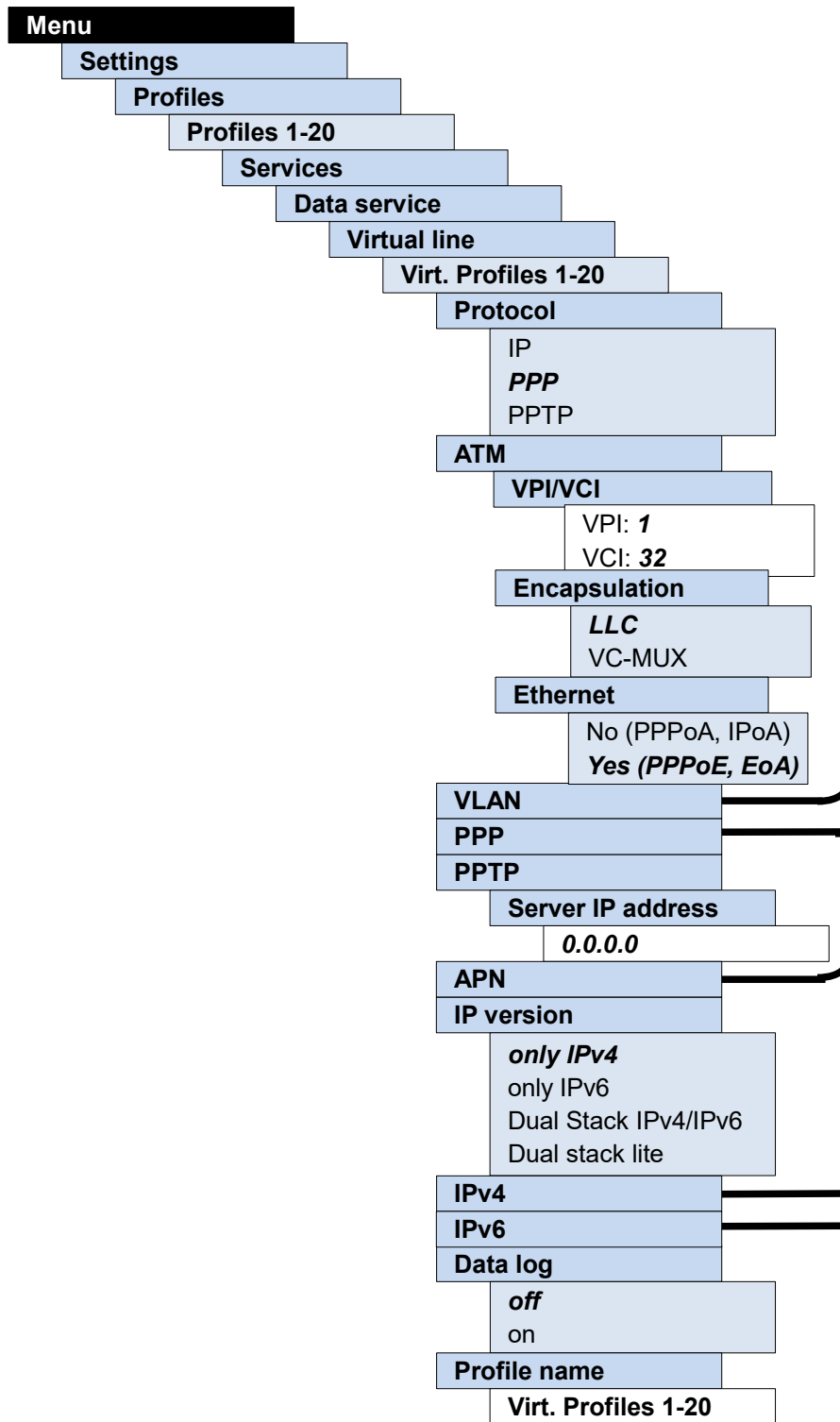
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Menu Profiles – Virt. profile



Note

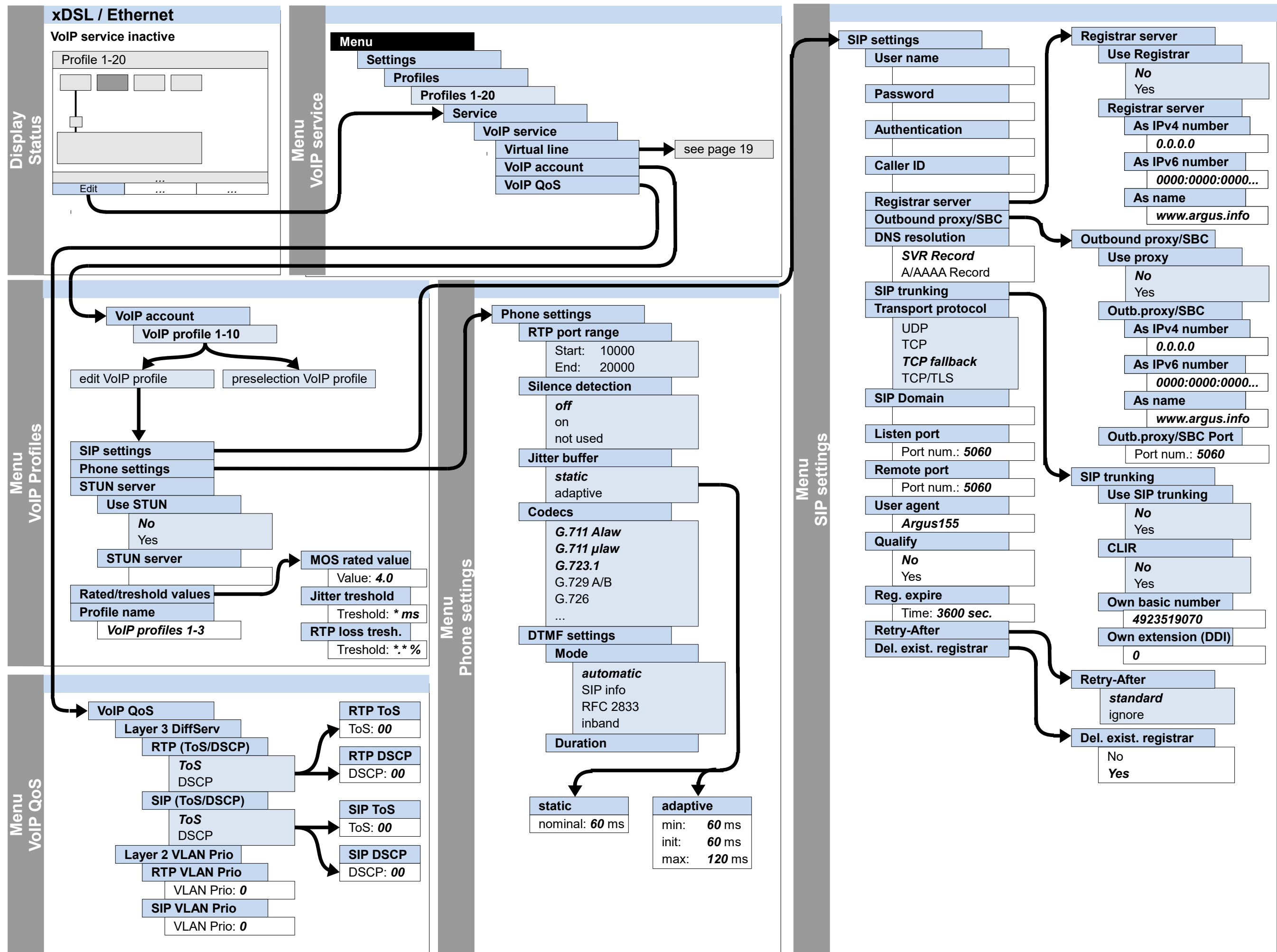
On page 3 you get a survey on the protocols, which are supported on the various interfaces.

# Settings

## Profiles – Services – VoIP service – VoIP account, VoIP QoS

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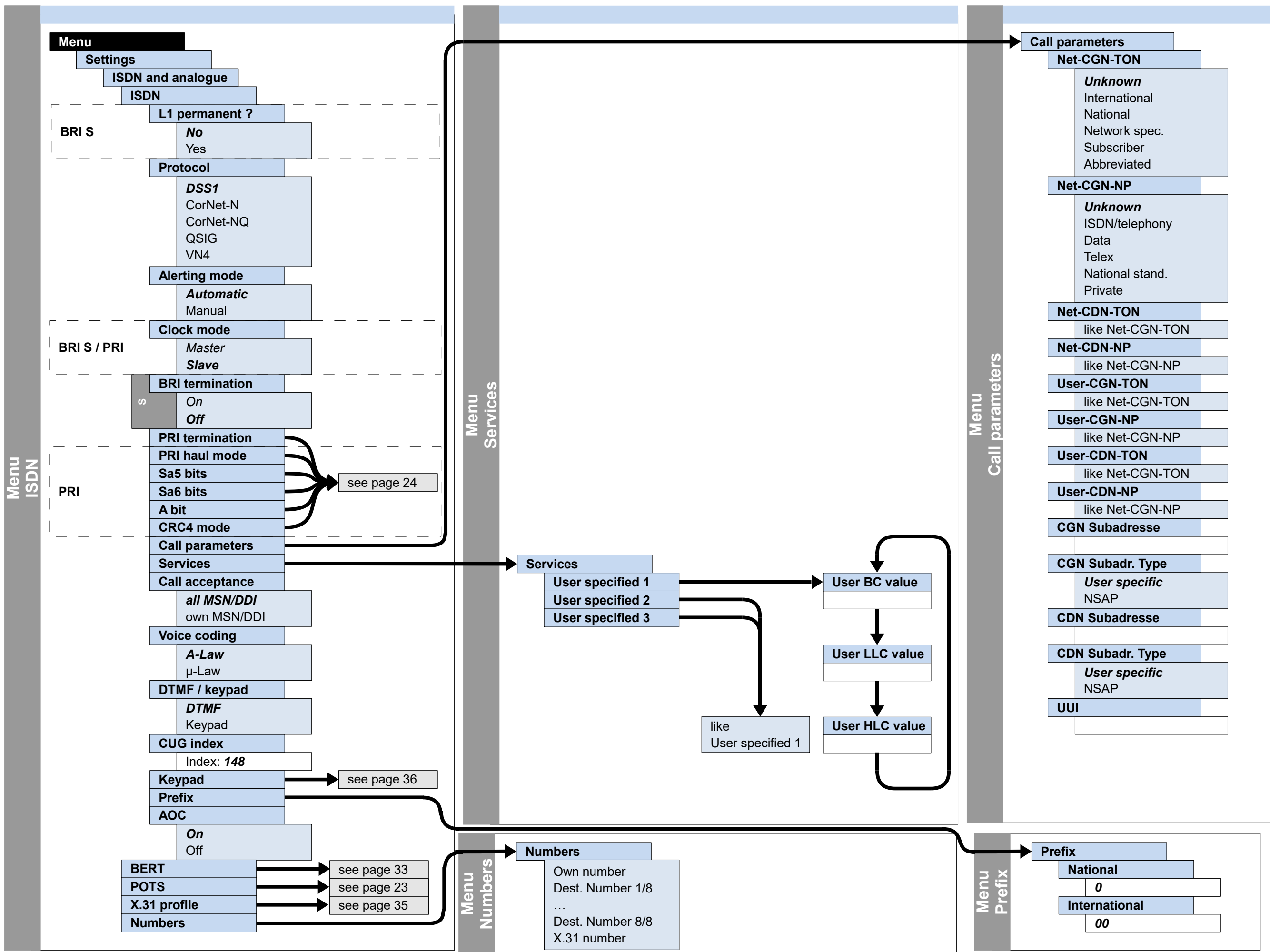


# Settings

## ISDN (General, BRI S, BRI U)

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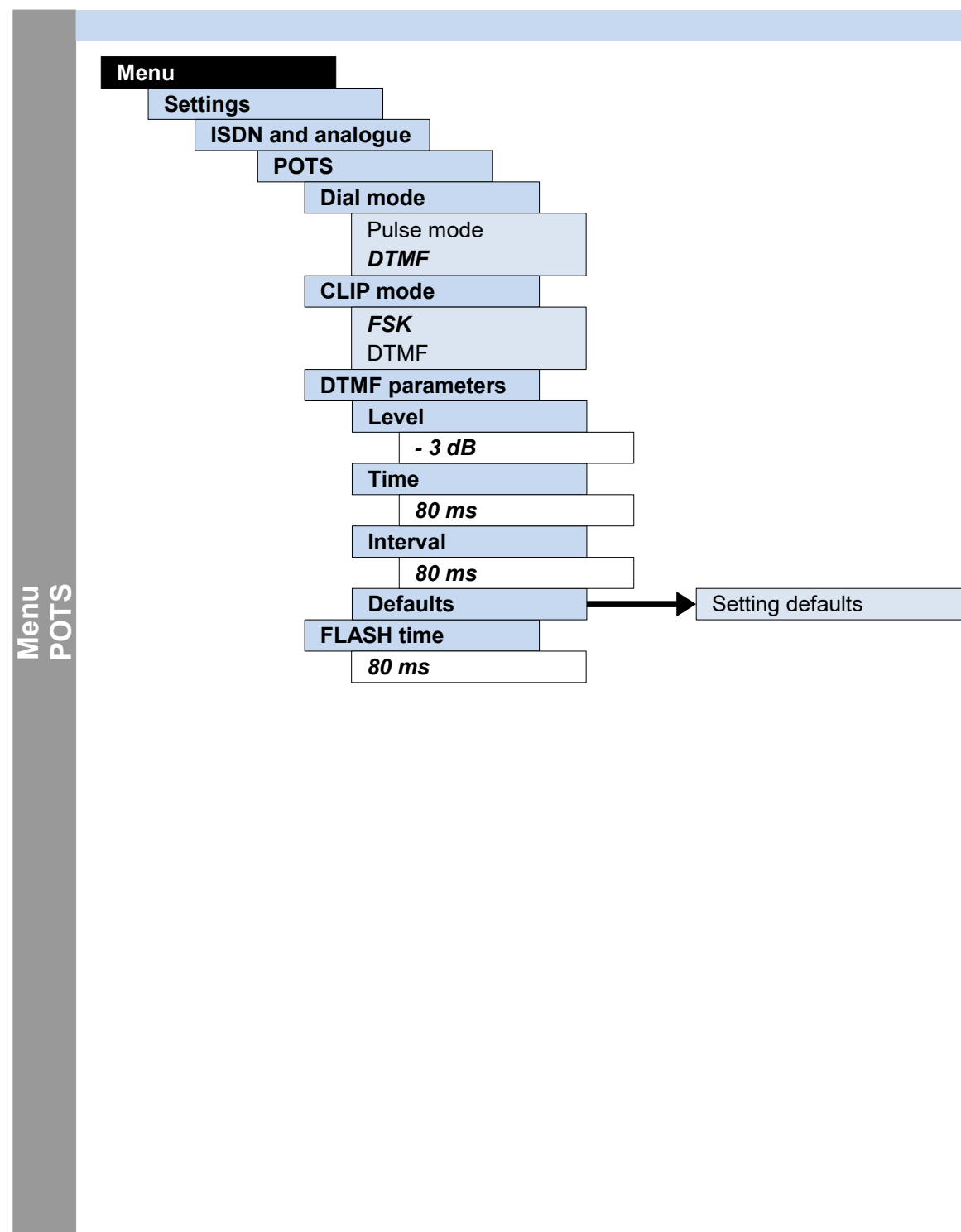
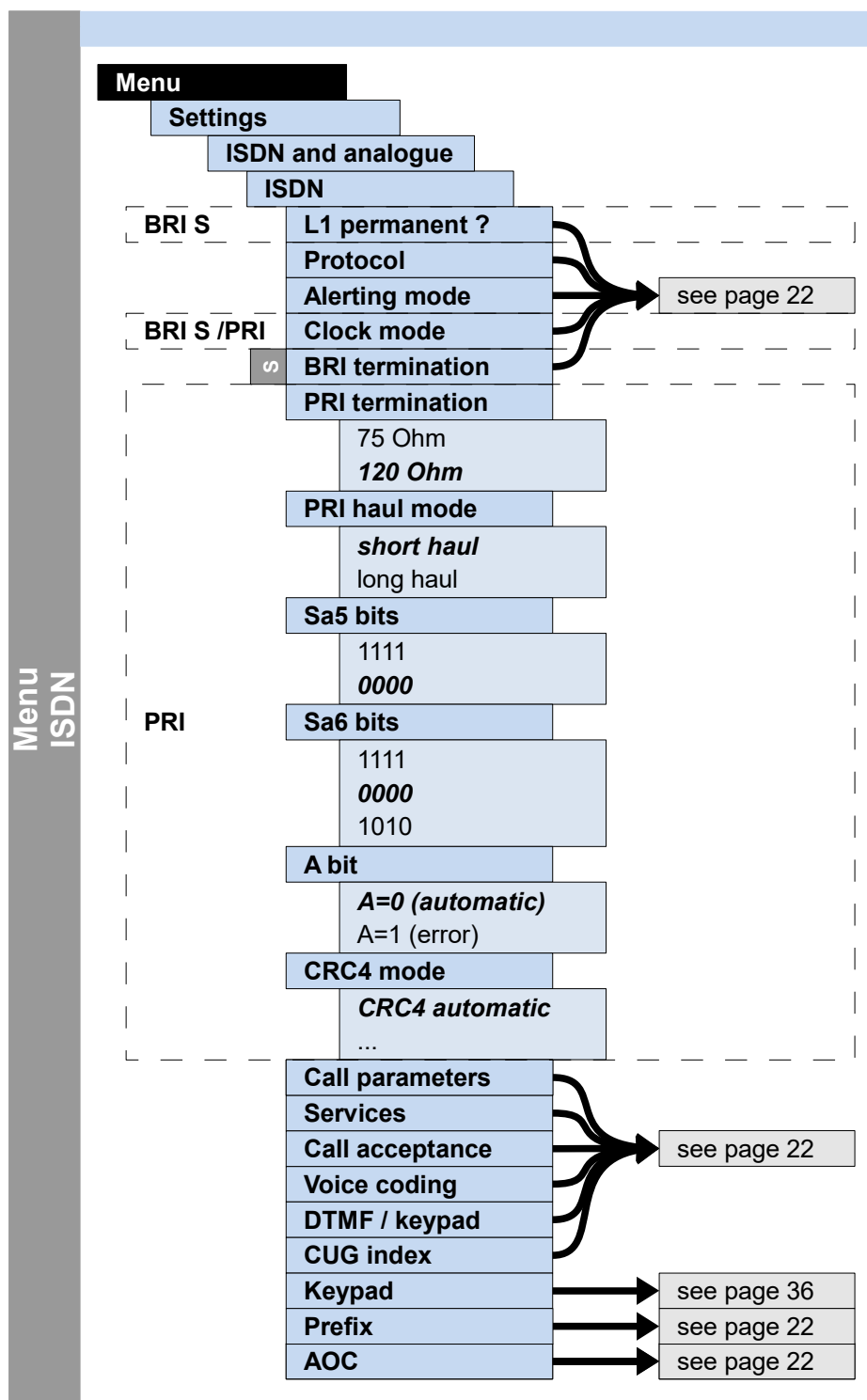


# Settings

## ISDN (PRI), POTS

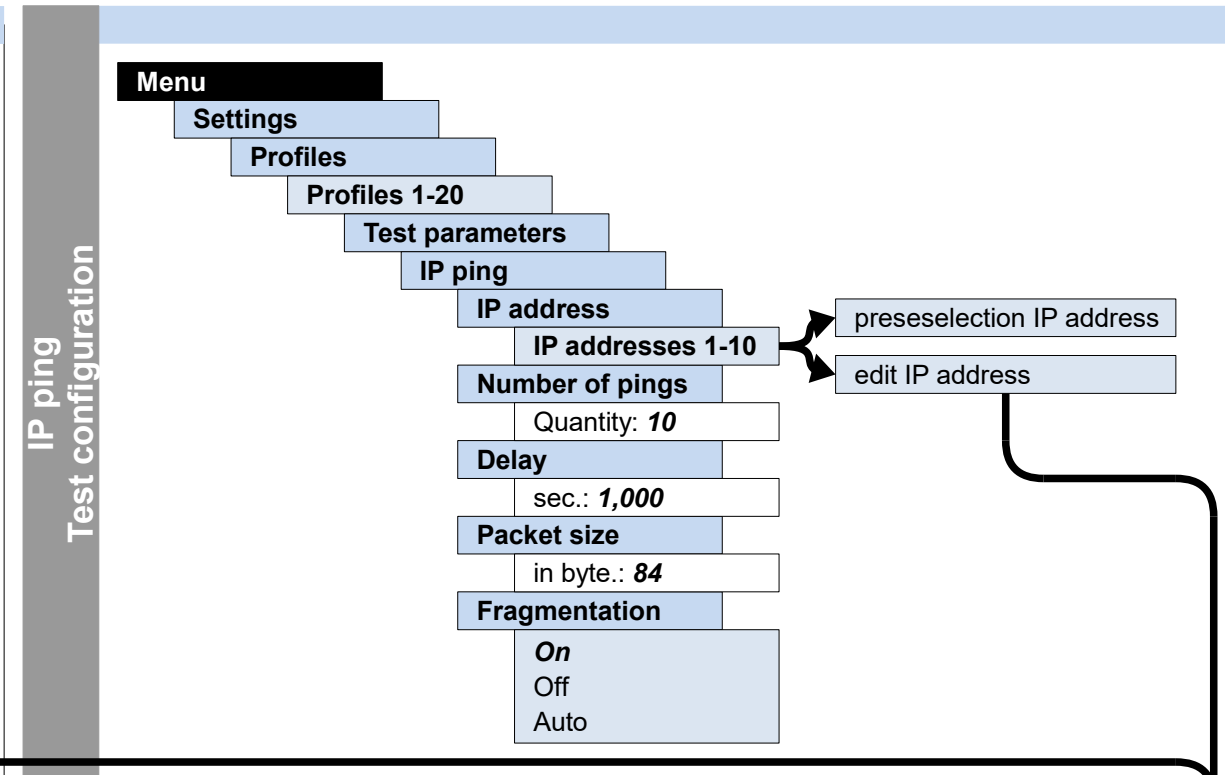
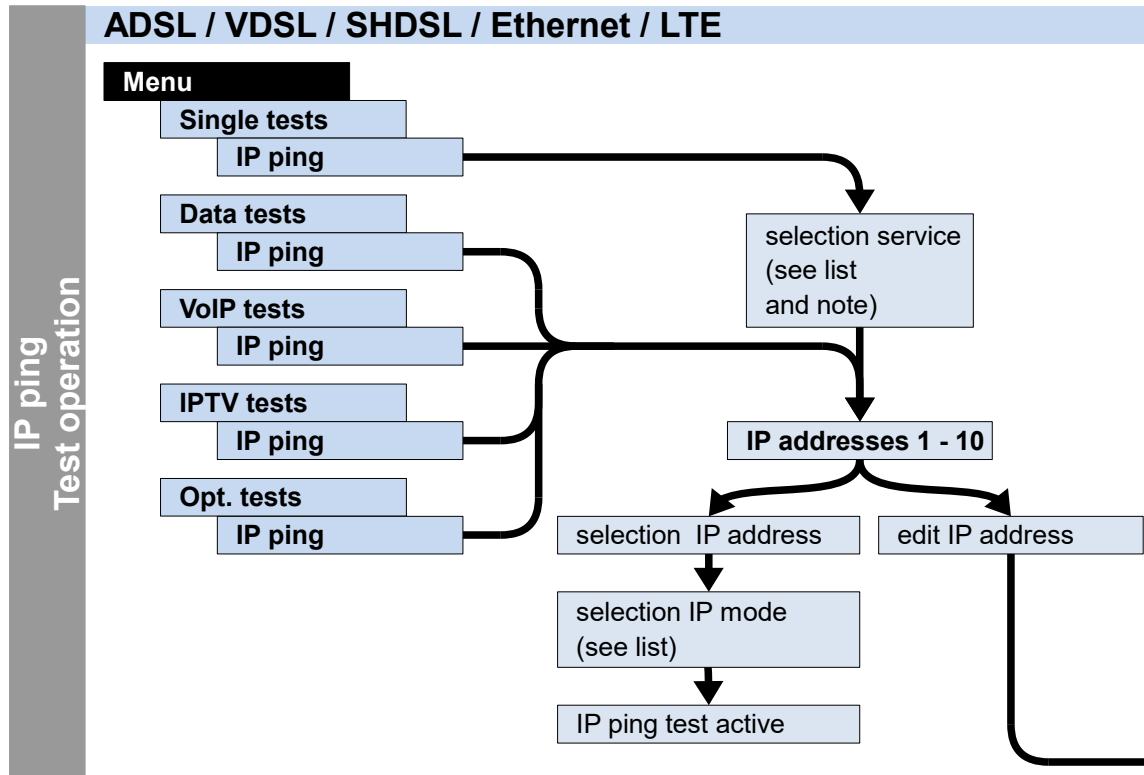
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### Cross reference:

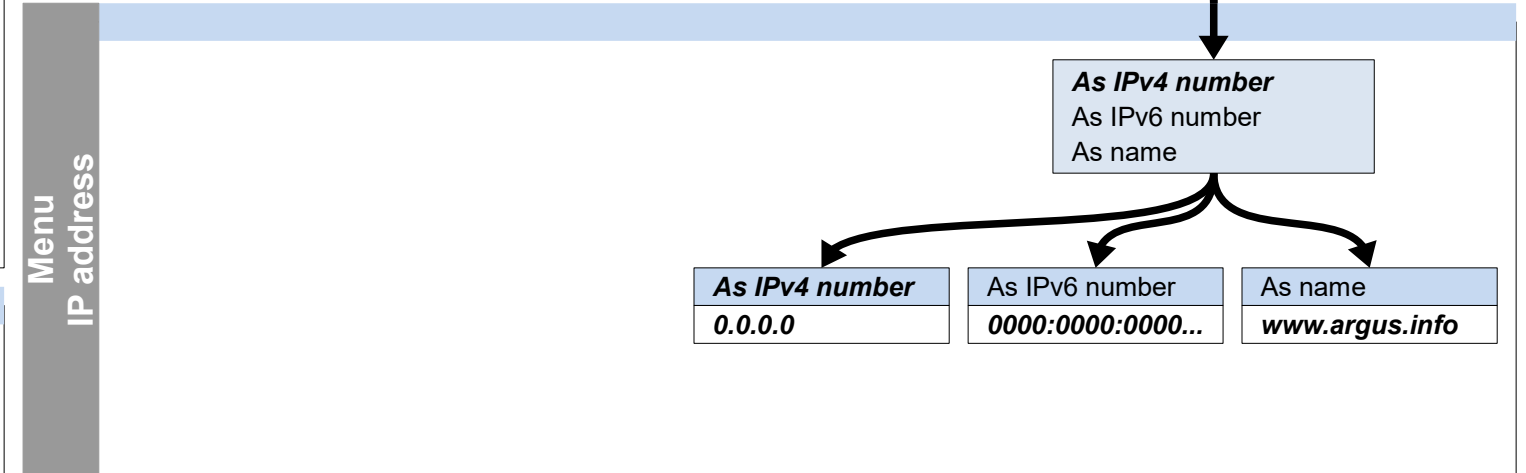
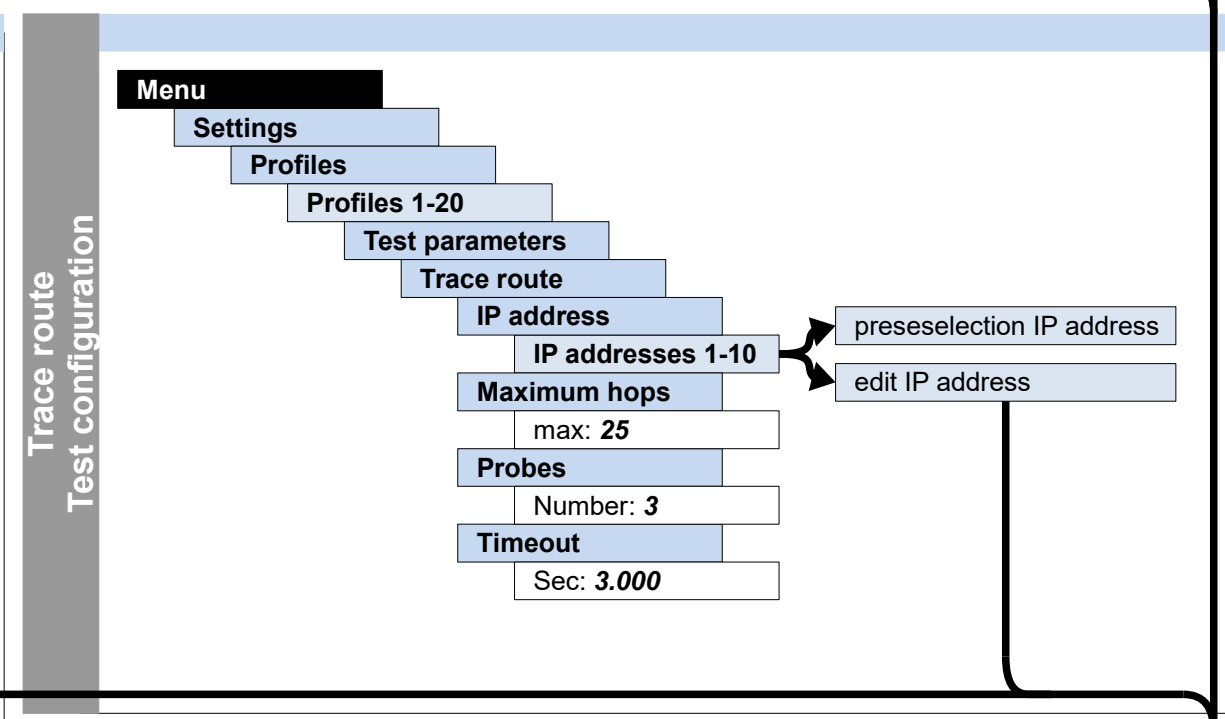
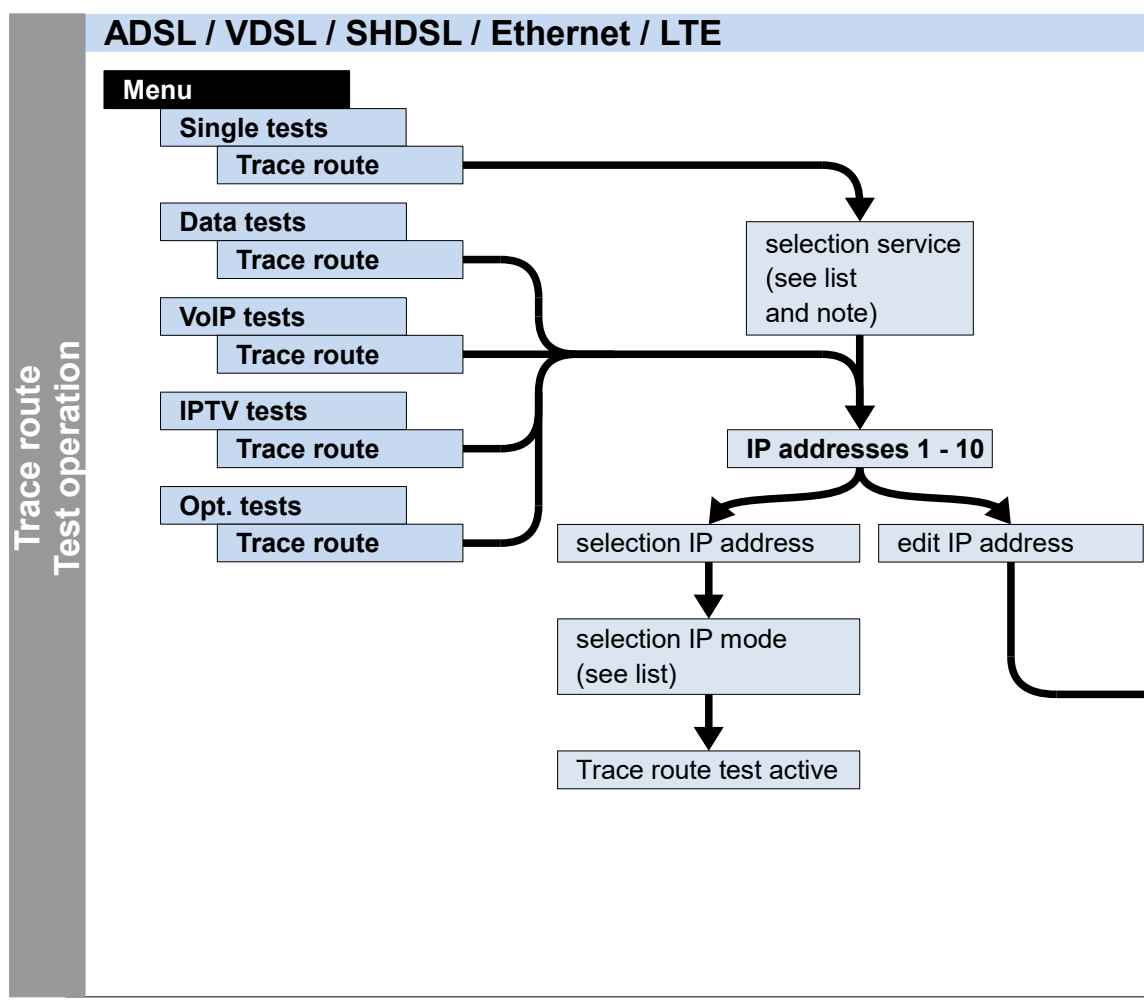
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**Lists**

Services
Data
VoIP
IPTV
Opt.

IP modes
IPv4
IPv6

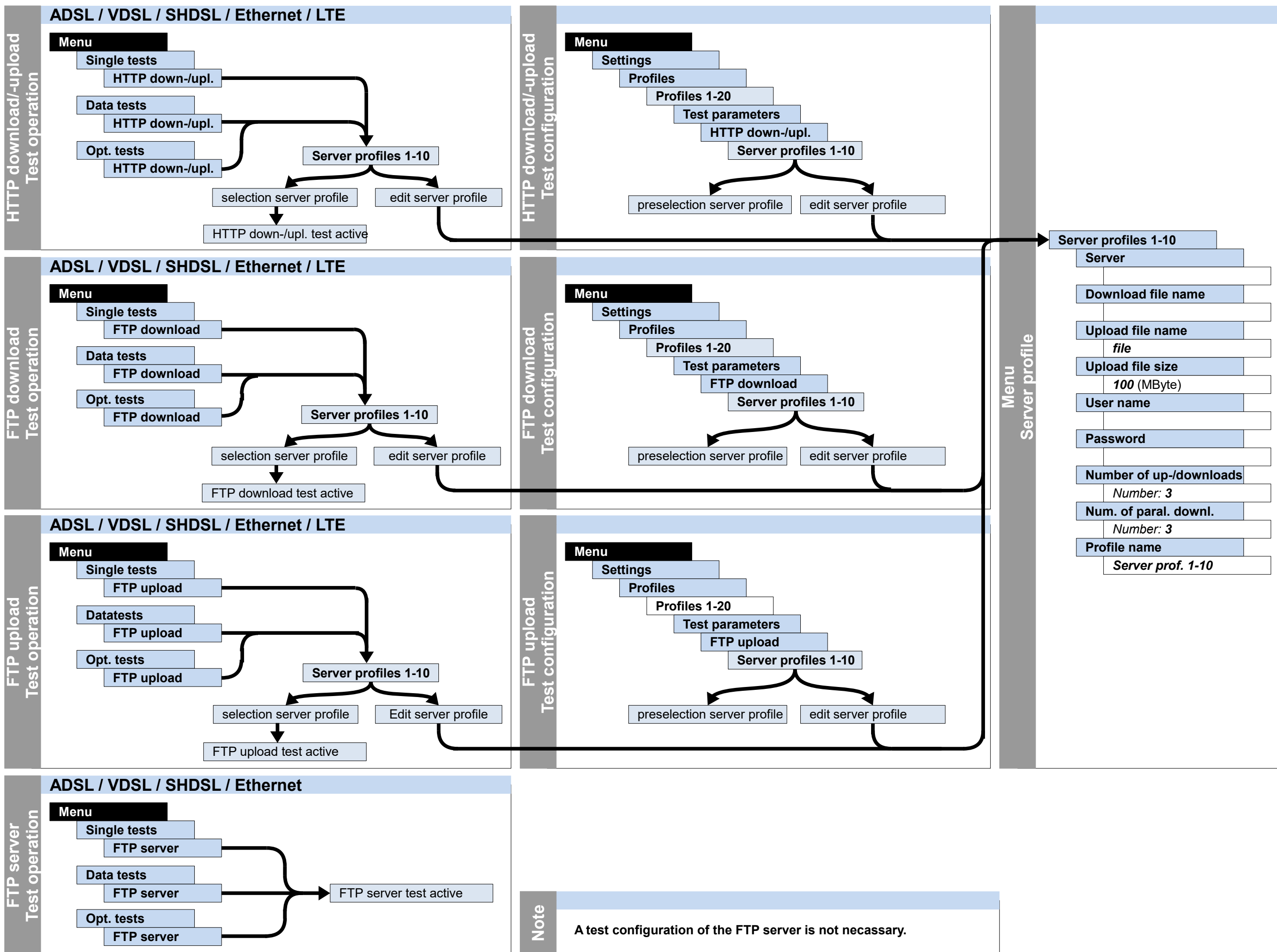


**Note**

The number of services may vary depending on the configuration of the Data, VoIP, IPTV, VoD services. If a single service has been configured, the selection will be skipped.

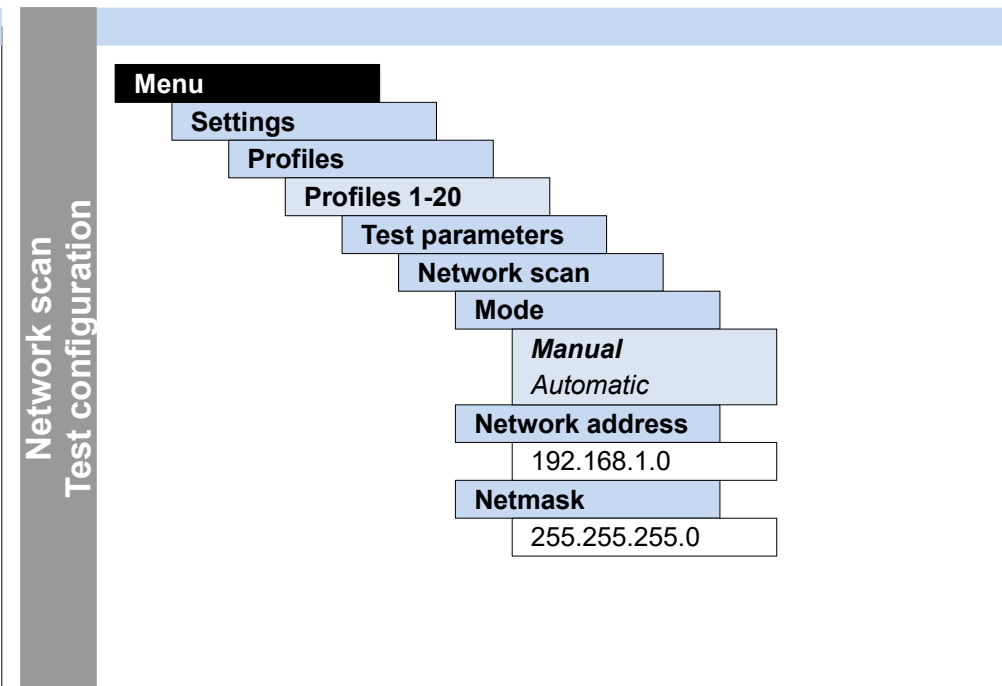
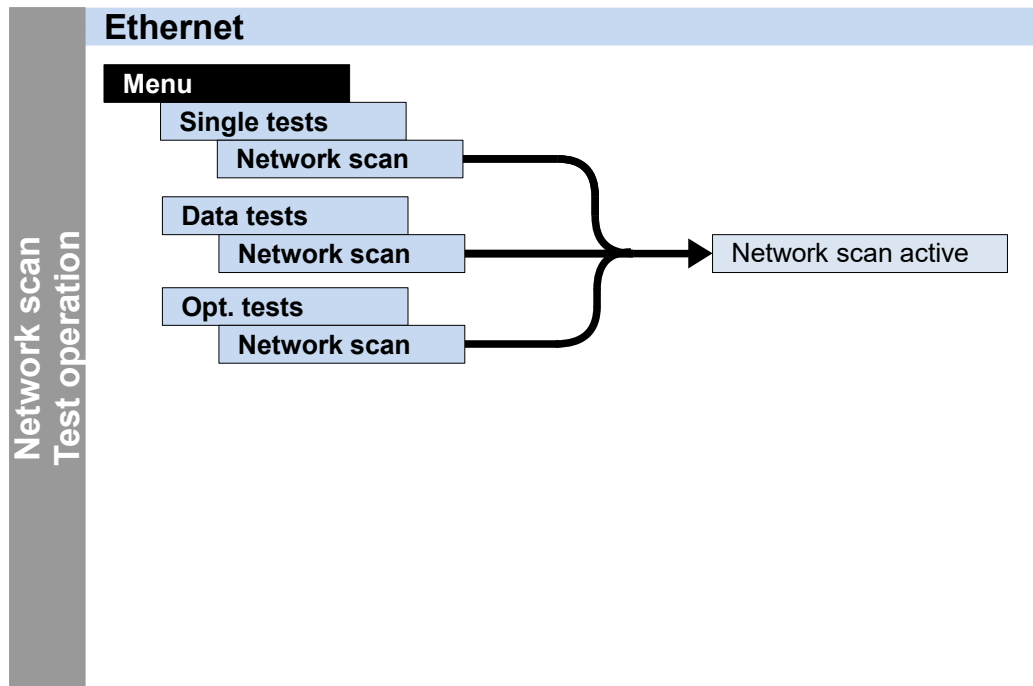
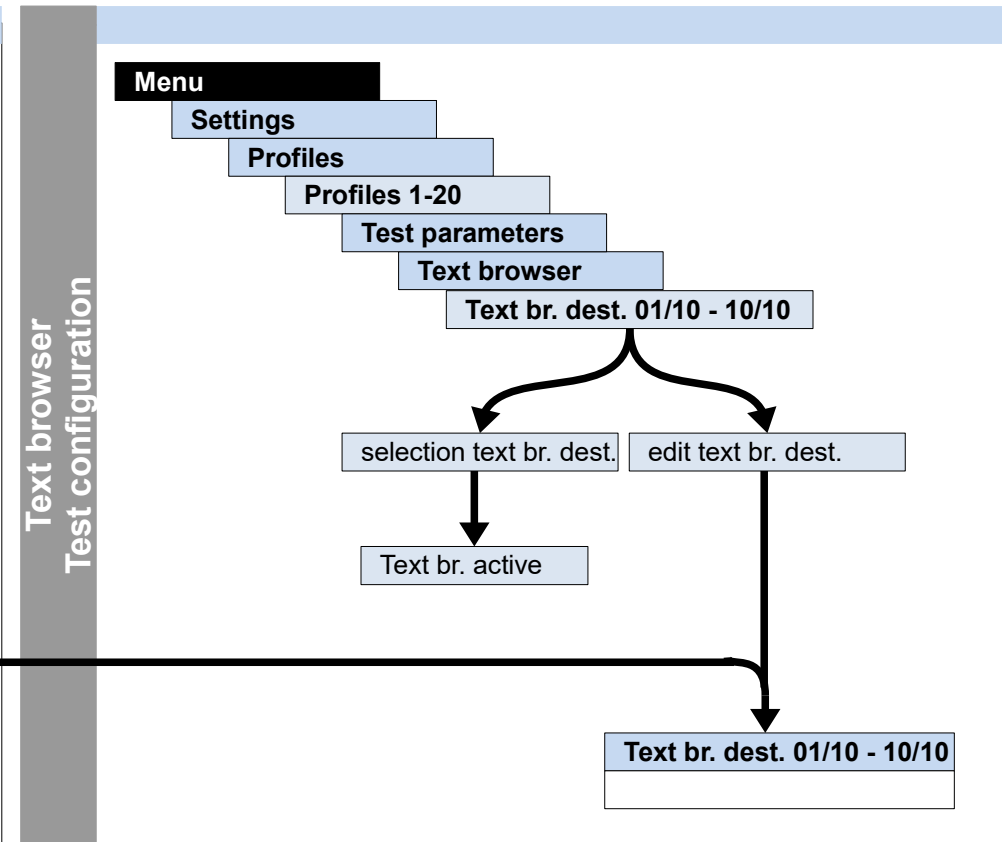
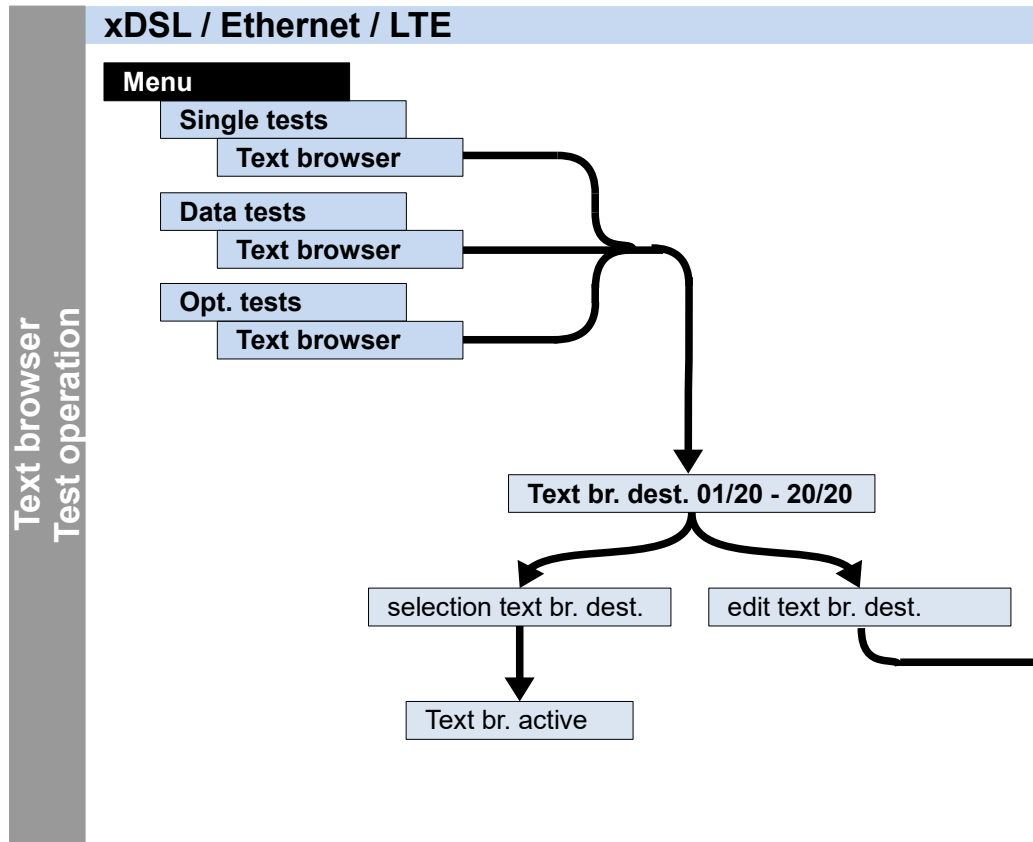
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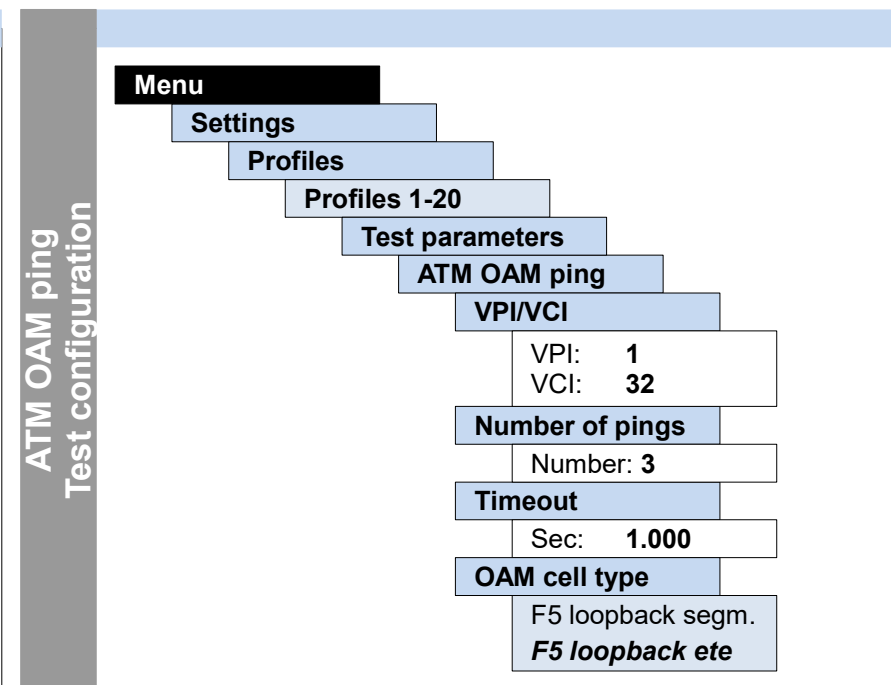
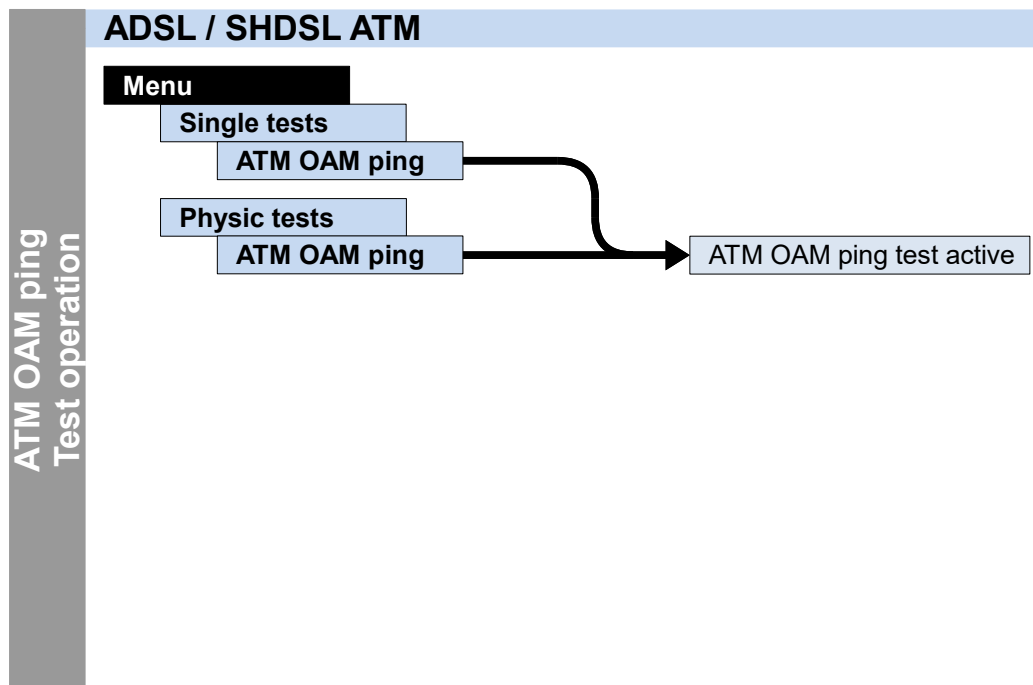
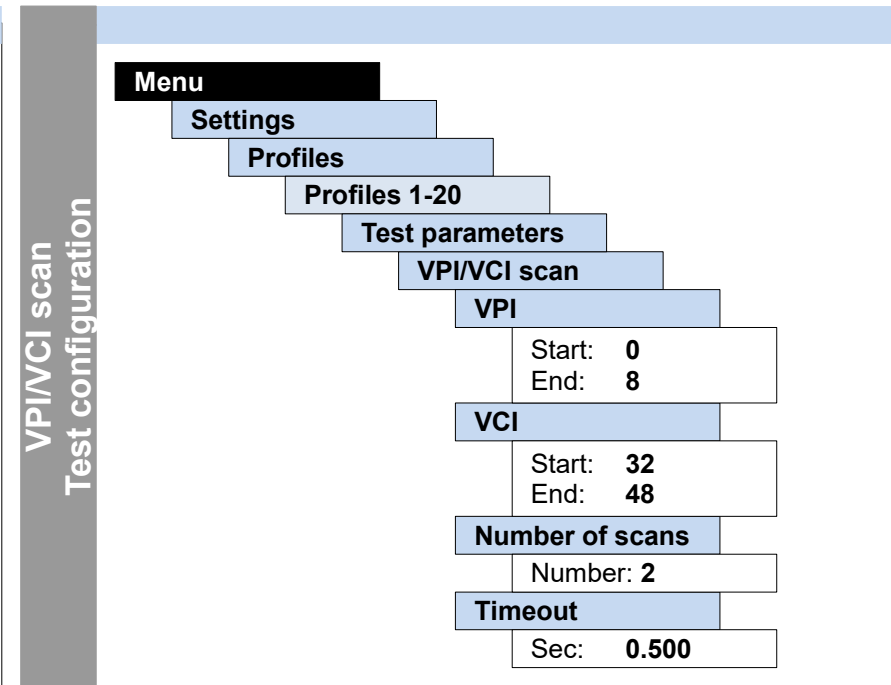
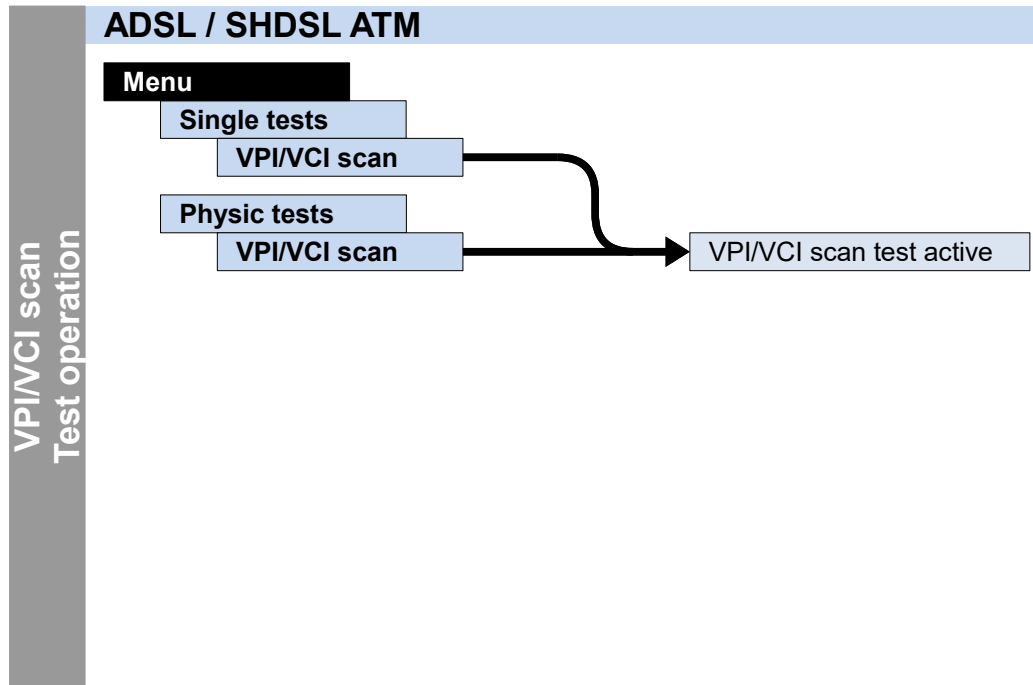
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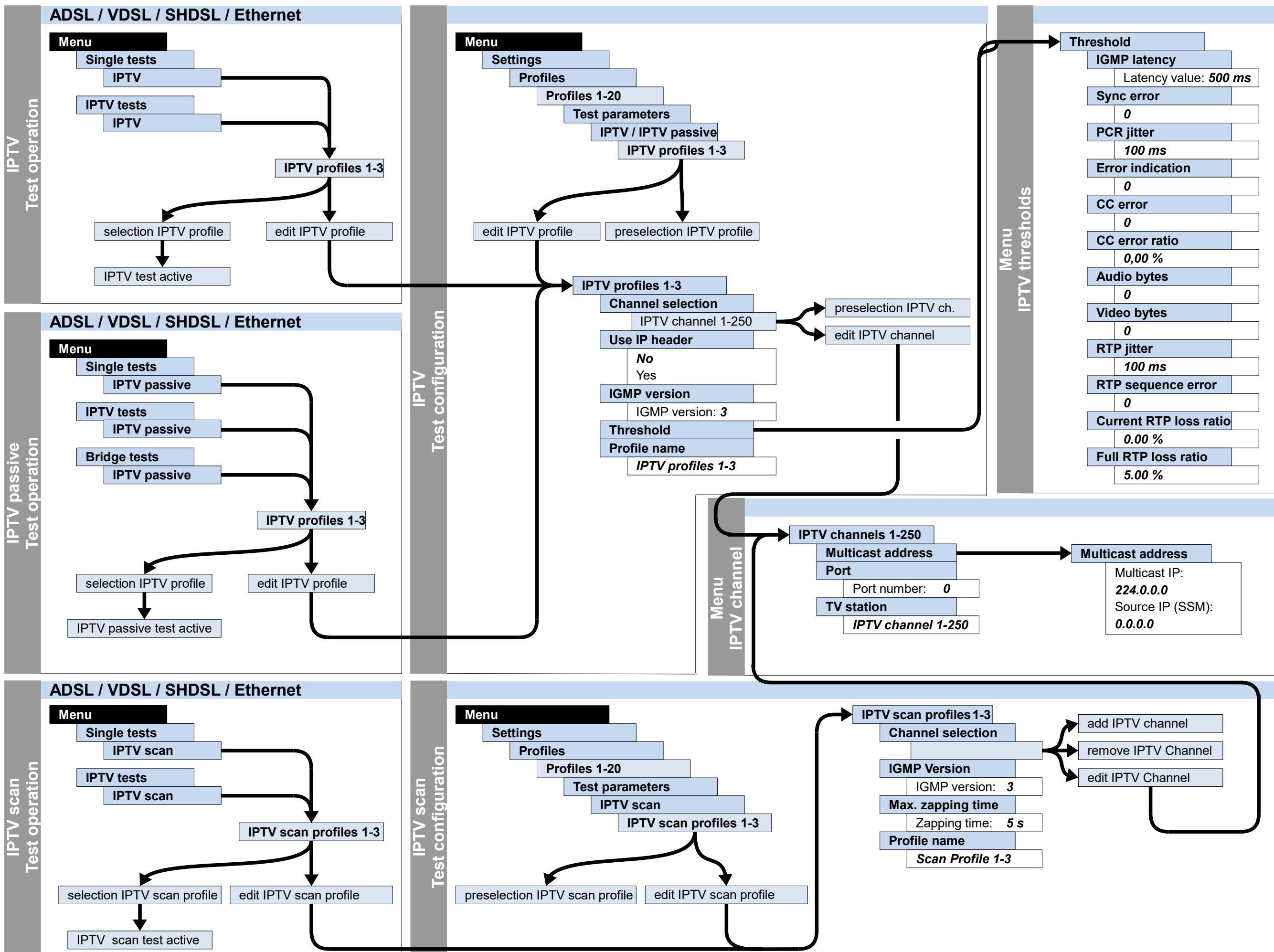
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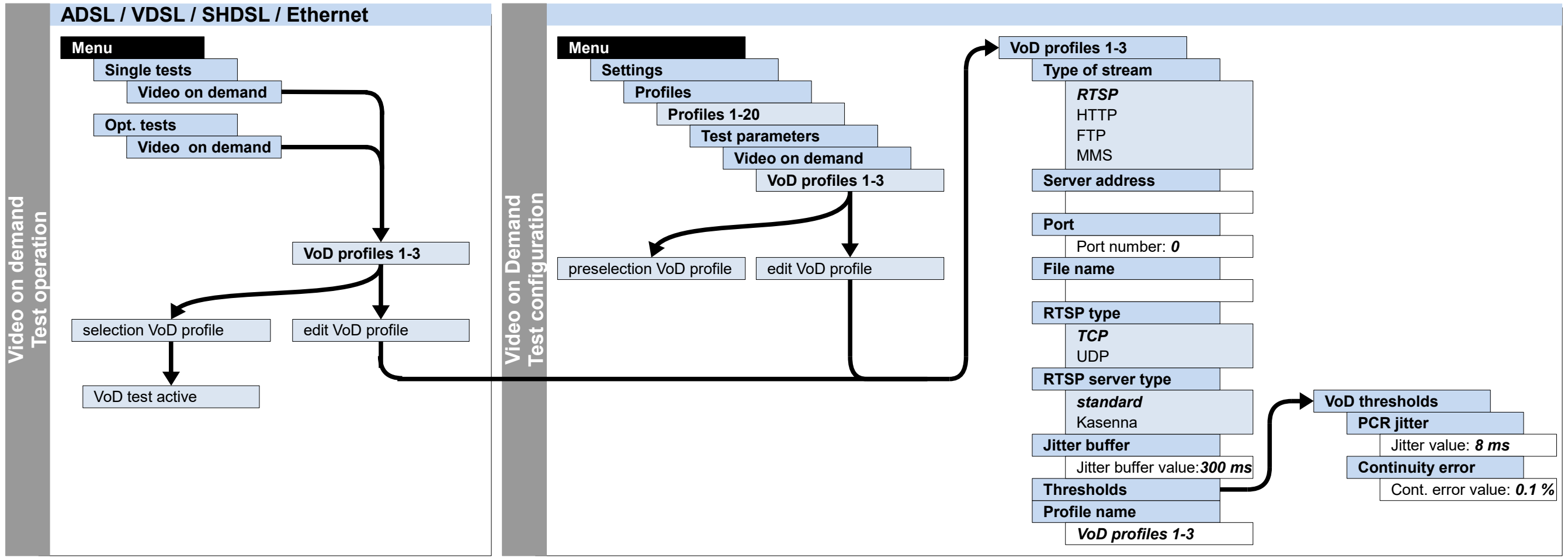
### Cross reference:

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Access wizard	7
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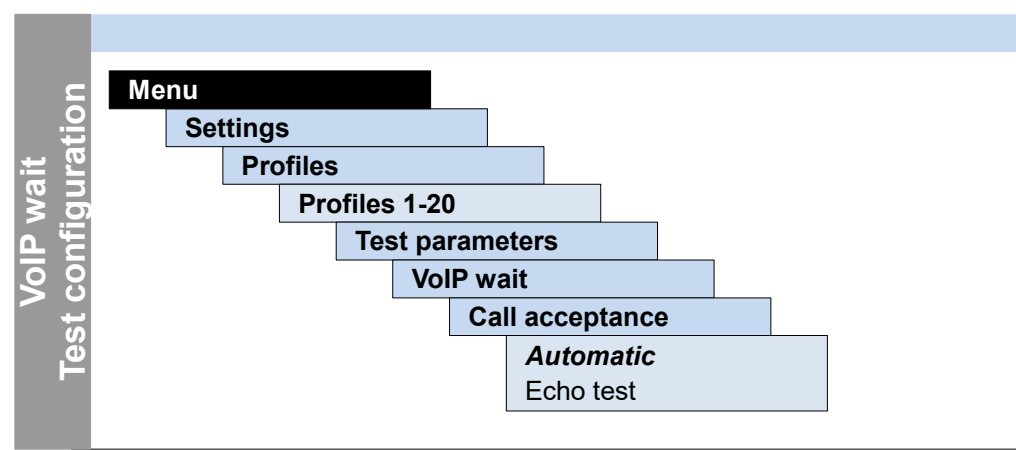
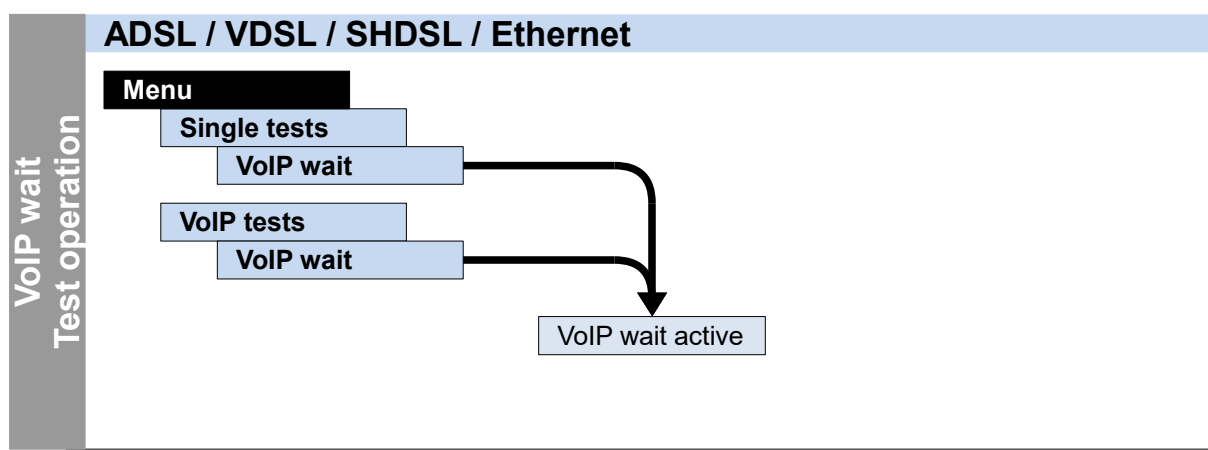
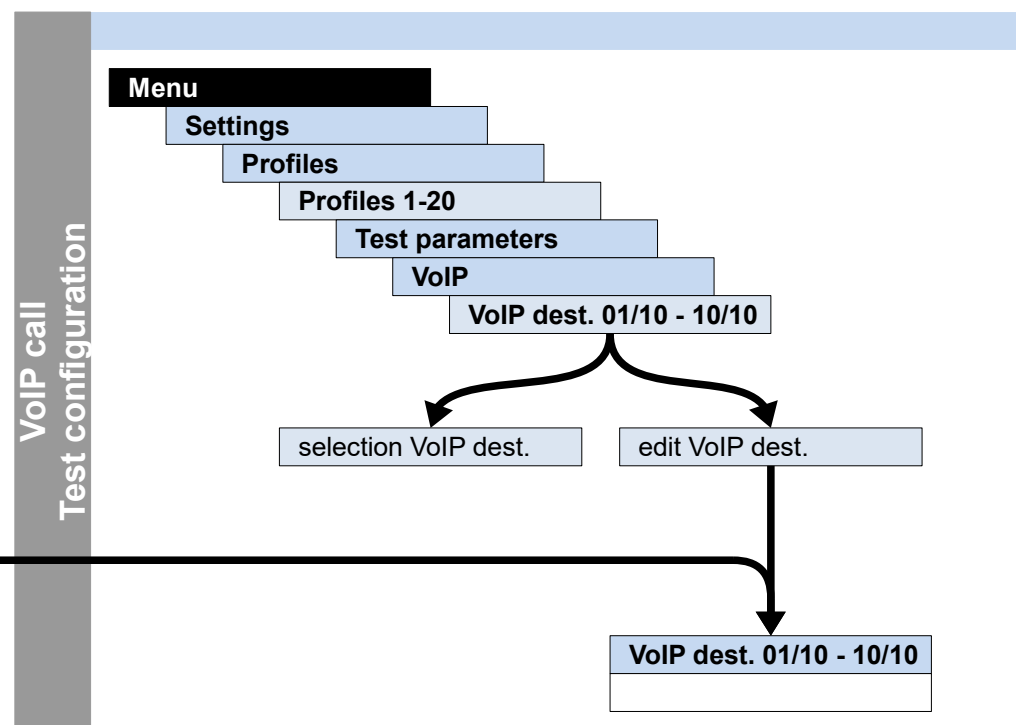
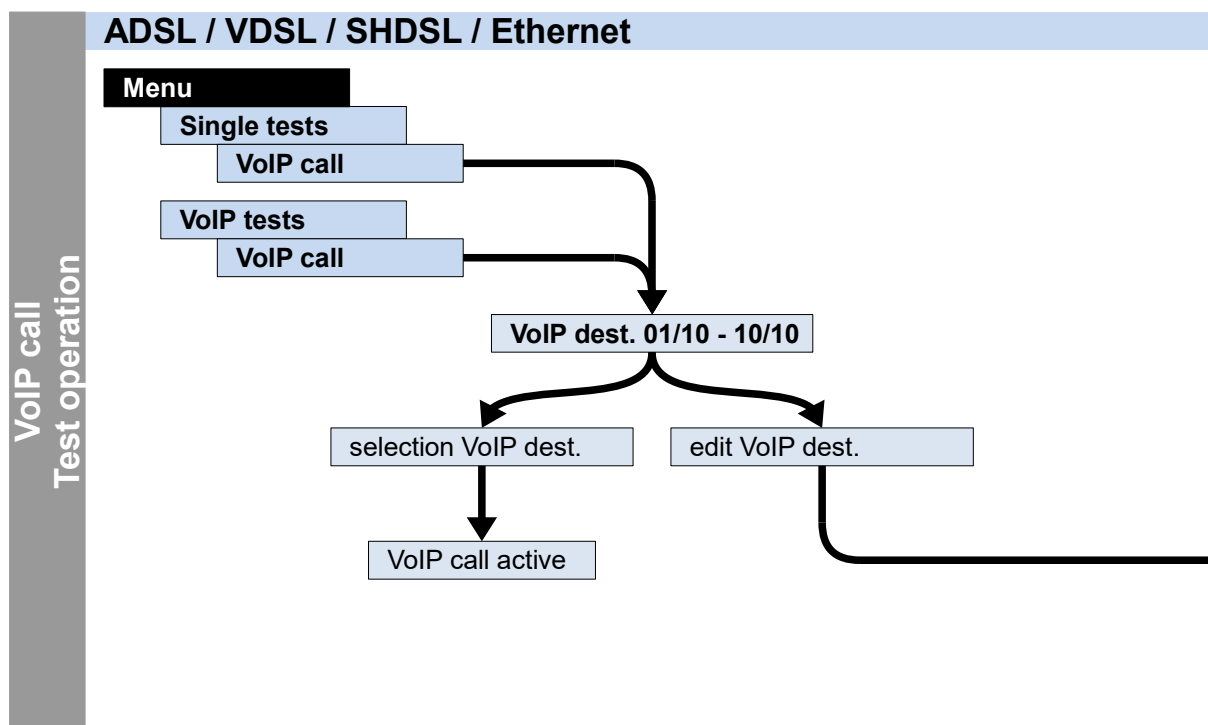
Cross reference:

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Access wizard	7
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Monitor (POTS)	37
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ETH cable tests	32
Others	page
Legend Protocol-overview	3
Hotkeys	4
Test leads	43-46



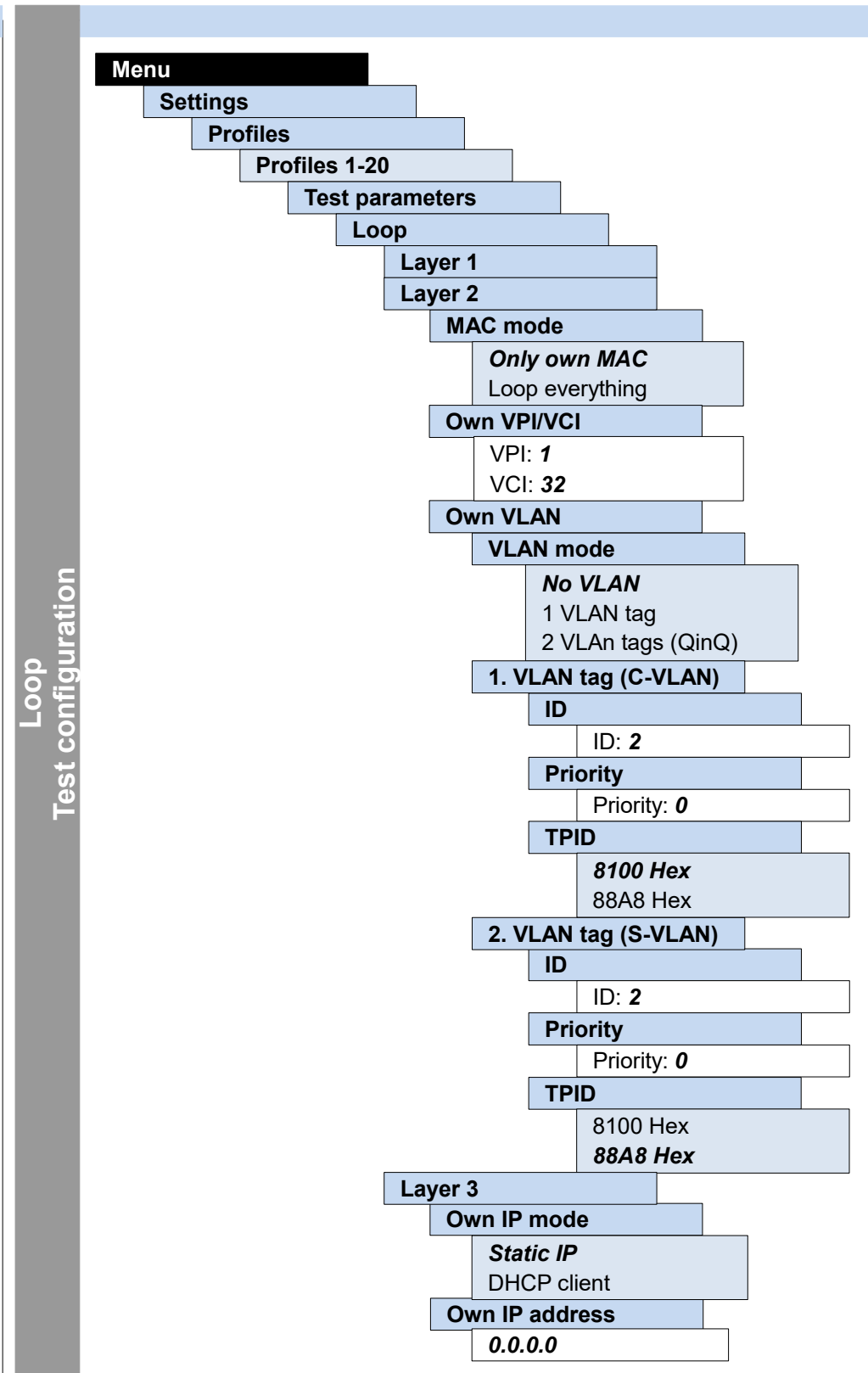
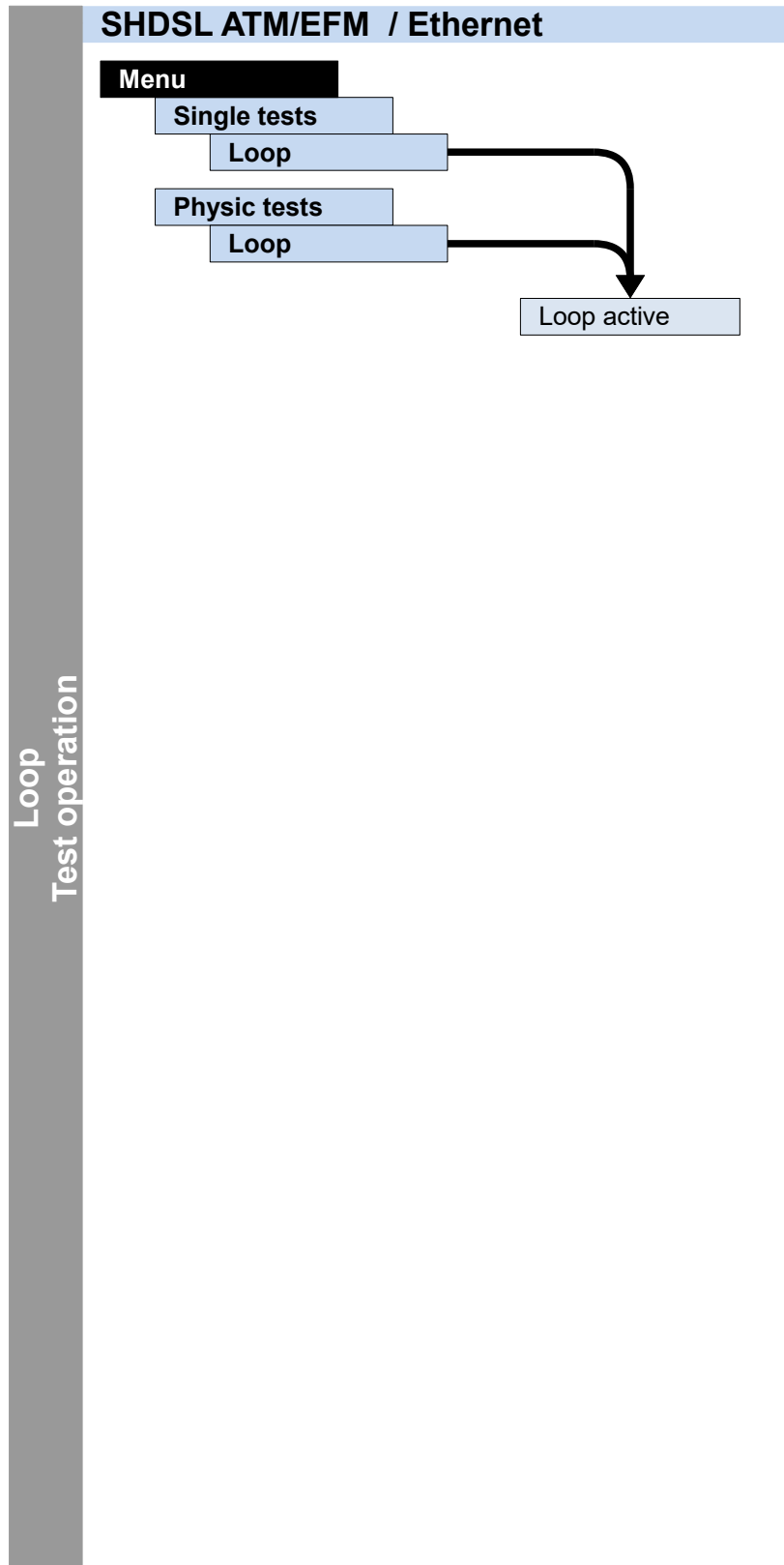
**Cross reference:**

Menu	page
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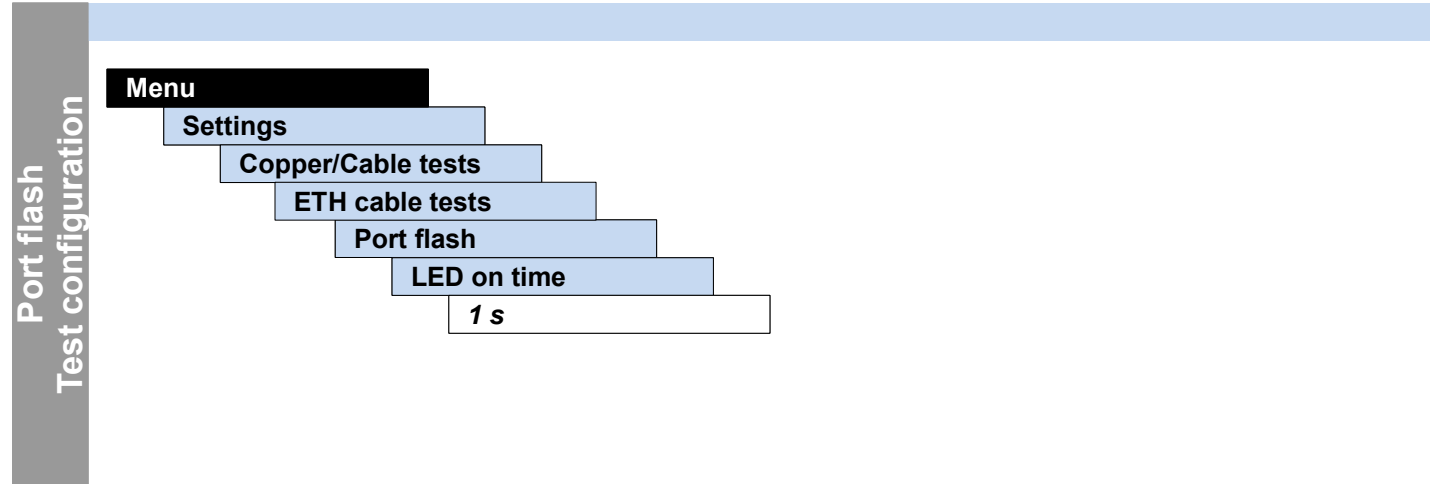
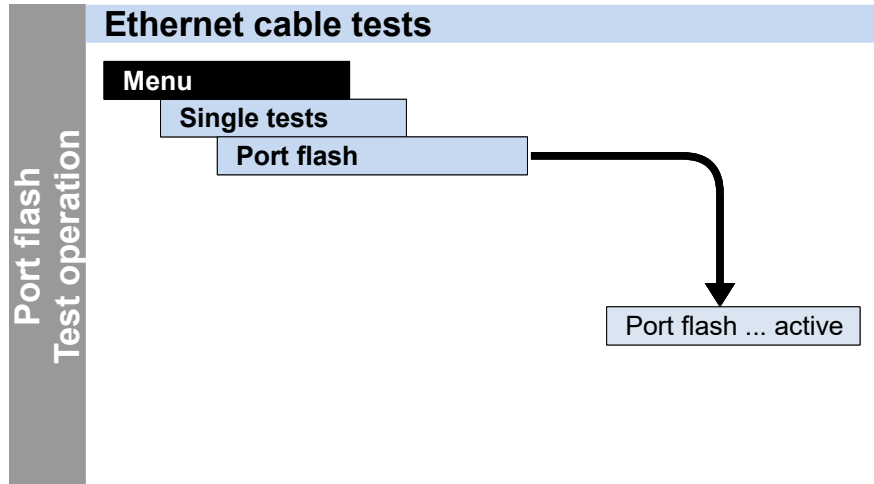
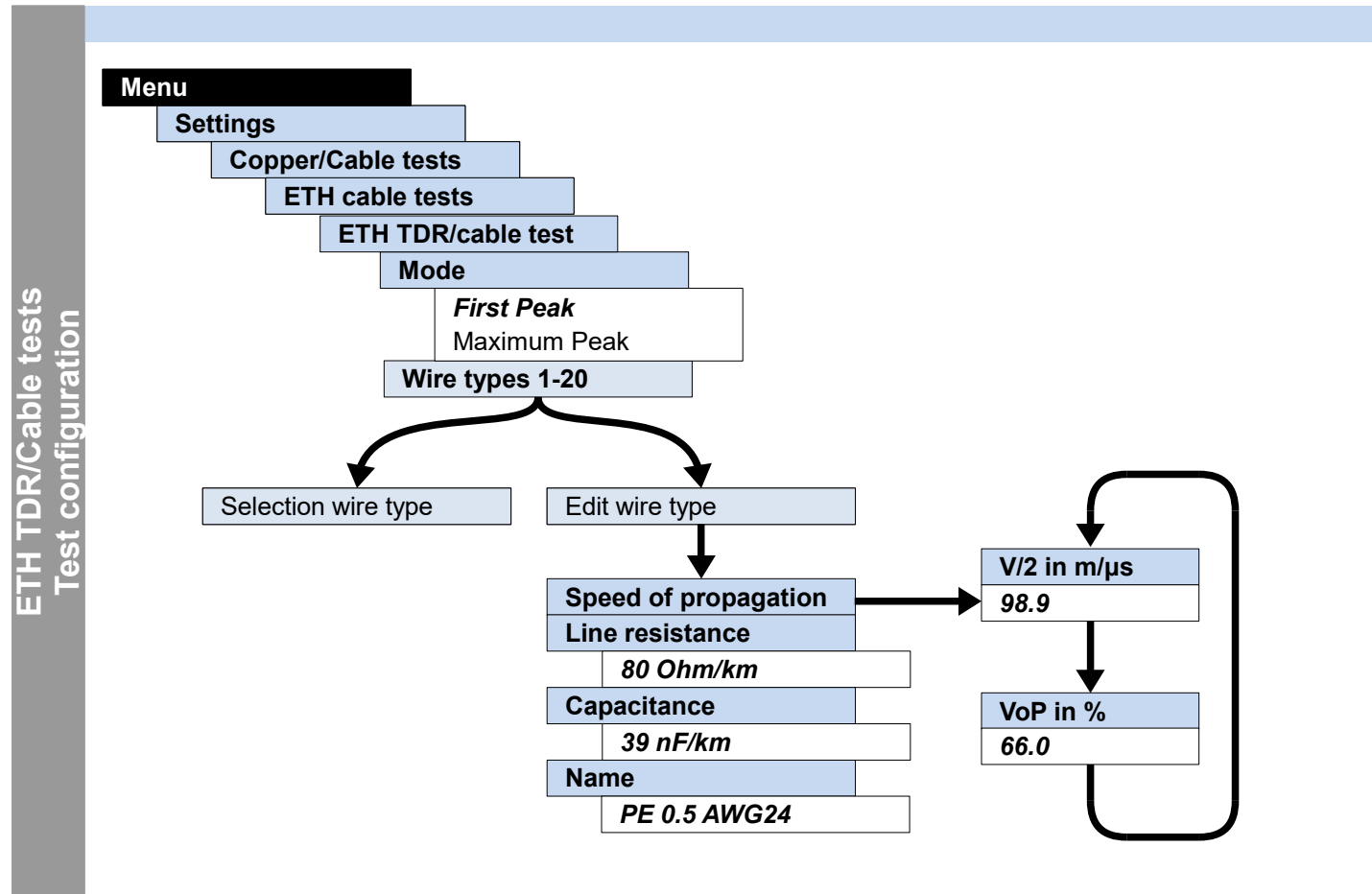
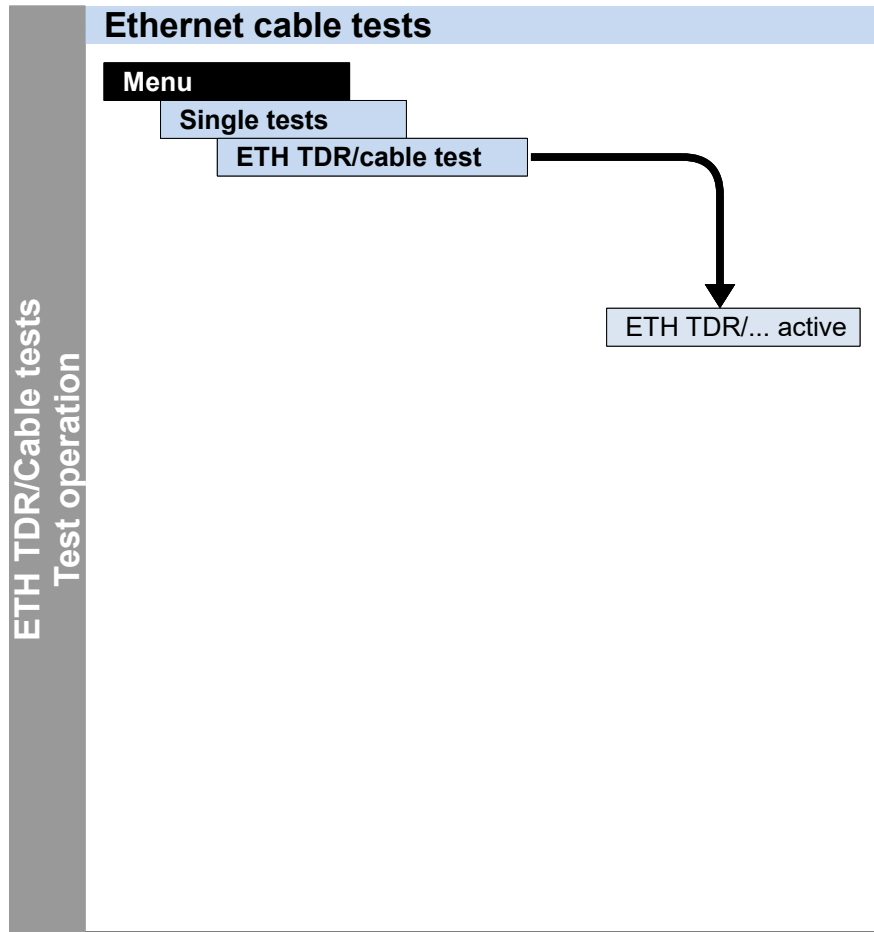
### Cross reference:

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### Cross reference:

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Main menu	8, 12
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<b>ISDN tests</b>	<b>page</b>
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<b>Copper tests</b>	<b>page</b>
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<b>Others</b>	<b>page</b>
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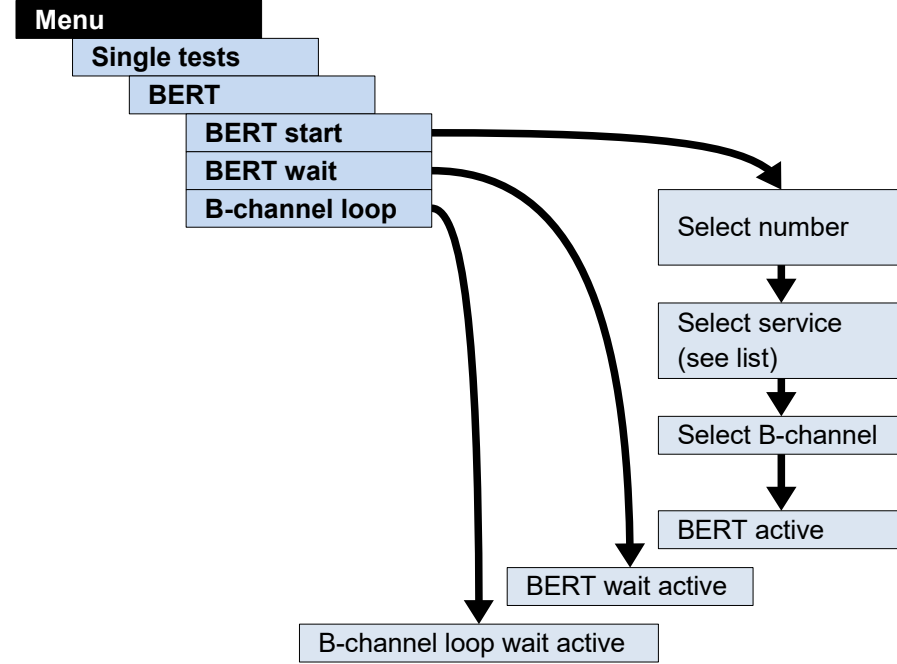
**Note** The wire type settings are the same settings which are used for the copper tests.

### Cross reference:

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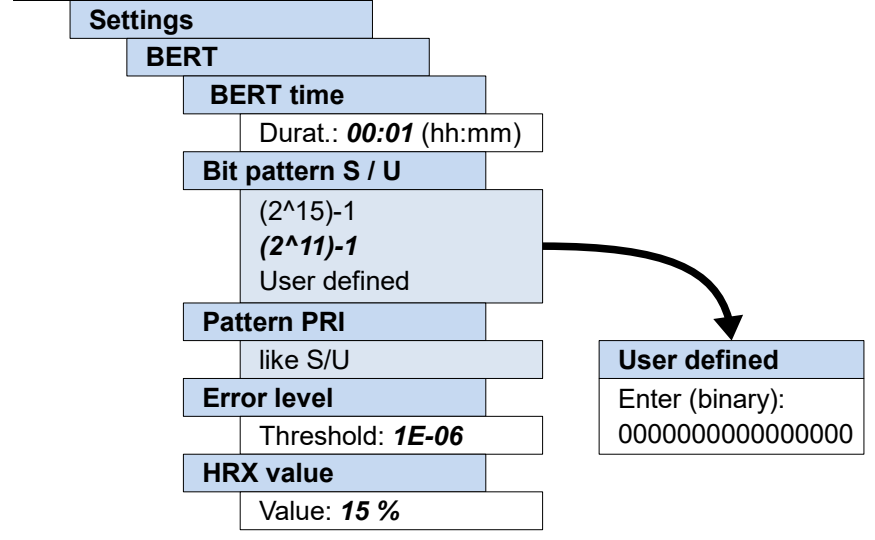
### BRI S/U / PRI

TE ... / NT ...



BERT configuration

Menu

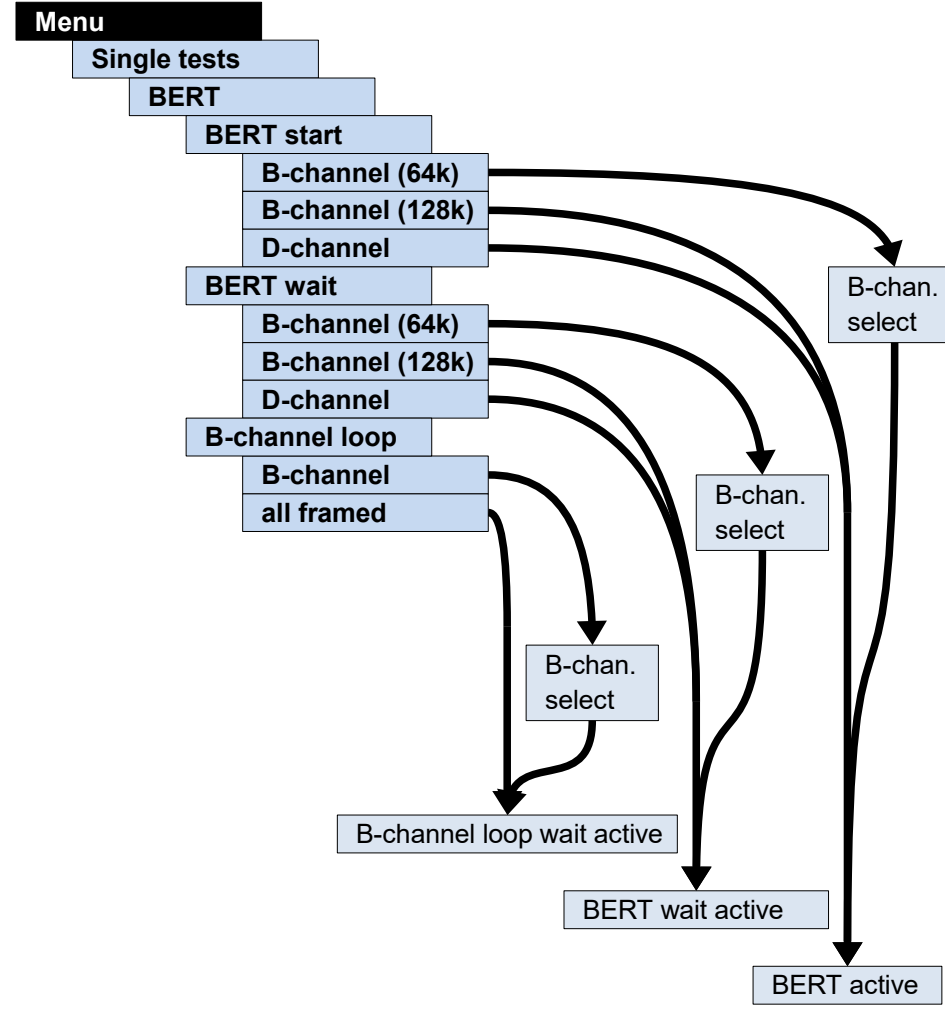


Lists

Services	MegaBERT pattern
Speech	2^15-1
UDI 64 kBit	2^15-1 inverse
3.1 kHz audio	2^20/QRSS
7 kHz audio	2^20/QRSS/inverse
DFU-TA	Space (0000)
Telephony ISDN	Mark (1111)
Fax G3	
Fax G4	
Mixed Mode	
Teletex	
Videotex	
Telex	
OSI	
Telephony 7 kHz	
Video telephony 1	
Video telephony 2	
User specified 1	
User specified 2	
User specified 3	

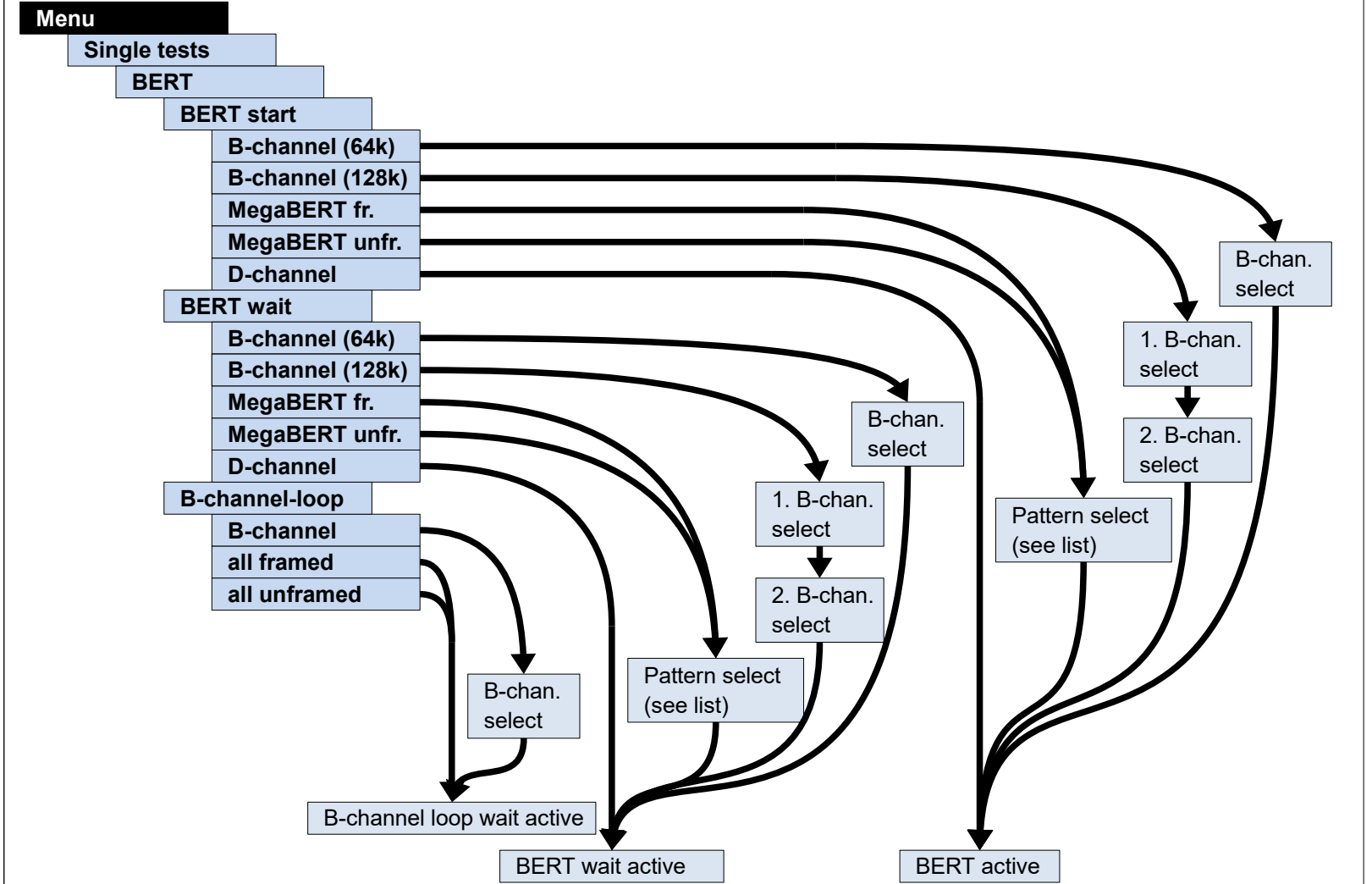
### BRI S/U

Leased line



### PRI

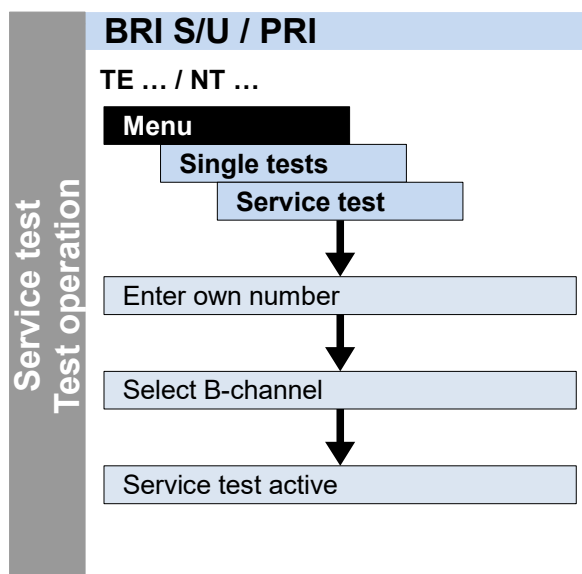
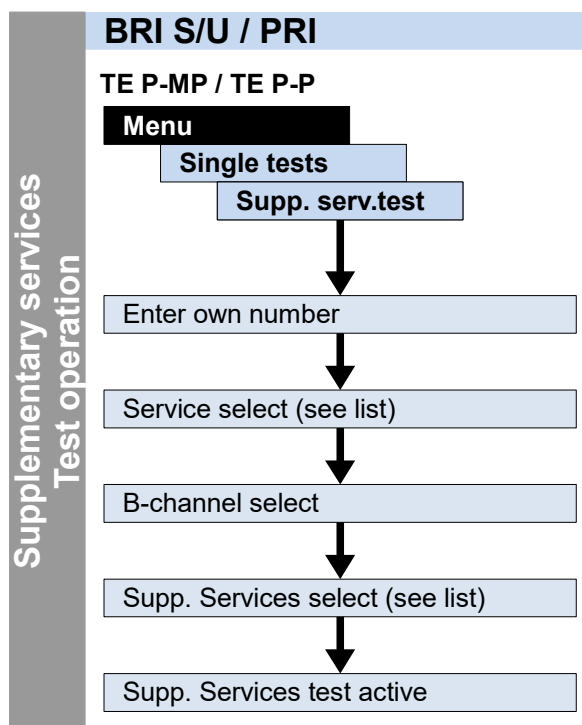
Leased line



BERT Test operation

### Cross reference:

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### Lists

#### Services

- Speech
- UDI 64 kBit
- 3.1 kHz audio
- 7 kHz audio
- DFU-TA
- Telephony ISDN
- Fax G3
- Fax G4
- Mixed Mode
- Teletex
- Videotex
- Telex
- OSI
- Telephony 7 kHz
- Video telephony 1
- Video telephony 2
- User specified 1
- User specified 2
- User specified 3

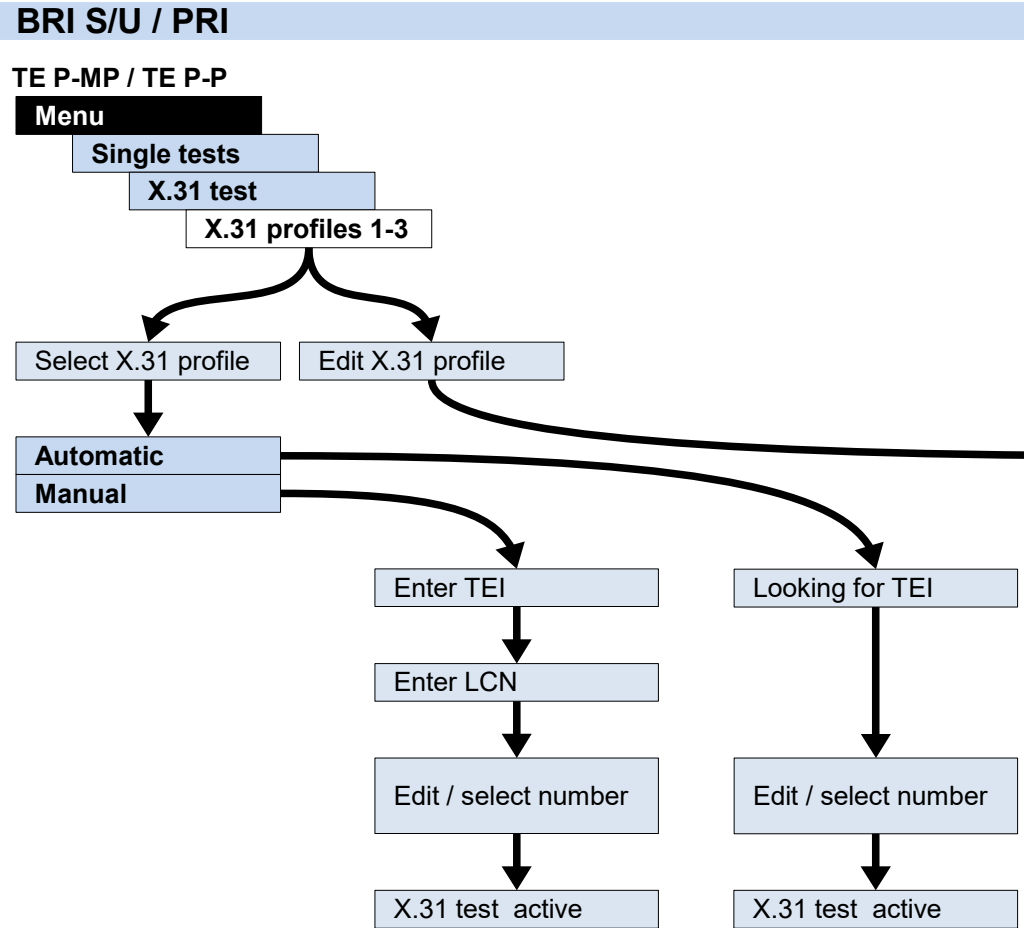
#### Supp. services

- TP test
- HOLD test
- CLIP test
- CLIP / CLIR
- COLP/COLR
- DDI test
- MSN test
- CF test
- CFU
- CFB
- CFNR
- CW test
- CCBS test
- CCNR test
- MCID test
- 3PTY test
- ECTtest
- CUG test
- CD test
- AOC test
- SUB test
- UUS test

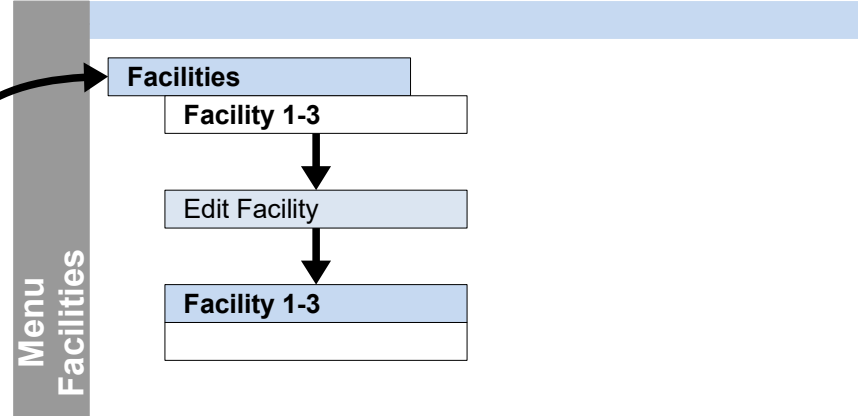
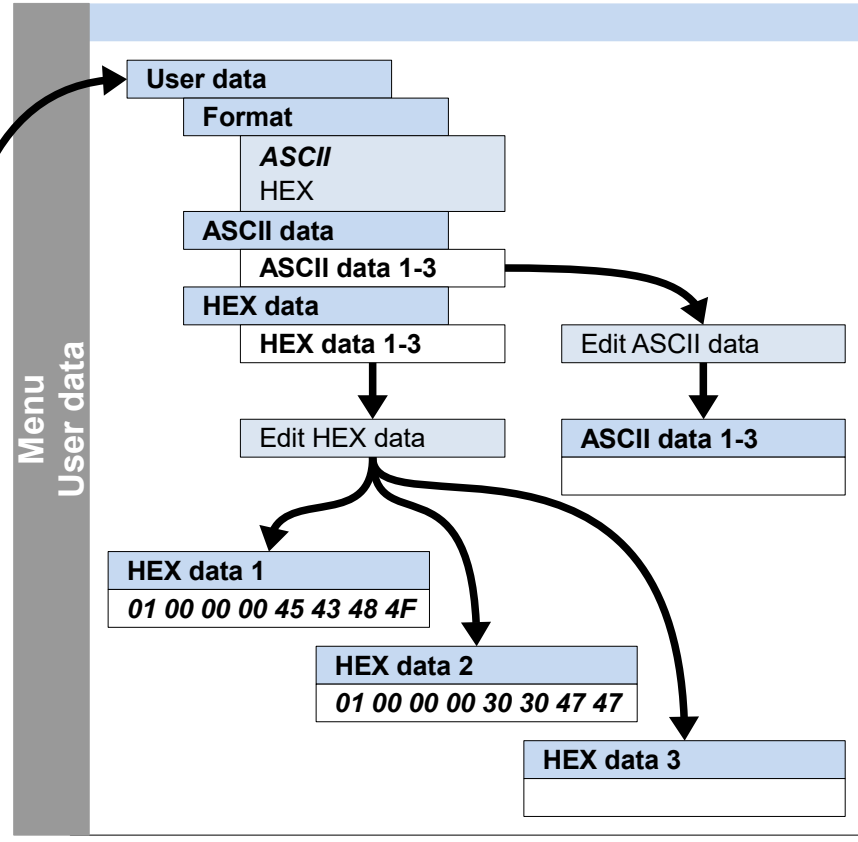
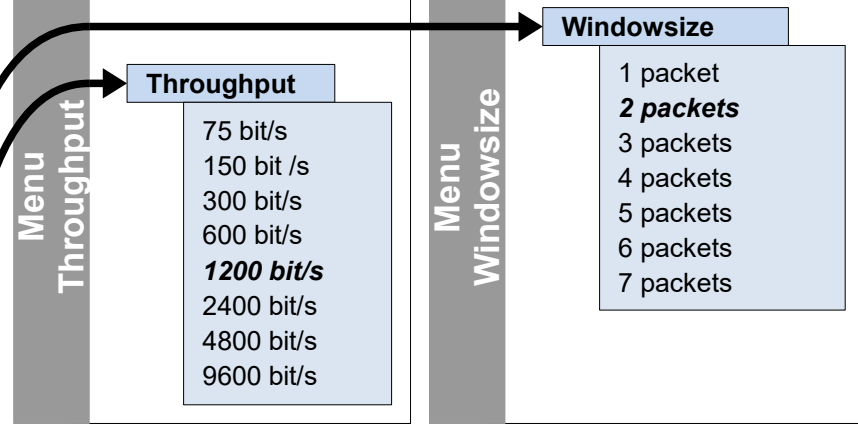
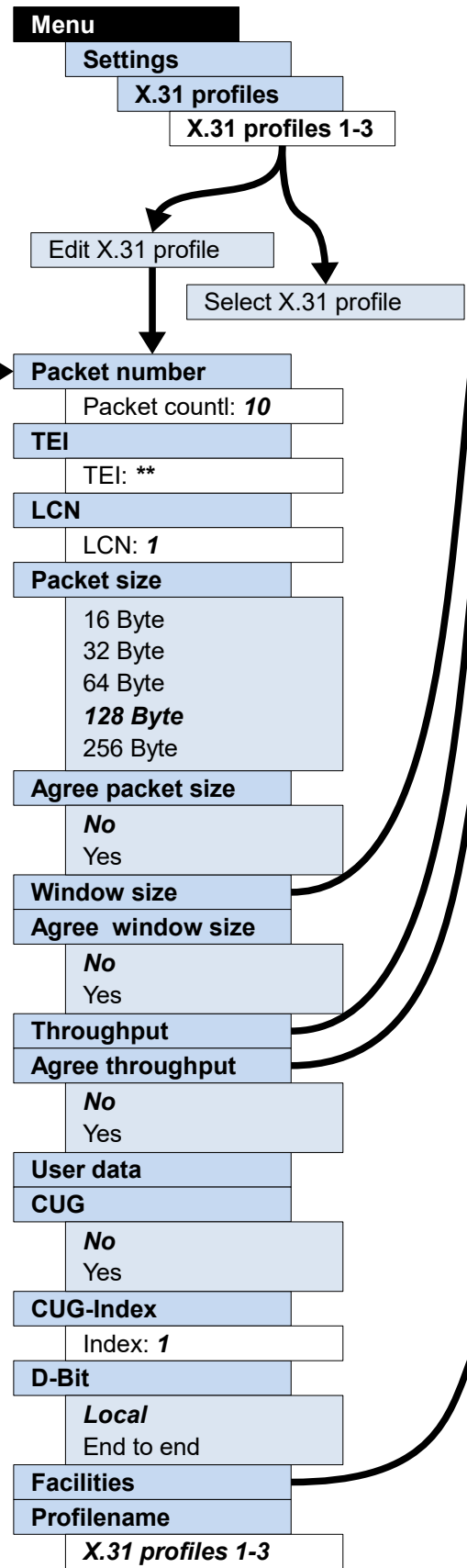
### Cross reference:

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ETH cable tests	32
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X.31 test  
Test operation

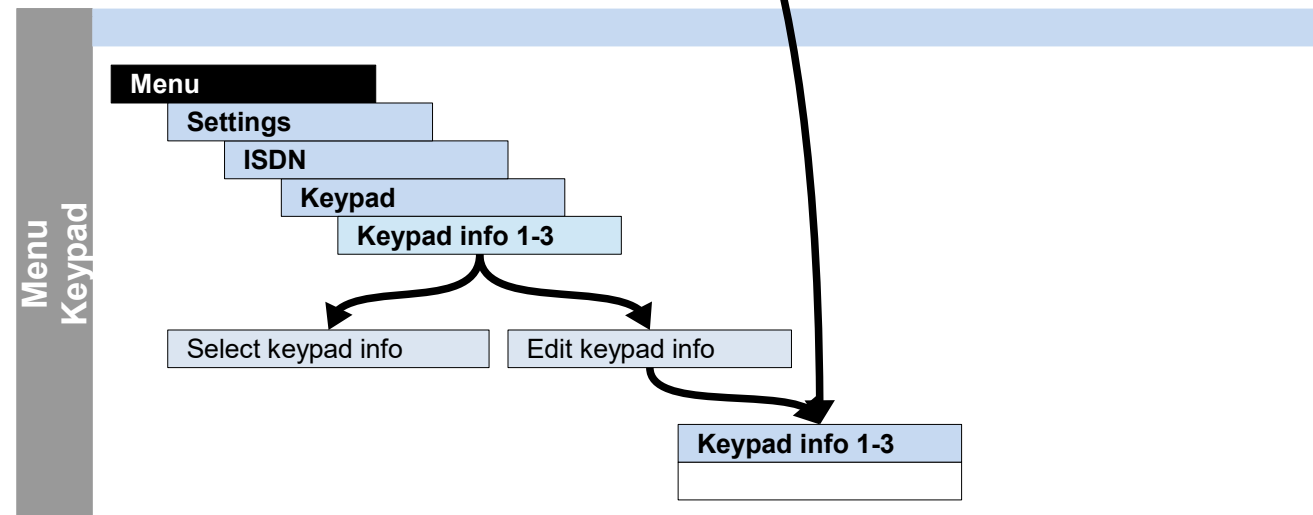
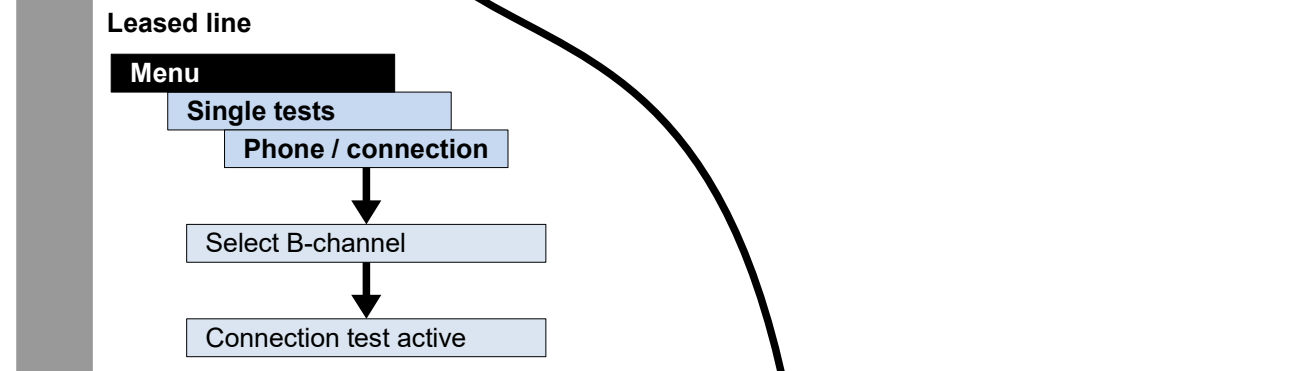
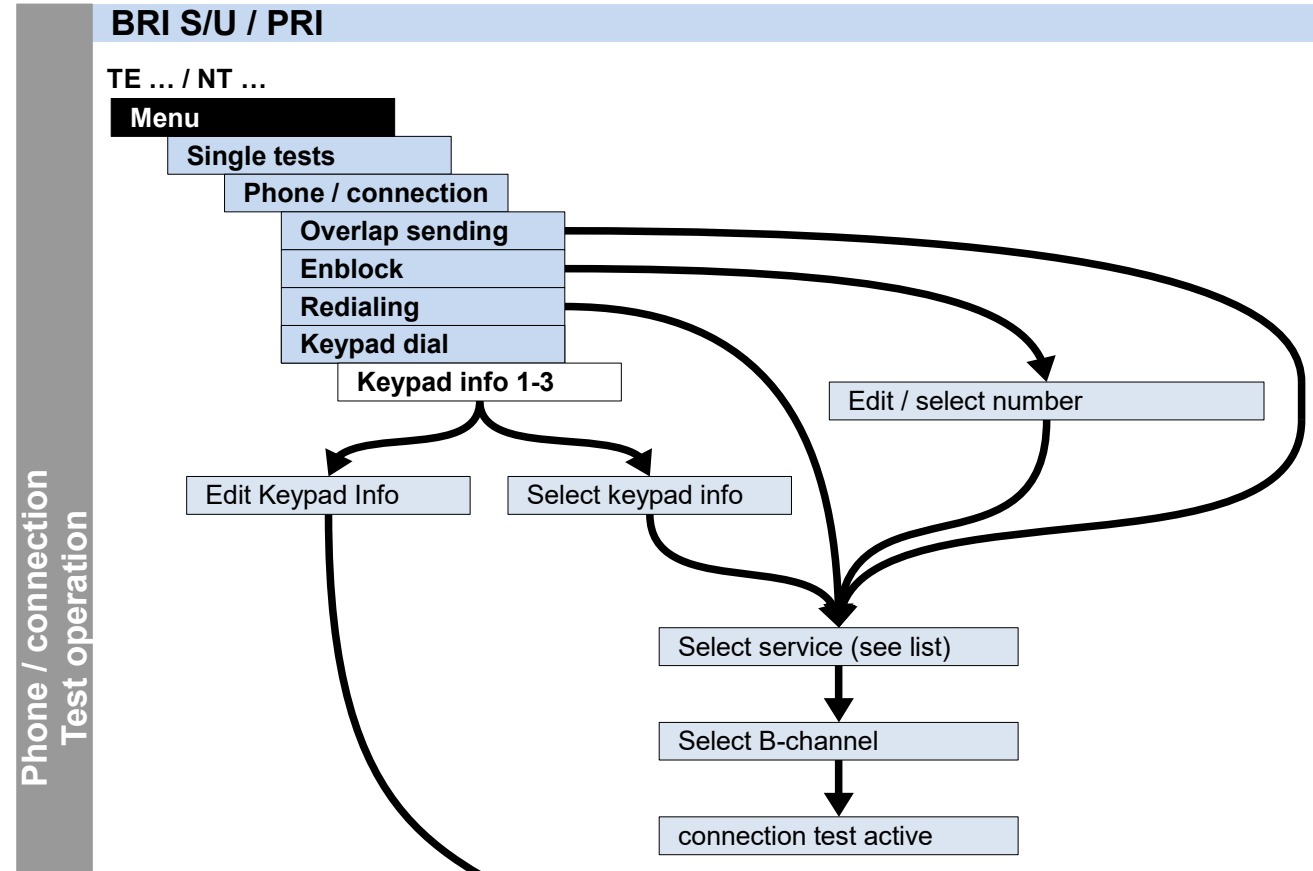
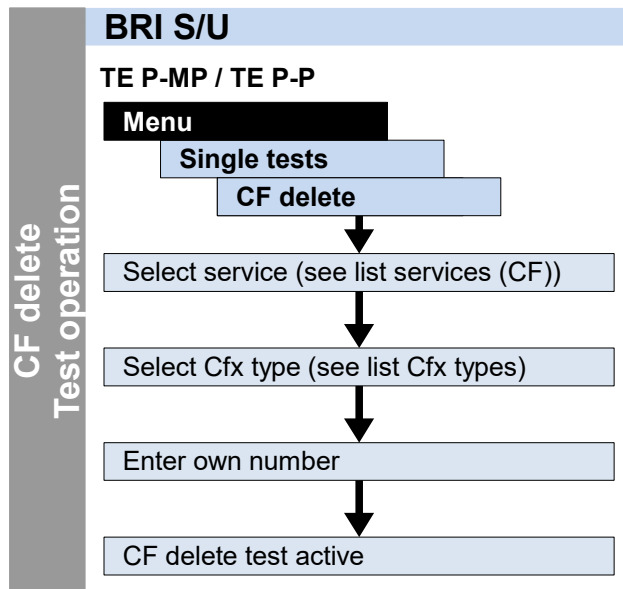
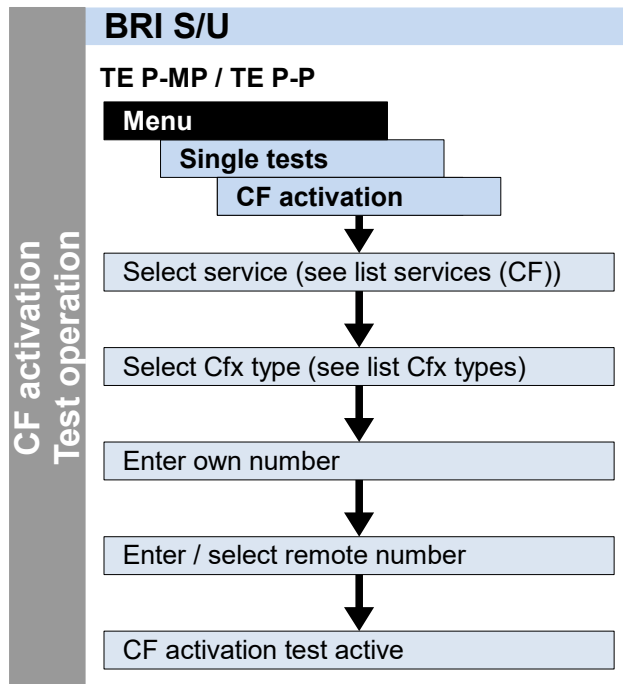
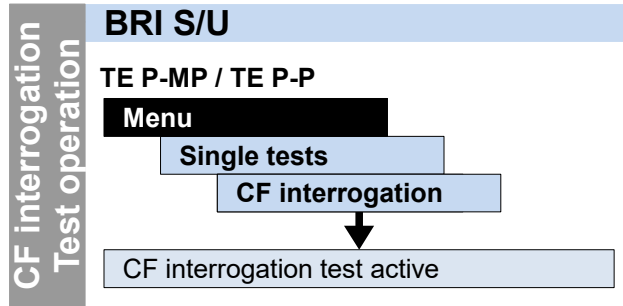


X.31 test  
Test configuration



#### Cross reference:

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ETH cable tests	32
Others	page
Legend Protocol-overview	3
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Test leads	43-46



#### Lists

##### Services

- speech
- IDU 64 kBit
- 3.1 kHz audio
- 7 kHz audio
- IDU TA
- Telephony ISDN
- Fax G3
- Fax G4
- Mixed Mode
- Teletex
- Videotex
- Telex
- OSI
- Telephony7 kHz
- Videotelephony 1
- Videotelephony 2
- User specified 1
- User specified 2
- User specified 3

##### Services (CF)

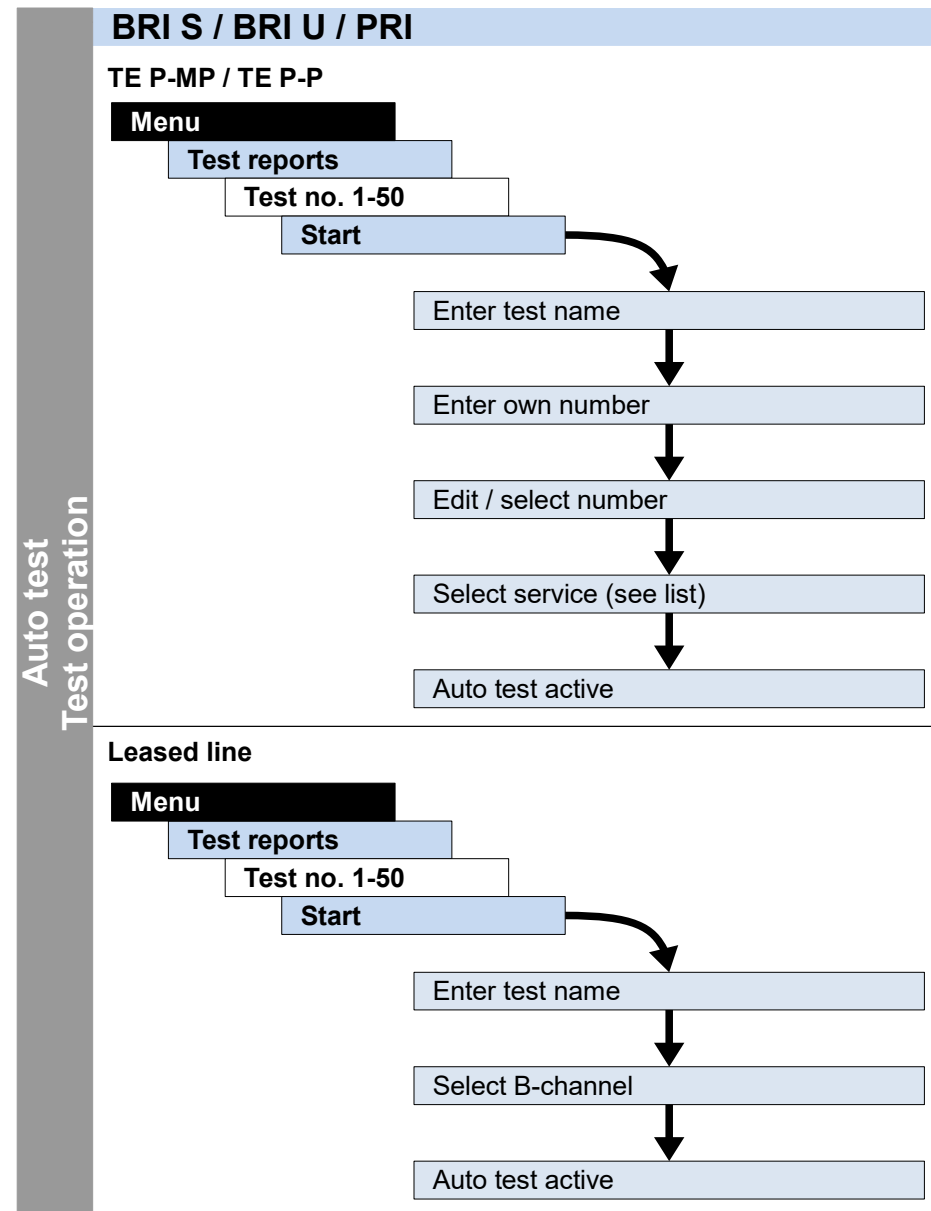
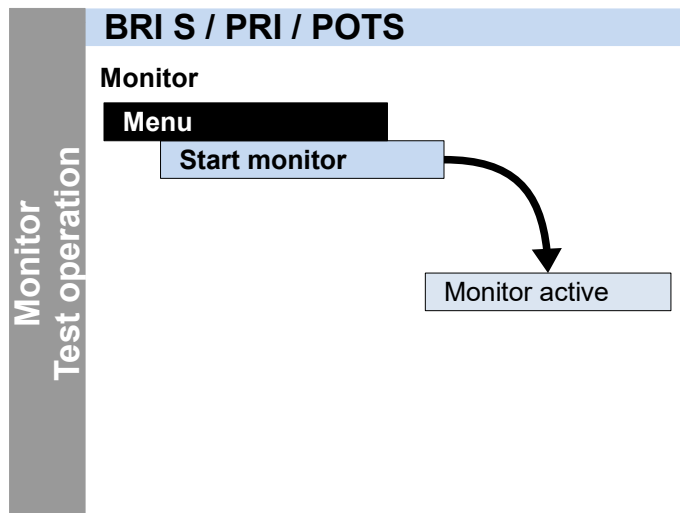
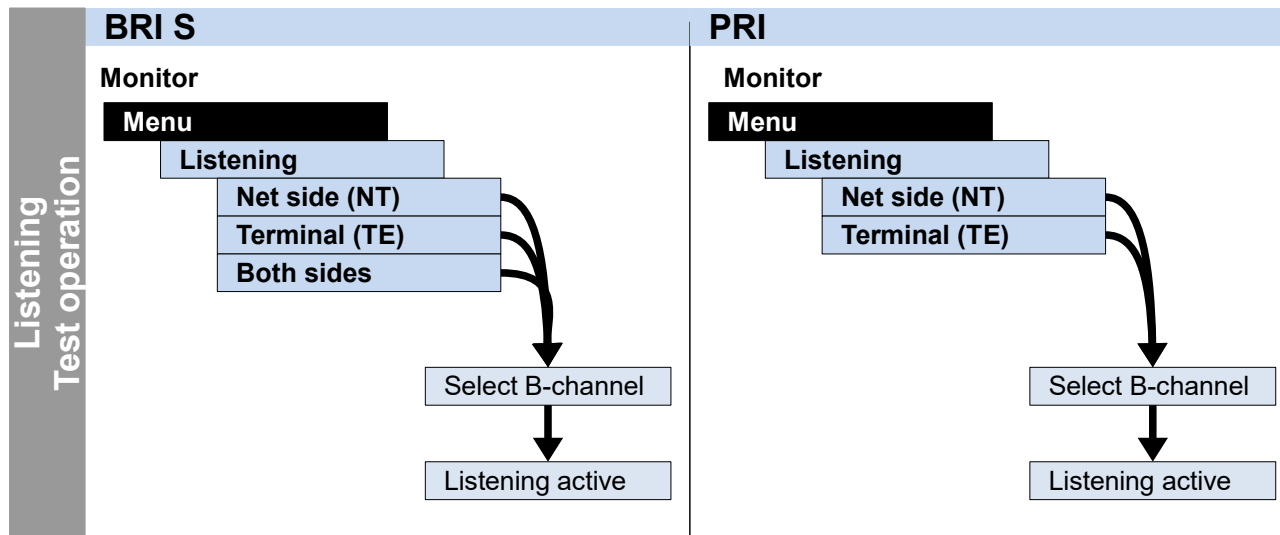
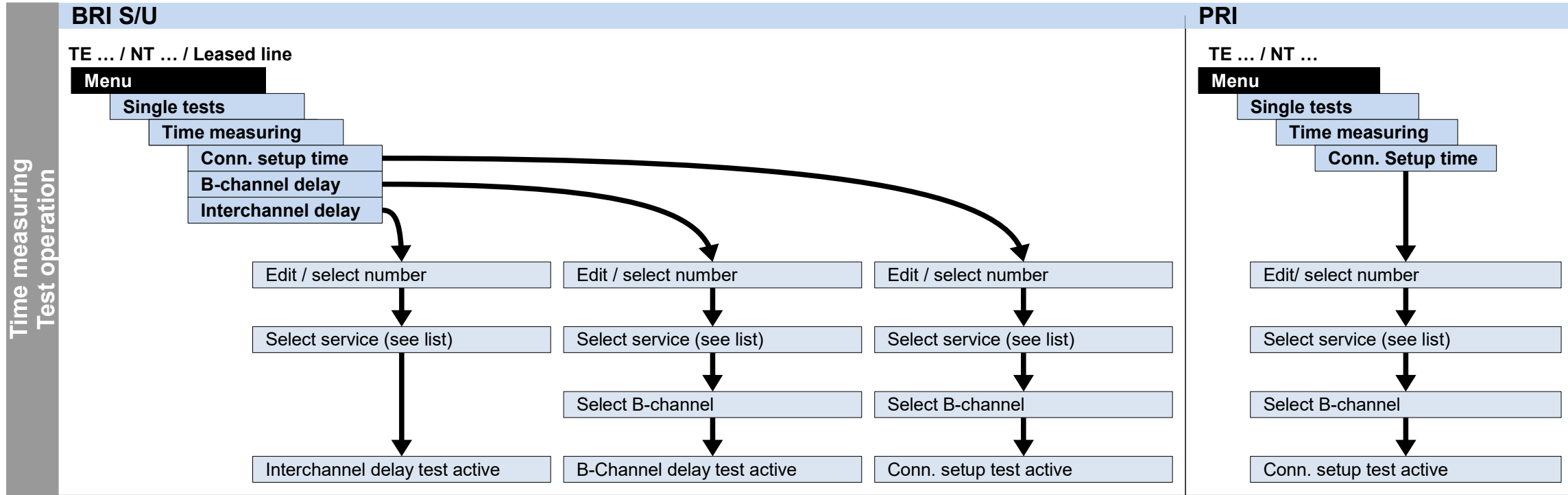
- All
- Spch
- DFU
- A3K1H
- A7kHz
- Tel31
- TTX
- FaxG4
- ViSyB
- ViTel
- FaxG3
- Tel7k

##### Cfx types

- CFU
- CFB
- CFNR

### Cross reference:

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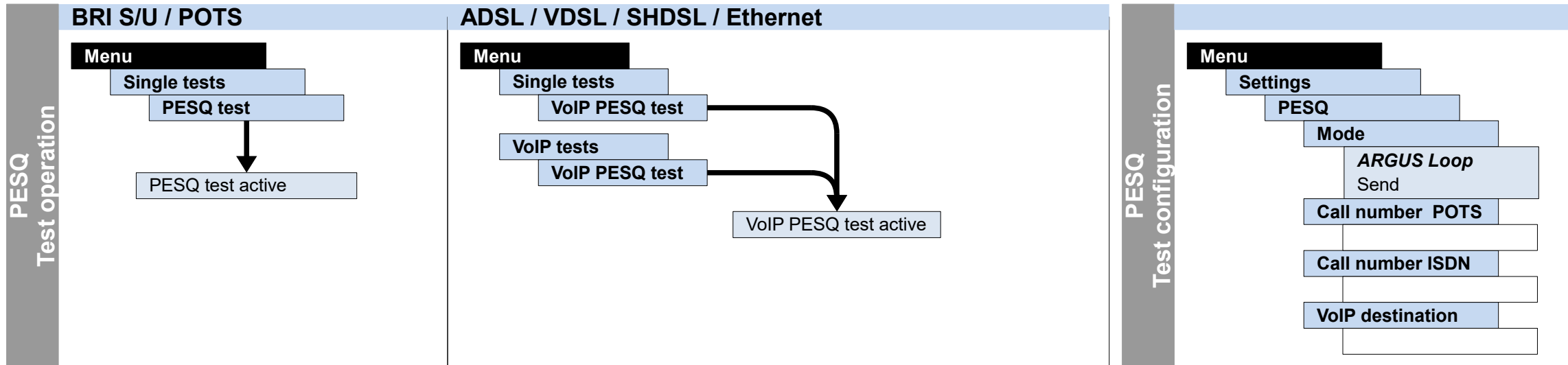
List

### Services

- Speech
- IDU 64 kBit
- 3.1 kHz audio
- 7 kHz audio
- IDU TA
- Telephony ISDN
- Fax G3
- Fax G4
- Mixed Mode
- Teletex
- Videotex
- Telex
- OSI
- Telephony 7 kHz
- Videotelephony 1
- Videotelephony 2
- User specified 1
- User specified 2
- User specified 3

### Cross reference:

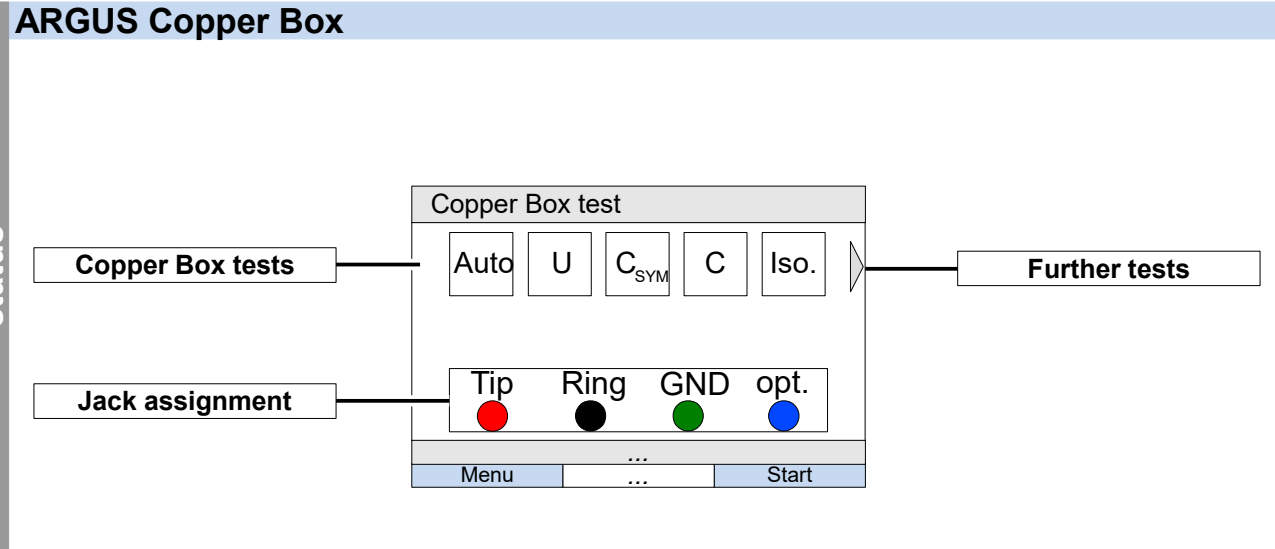
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Line scope, TDR	42
<b>Other tests</b>	
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Loop	31
Connection (POTS)	12
Monitor (POTS)	37
PESQ	38
ETH cable tests	32
<b>Others</b>	
Legend	
Protocol-overview	3
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RC measurement	41
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Other tests	page
Text br., Netw. scan	26
Loop	31
Connection (POTS)	12
Monitor (POTS)	37
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ETH cable tests	32
Others	page
Legend Protocol-overview	3
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Legend status



### ARGUS Copper Box

Menu hotkeys

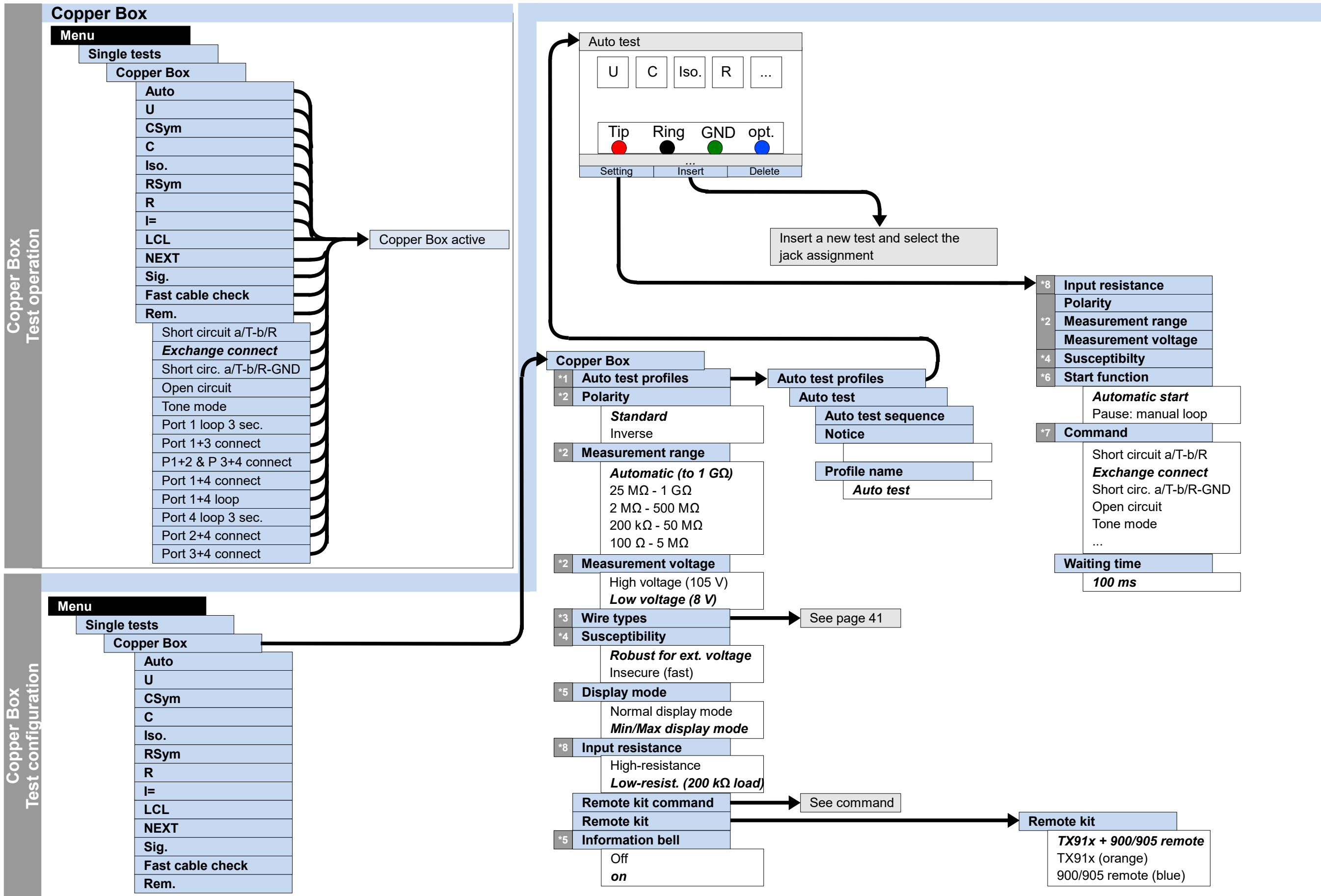
Key	Auto test	Voltage measurement	Capacitive symmetry measurement	Capacitance measurement	Isolation resistance measurement	Resistance symmetry measurement	Loop resistance measurement	DC current measurement	Unbalance	Near-end crosstalk	Termination detection	Fast cable check	Remote control of loop assistant
0	-	Reset	-	Reset	-	-	-	Reset	-	-	-	-	-
1	Auto test prof.	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	Polarity	-	-	-	-	-	-	-	-
4	-	-	-	-	Meas. range	-	-	-	-	-	-	-	-
5	-	-	-	-	Meas. voltage	-	-	-	-	-	-	-	-
6	Wire types	-	Wire types	-	-	Wire types	-	-	-	-	-	-	-
7	QR code	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	Susceptibility	-	-	-	-	-	-	-	-
9	-	Display mode	-	Display mode	-	-	-	Display mode	-	-	-	-	-
⌂	-	-	-	-	-	-	-	-	-	-	-	-	-
#	-	Input resistance	-	-	-	-	-	-	-	-	-	-	-
!	-	-	-	-	-	-	Information bell	-	-	-	-	-	-
* then 0	-	-	-	-	-	-	-	-	-	-	-	-	-
* then 1	-	-	-	-	-	-	Copper Box info	-	-	-	-	-	-
* then 2	-	-	-	-	-	-	-	-	-	-	-	-	-
* then 3	-	-	-	-	-	-	-	-	-	-	-	-	-
* then 6	-	-	-	-	-	-	-	-	-	-	-	-	-
* then 7	-	-	-	-	-	-	Store	-	-	-	-	-	-
* then #	-	-	-	-	-	-	Remote kit command	-	-	-	-	-	-
	-	-	-	-	-	-	Remote kit	-	-	-	-	-	-

Note

The hotkeys can vary depending on the selected sockets.

### Cross reference:

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<b>Copper tests</b>	<b>page</b>
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<b>Other tests</b>	<b>page</b>
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<b>Others</b>	<b>page</b>
Legend Protocol-overview	3
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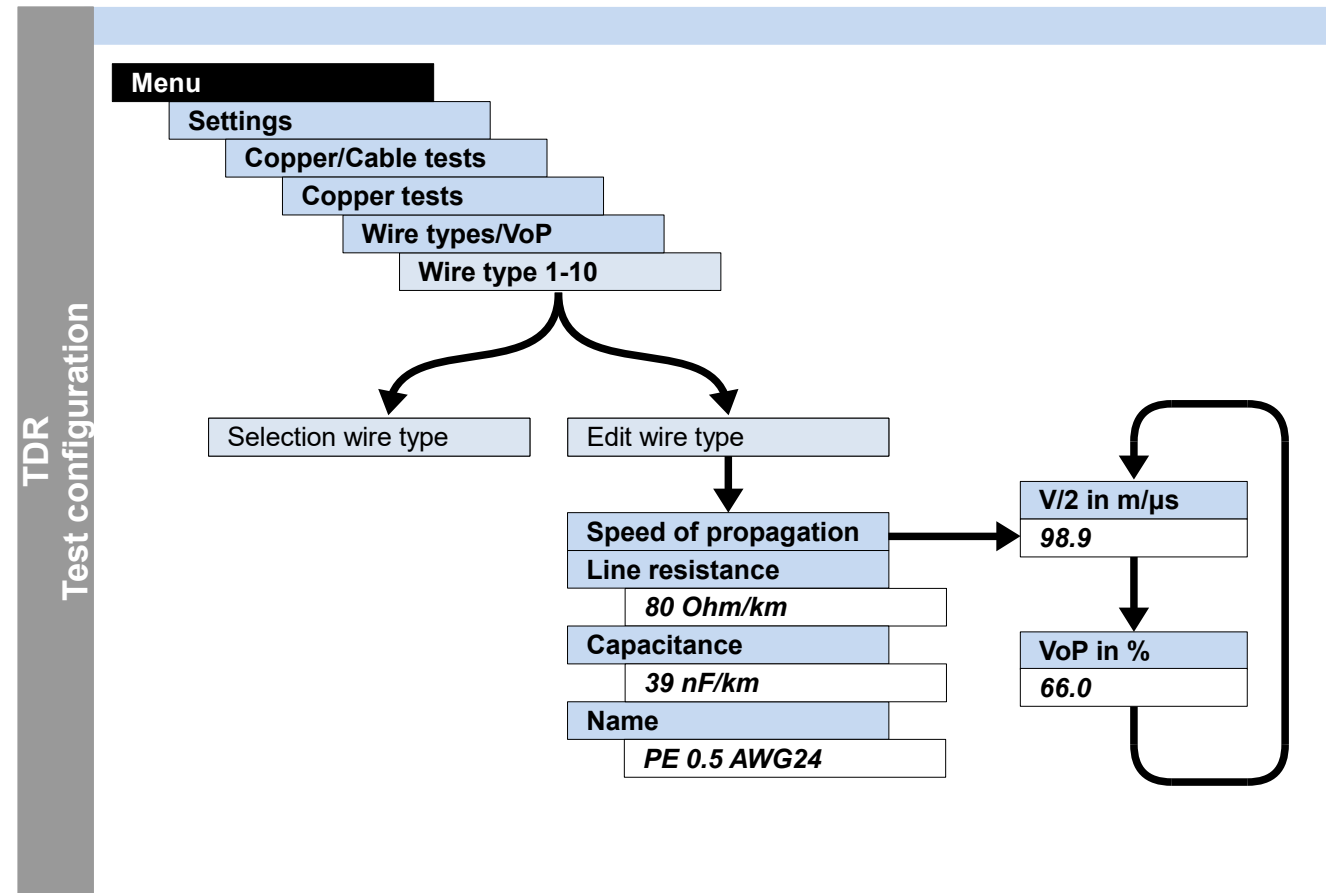
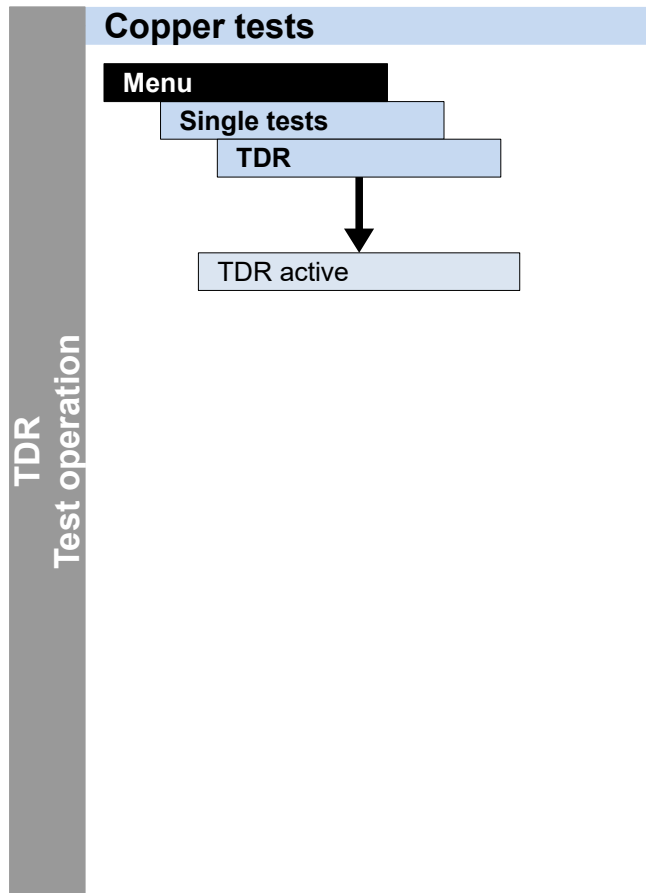
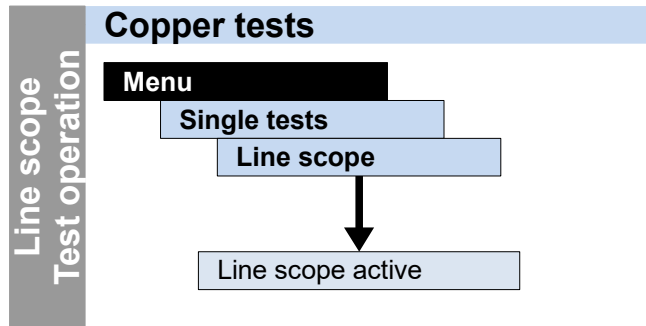
**Note**

*1 = Autotest	*3 = Auto test, CSym, C, RSym, R	*5 = U, C, Iso., R, I=, LCL, NEXT	*7 = Rem.
*2 = Iso.	*4 = CSym, C, Iso., RSym, R,	*6 = RSym, R	*8 = U



### Cross reference:

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<b>Others</b>	<b>page</b>
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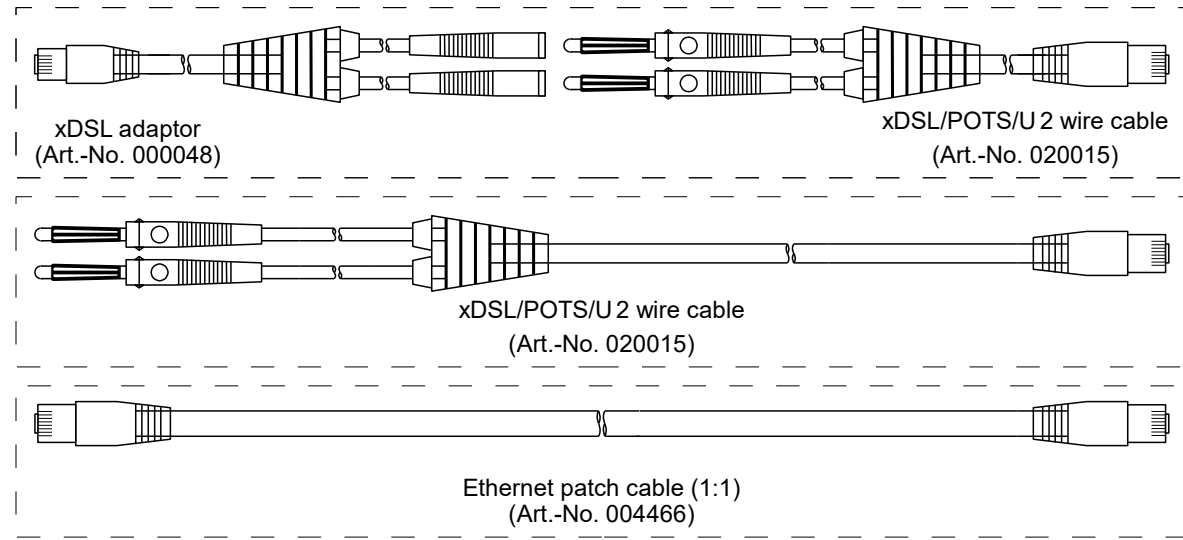
# Test leads and pin assignments

## ADSL, VDSL

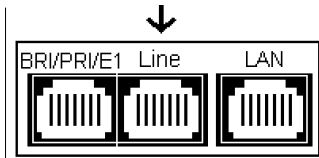
**Cross reference:**

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Access	6
Access wizard	7
Main menu	8, 12
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Data-, VoIP-, IPTV-, VoD-, Bridge-, Physic tests	8-12
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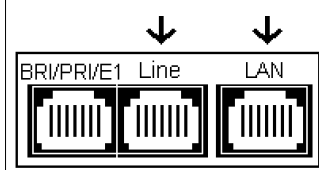
**ADSL / VDSL**



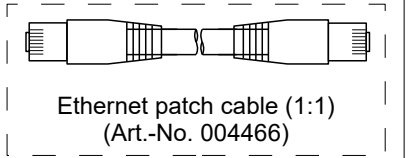
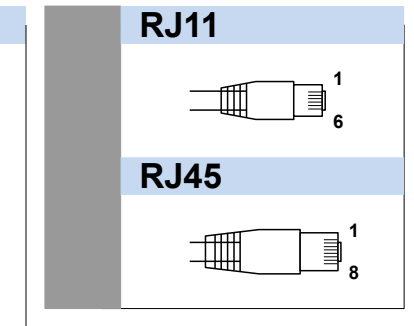
RJ11	Ban.	RJ45
3	rd	4
4	blk	5
Ban.		RJ45
rd		4
blk		5
RJ45		RJ45
1-8		1-8



**ADSL / VDSL – Bridge / Router**



RJ45	RJ45
1-8	1-8

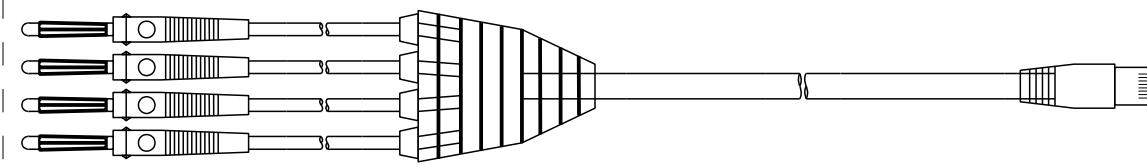


## Test leads and pin assignments SHDSL, Ethernet

### Cross reference:

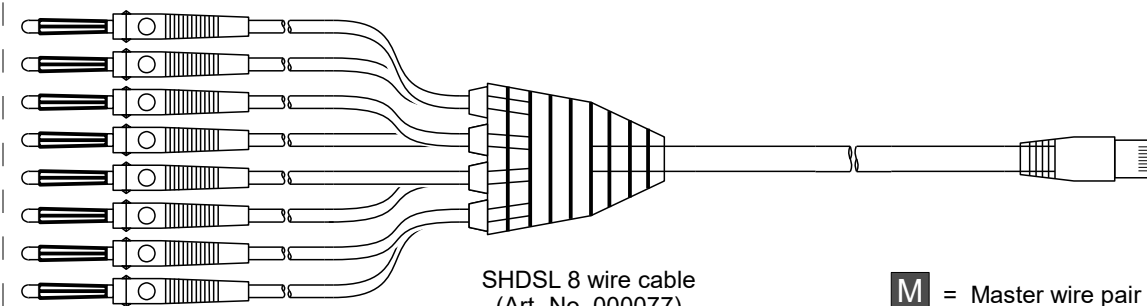
Menu	page
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Others	page
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### SHDSL 2 / 4 wire



SHDSL 4 wire cable  
(Art.-No. 000076)

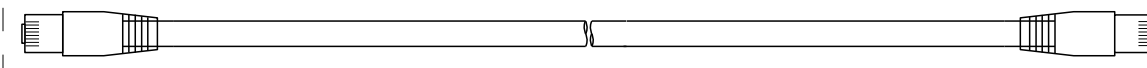
### SHDSL 2 / 4 / 6 / 8 wire



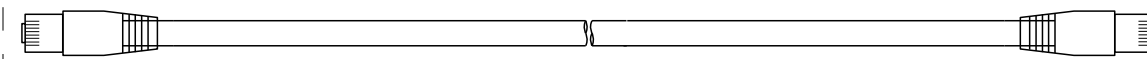
SHDSL 8 wire cable  
(Art.-No. 000077)

M = Master wire pair

### SHDSL 8 wire

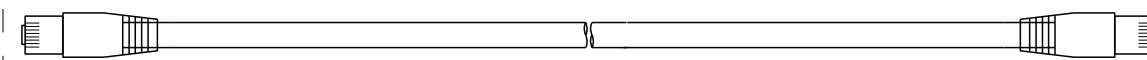


ARGUS 8 wire Crossover cable  
(Art.-No. 000083)



Ethernet patch cable 1:1  
(Art.-No. 004466)

### Ethernet



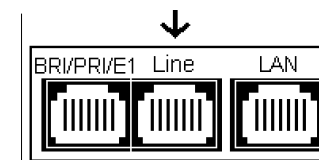
Ethernet patch cable 1:1  
(Art.-No. 004466)

Ban.	RJ45
rd (L2)	3
rd (L1)	4
blk (L1)	5
blk (L2)	6

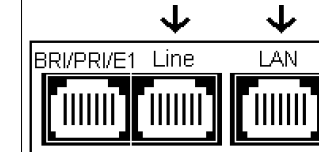
Ban.	Line	RJ45
M rd	Pin 4	4/5
M blk	Pin 5	4/5
rd	Pin 3	3/6
blk	Pin 6	3/6
rd	Pin 1	1/2
blk	Pin 2	1/2
rd	Pin 7	7/8
blk	Pin 8	7/8

Line	RJ45	RJ45
1	1/2	4/5
2	4/5	1/2
3	3/6	3/6
4	7/8	7/8

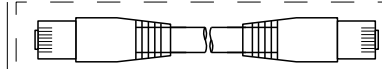
RJ45	RJ45
1-8	1-8



### SHDSL 2 / 4 / 6 / 8 wire – Bridge / Router

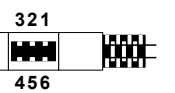


RJ45	RJ45
1-8	1-8

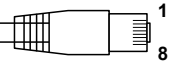


Ethernet patch cable 1:1  
(Art.-No. 004466)

### TAE



### RJ45



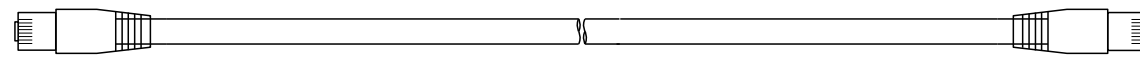
**Notice**  
For the use of the SFPs, please contact your dealer or the intec support.

## Test leads and pin assignments BRI S, BRI U, PRI, POTS

### Cross reference:

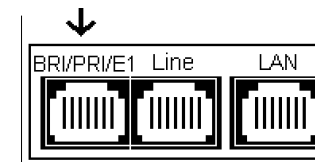
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### BRI S

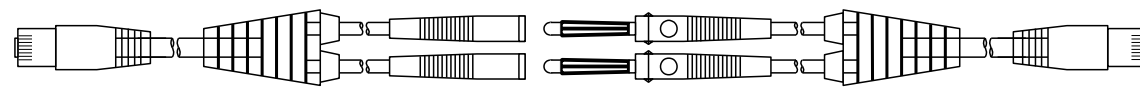


BRI S cable  
(Art.-No. 000041)

RJ45	RJ45
3/6	3/6
4/5	4/5

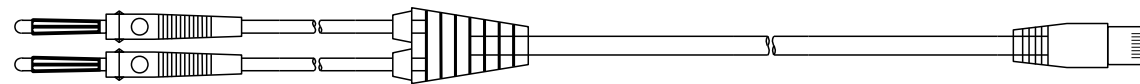


### BRI U / POTS



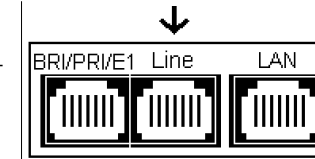
XDSL adaptor  
(Art.-No. 000048)

xDSL/POTS/BRI U 2 wire cable  
(Art.-No. 020015)

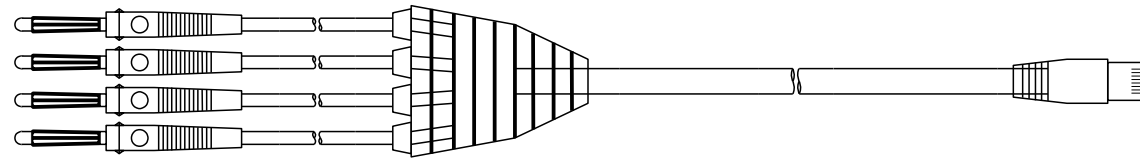


xDSL/POTS/BRI U 2 wire cable  
(Art.-No. 020015)

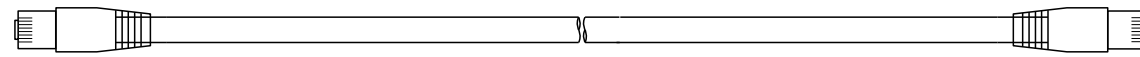
RJ11	Ban.	RJ45
3	rd	4
4	blk	5
Ban.		RJ45
rd		4
blk		5



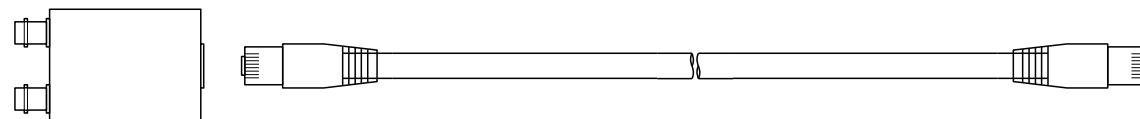
### PRI



PRI banana cable  
(Art.-No. 000018)

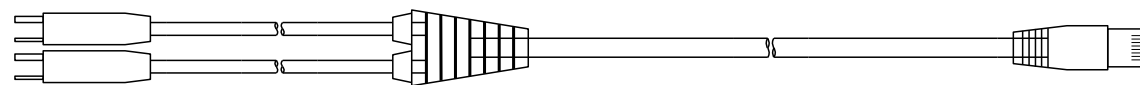


PRI cable  
(Art.-No. 000025)



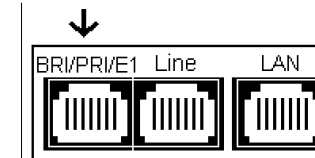
PRI coax adaptor  
(Art.-No. 000014)

PRI cable  
(Art.-No. 000025)

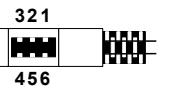


PRI ISEP cable  
(Art.-No. 000098)

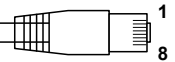
Ban.	RJ45	
rd 1	8	
rd 2	1	
blk 1	7	
blk 2	2	
RJ45	RJ45	
1/2	1/8	
4/5	2/7	
BNC	RJ45	RJ45
TX Out	1/2	1/8
RX In	4/5	2/7
ISEP	RJ45	
1/2	1/8	
4/5	2/7	



### TAE



### RJ45



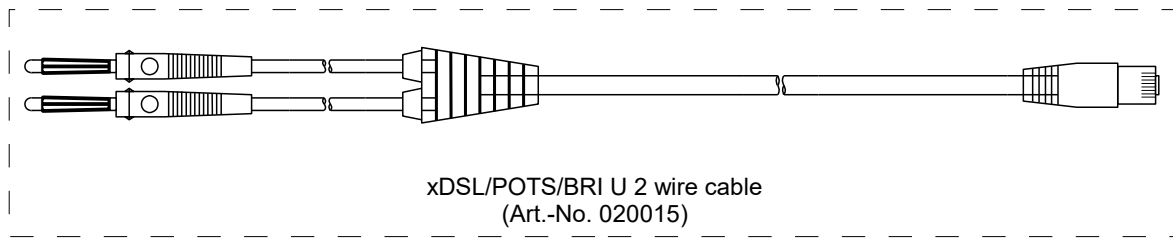
# Test leads and pin assignments

## Copper tests

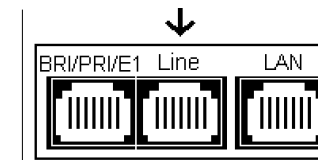
### Cross reference:

Menu	page
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Access wizard	7
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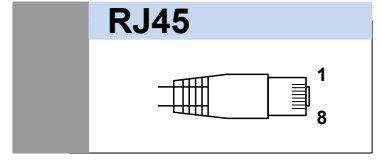
### Copper tests: R measurement / RC measurement / Line scope / TDR



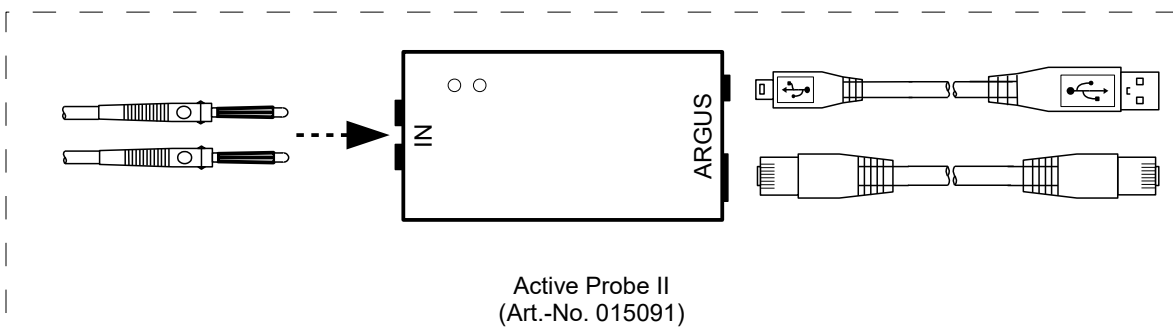
Ban.	RJ45
rd	4
blk	5



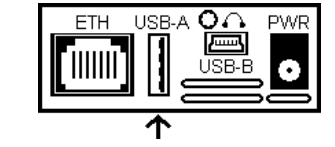
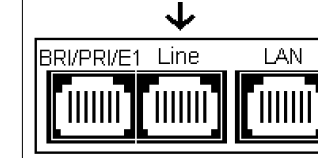
The copper tests are performed using pin 4/5 of the line interface. Alternatively, the test can be carried out with every other test leads that is using pin 4/5.



### Copper tests: Line scope



Ban.	RJ45
blk	4
blk	5



The Active Probe II needs to be powered by the USB-A interface. The power supply can be enabled in the settings or according tests.

**Cross reference:**

<b>Menu</b>	<b>page</b>
Access	6
Access wizard	7
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