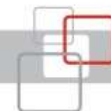


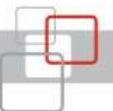
Vykročte do budoucnosti konektivity s námi

Cesta od 1G k 10G

Roman Štemberk



Proč se zajímat o XGS-PON?

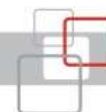


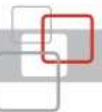
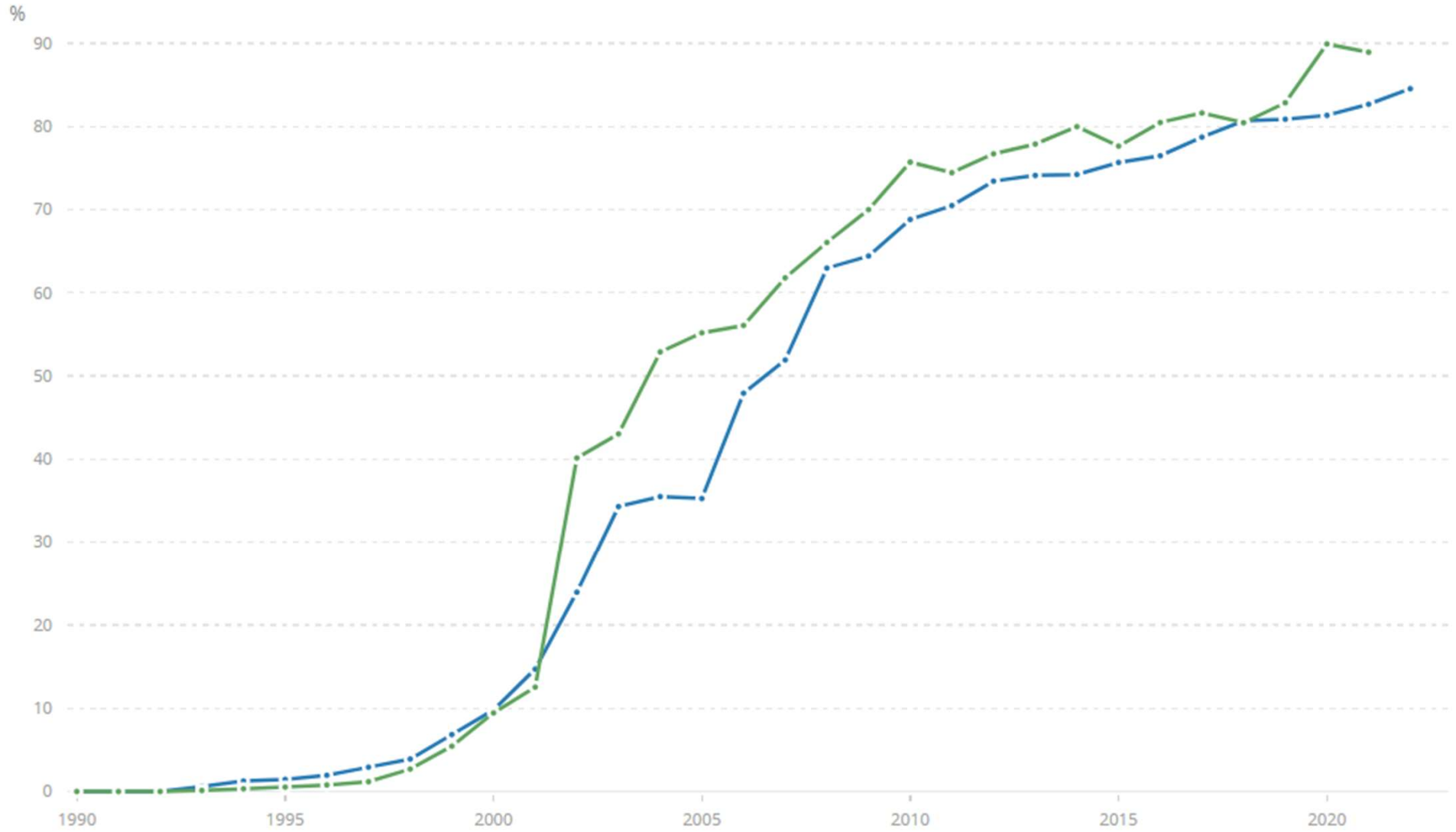
T FIBER

8000

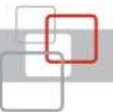
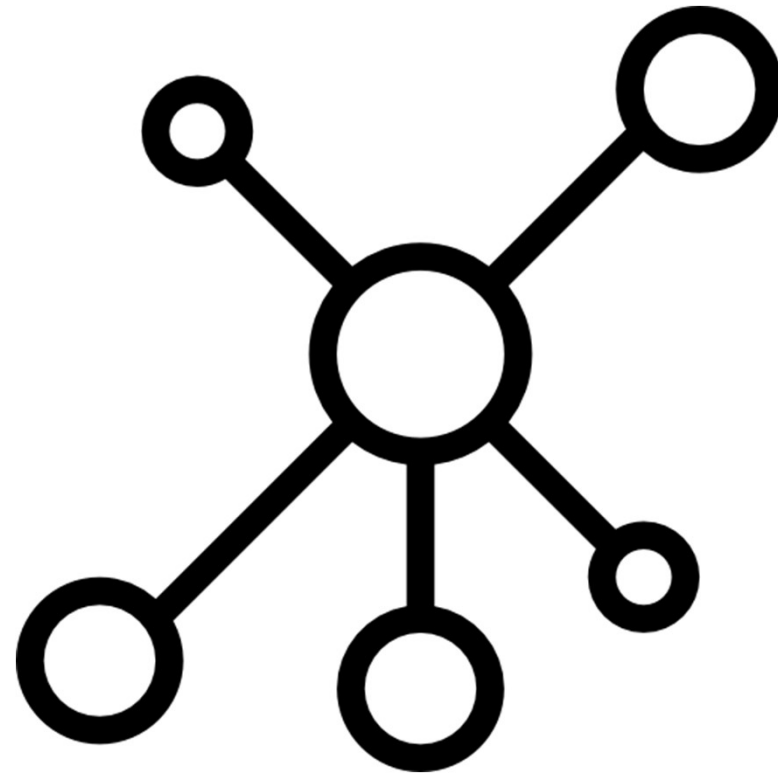
Optický internet T FIBER

Technologie	Maximální inzerovaná rychlost		Běžně dostupná rychlost		Minimální dostupná rychlost	
	Stahování dat	Odesílání dat	Stahování dat	Odesílání dat	Stahování dat	Odesílání dat
Fiber Internet 250	250 Mb/s	250 Mb/s	175 Mb/s	175 Mb/s	75 Mb/s	75 Mb/s
Fiber Internet 500	500 Mb/s	500 Mb/s	350 Mb/s	350 Mb/s	150 Mb/s	150 Mb/s
Fiber Internet 1000	1000 Mb/s	1000 Mb/s	700 Mb/s	700 Mb/s	300 Mb/s	300 Mb/s
Fiber Internet 8000	8000 Mb/s	8000 Mb/s	5600 Mb/s	5600 Mb/s	2400 Mb/s	2400 Mb/s

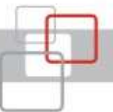
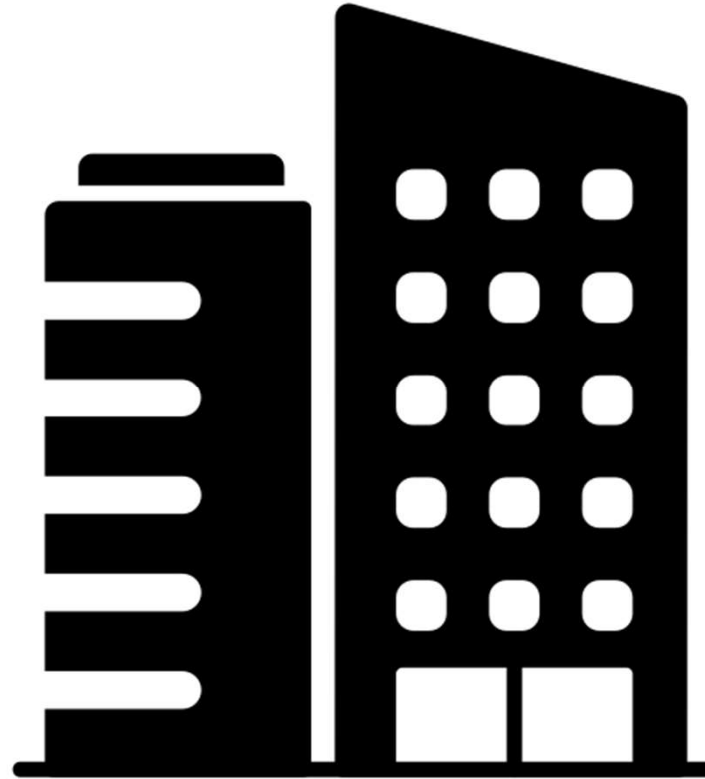




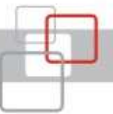
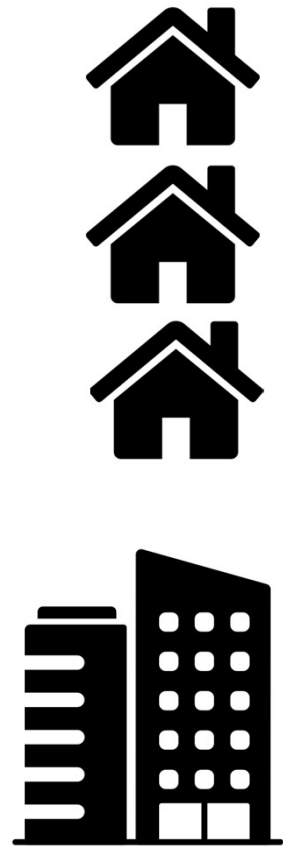
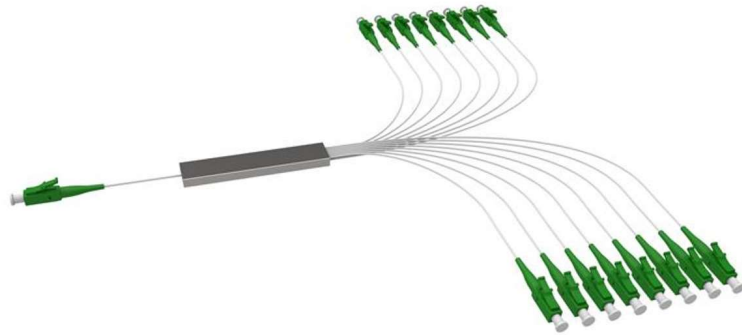
PON Topologie



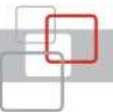
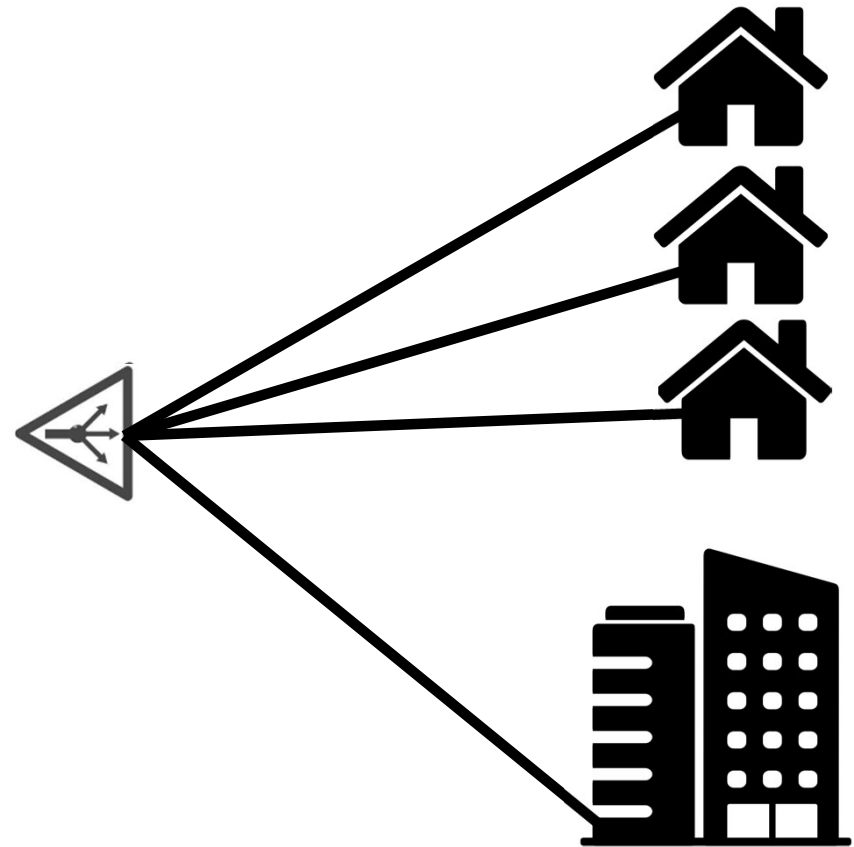
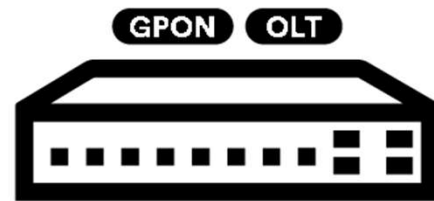
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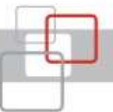
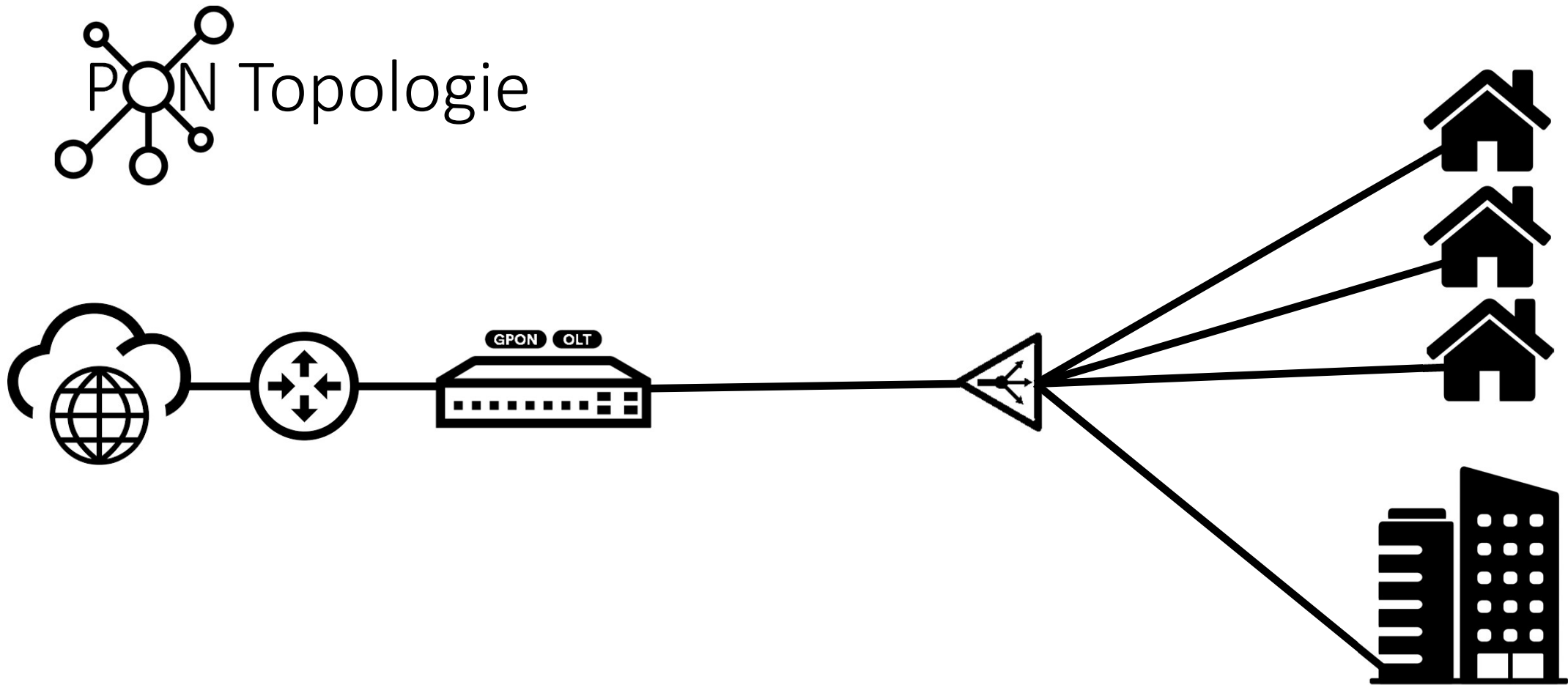
PON Topologie



PON Topologie

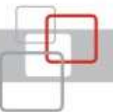
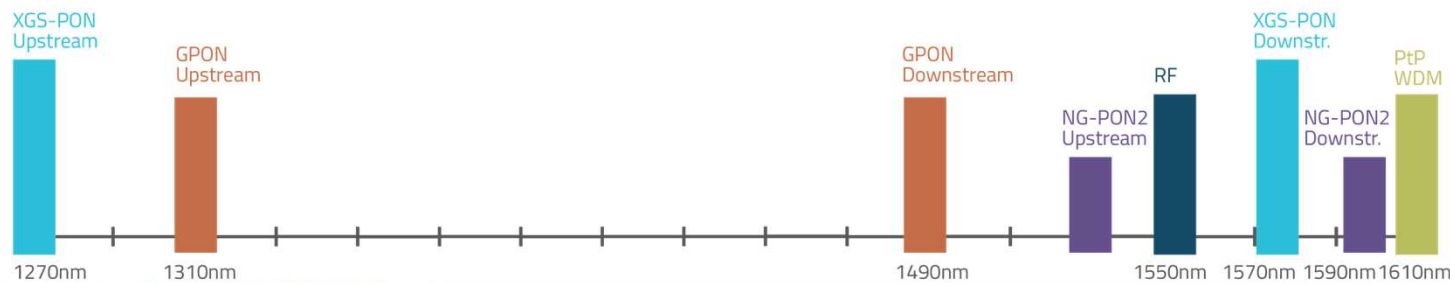
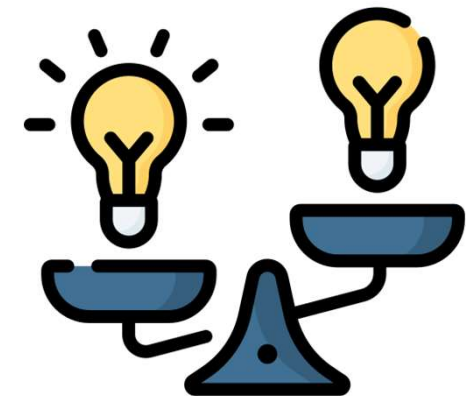


PON Topologie

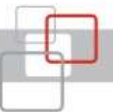
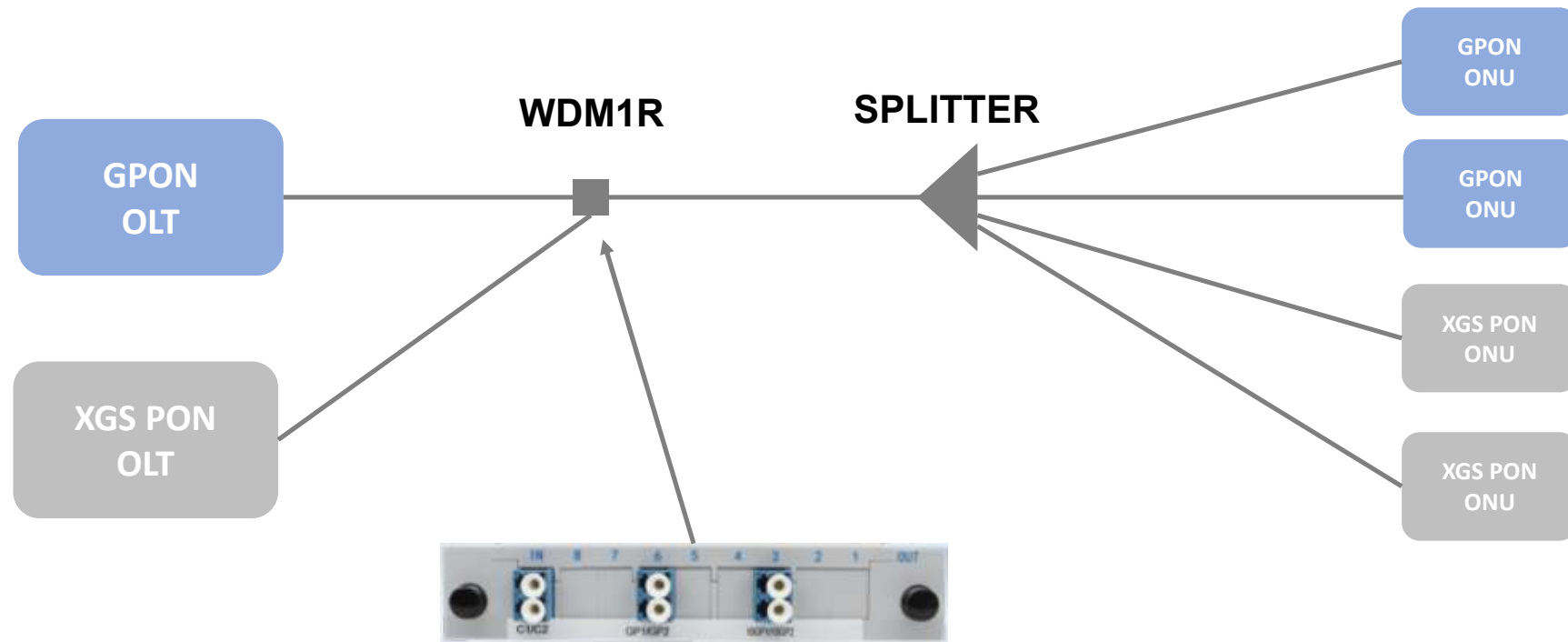


XG(S)-PON vs GPON

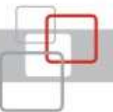
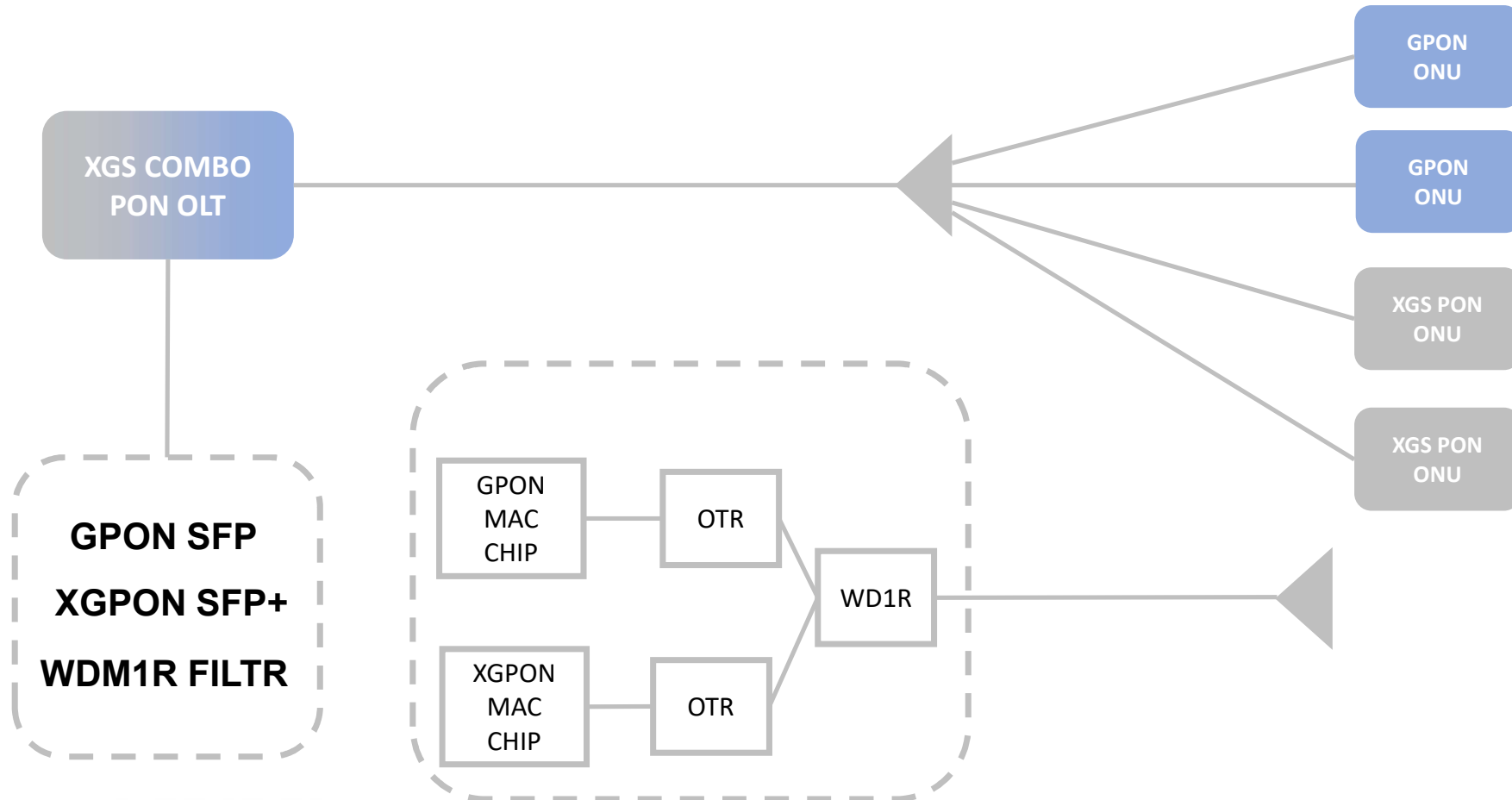
GPON	XG-PON	XGS-PON
STANDARD ITU-T	STANDARD ITU-T	STANDARD ITU-T
1310/1490 nm	1270/1577 nm	1270/1577 nm
1:128	1:256	1:256
2,48 Gbps	9,95 Gbps	9,95 Gbps
1,25 Gbps	2,48 Gbps	9,95 Gbps



Koexistence s GPON



XGS COMBO PON

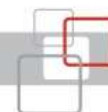


XGS-PON Dodavatelé

Adtran 

RAISECOM 

genexis 

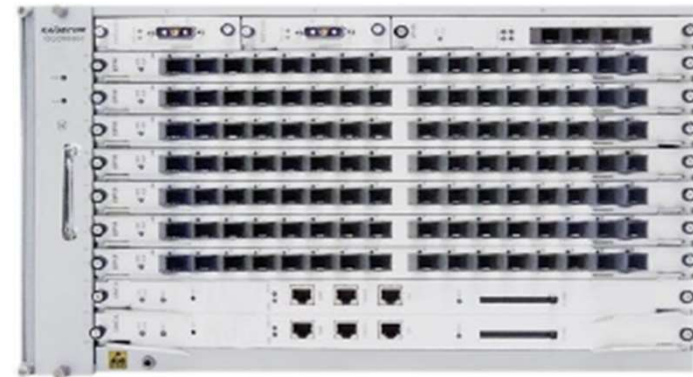


RAISECOM

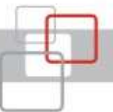
Centrální jednotky XGS-PON



ISCOM 6820



ISCOM 6860



RAISECOM

- Koncové jednotku



HT806G-XGS-XE



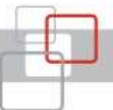
HT806G-WX



ISCOM6108-XGS-PSE



HT801-XGSFP



Reference - SK



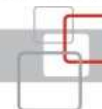
20x ISCOM 6820



800x HT803G-1GE



150x ISCOM6108-XGS-PSE

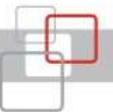


Adtran

- 4x XGS-PON
- 4x 10 Gbps
- -40 ~ 65 °C
- Fanless design



SDX 6324-4

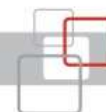


Adtran

SDX 6320-16



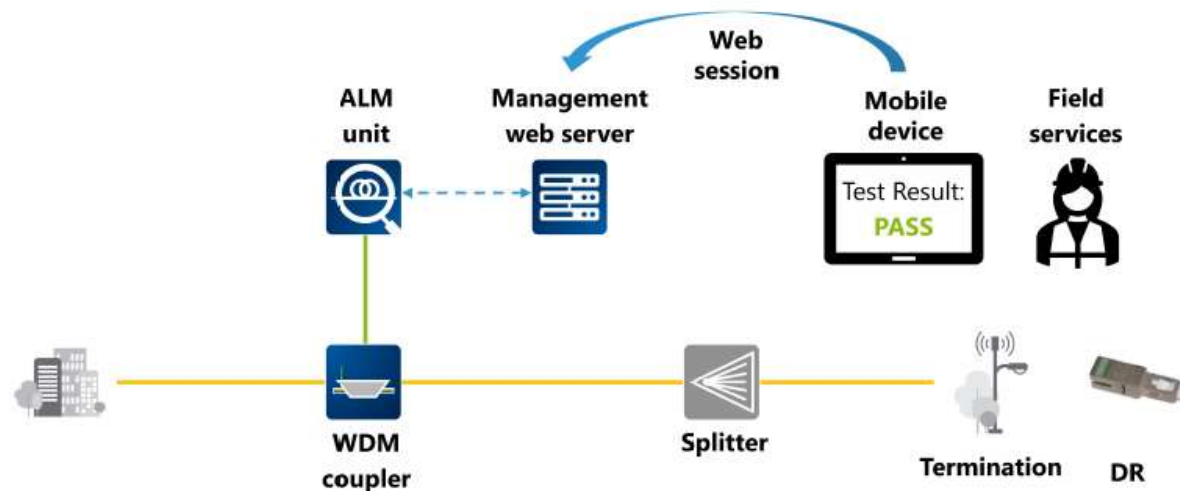
SDX 6312-4



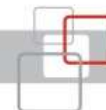
MPO based port extender
16 x MPO24 = 384 ports



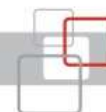
LC/APC based port extender
96 ports



Geo view



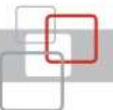
Genexis FiberTwist














Genexis nezávislé ONU



OLT Brand	HW Chassis	Line card(s)	Current software version
Calix	E7	GPON-8r2	AXOS-R22.1.0
		XG801	AXOS-R23.2.0
DZS	V2/MXK-F219 V14/MXK-F1419	V2/MXK-LC-GP16-3	3.4.2.242
		V2/MXK-LC-NGPS16-3	
		V2/MXK-LC-NGPS16-5	
	V1-16XC	Integrated GPON/XGS-PON line card	R5.01
V6	V-LC-APAP-16	TBD	
	V2-LC-NGPC16-5		
GX Group	Saturn SOLT33-08P Saturn SOLT33-16P	Integrated GPON line card	2.1.19B 2.1.23B
	Mars MOLT-XGS-16P	XM16LC	1.1.1.101
	Harmonic	FIN-1	vOLT (virtual OLT)
Huawei	MA5600T	GPON line card: H802GPFD	MA5600V800R012C00
	MA5608T	GPON line card: H807GPBH	MA5600V800R017C00
	MA5800-X7	Combo line card: H902CSHF	MA5800V100R019C11 / SPH216
Keymile	MileGate 2510	GPON line card: SUGP1	R22H03
Nokia (Alcatel-Lucent)	ISAM 7360 FX-4 ISAM 7360 FX-8	GPON line card: NGLT-C	R6.0.02
		GPON line card: FGLT-B	R6.2.04d
		GPON line card: FGLT-C	R6.2.04m
		GPON line card: FGLT-D	R6.2.04sc
		XGS-PON line card: FWLT-B	R6.2.04sj
		XGS-PON line card: FWLT-C	R6.6 pre-release
Raisecom	ISCOM6820-GP	ISCOM6820-GPSC	ISCOM6820-GPSC_ROAP_3.10.9_20180813
ZTE	C300	GPON line card: GTGH	V2.1.0
	C620	XGS-PON line card: HFTL	V1.2.1
Zyxel	2406	GPON line card: OLC2404	V4.02.(AAVA.4)C0

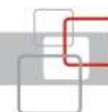


XGS-PON portfolio overview

FiberTwist & FiberBox XGS2000-Series					
LAN I/O CATV w/ RF filters	Data only		Data + Voice (FXS)	Data + CATV	Data +
1-port XGS-PON ONTs (2.5G/10G LAN)	XGS2110-2.5G	XGS2110	XGS2114-2.5G	XGS2120-2.5G	XGS2172-2.5G
					
Multi-port XGS-PON ONTs (10G LAN + 2x/3x GE)	XGS2310B	XGS2410	XGS2414	XGS2420	XGS2472
					
Standalone 1- port XGS-PON ONTs (10G LAN)	FiberBox XGS2110 				

Tipy pro nasazení

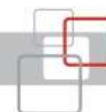
- Spočítat útlumové bilance
- Správný výběr dodavatele
 - Škálovatelnost



Školení - Pasivní optické sítě (XGS-PON, NG-PON, GPON, EPON)

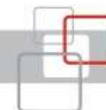


22.5. Brno



Proč PROFicomms?

- Silní dodavatelé
- Centrální sklad
- Technologický partner
 - Know-how
 - Technický tým
 - Lokální support
 - Školení





Děkuji za pozornost

Mgr. Roman Štemberk, DiS.

Stemberk@proficomms.cz

736 625 838

