



Question 5

What should be the minimal configuration of the Joining Link with regard to:

A. Trunk groups

The number and type of separate trunk groups between Swisscom and the PTS

B. Distance between ducts

The minimum distance between ducts to support the Network Joining Service

C. Connect to 1 or 2 Access Points

The minimum number of Swisscom Access Points the PTS must connect to in an Access Area



A. Trunk Groups

- Is it necessary to have two separate both-way trunk groups.
 - one for traffic forecasted by Swisscom
 - one for traffic forecasted by PTS
- Swisscom to investigate whether billing processes are able to accommodate single trunk group for all traffic



B. Distance between ducts

- **Previous standard offer required a minimum of 5 meters separation between Network Joining Links connecting an operator's network to each of a pair of Swisscom Access Points**
- **Swisscom standard offer changed**
- **5 meters now specified as 'target' minimum separation between Network Joining Links**
- **Separation able to be jointly reviewed by Swisscom and PTS on a case by case basis.**



C. Connect to 1 or 2 Access Points

Main discussion point:

Should connection to a pair of Access Points be required when the pair of switches are located in different cities

Swisscom's solution:

Swisscom Managed Network Implementation Service

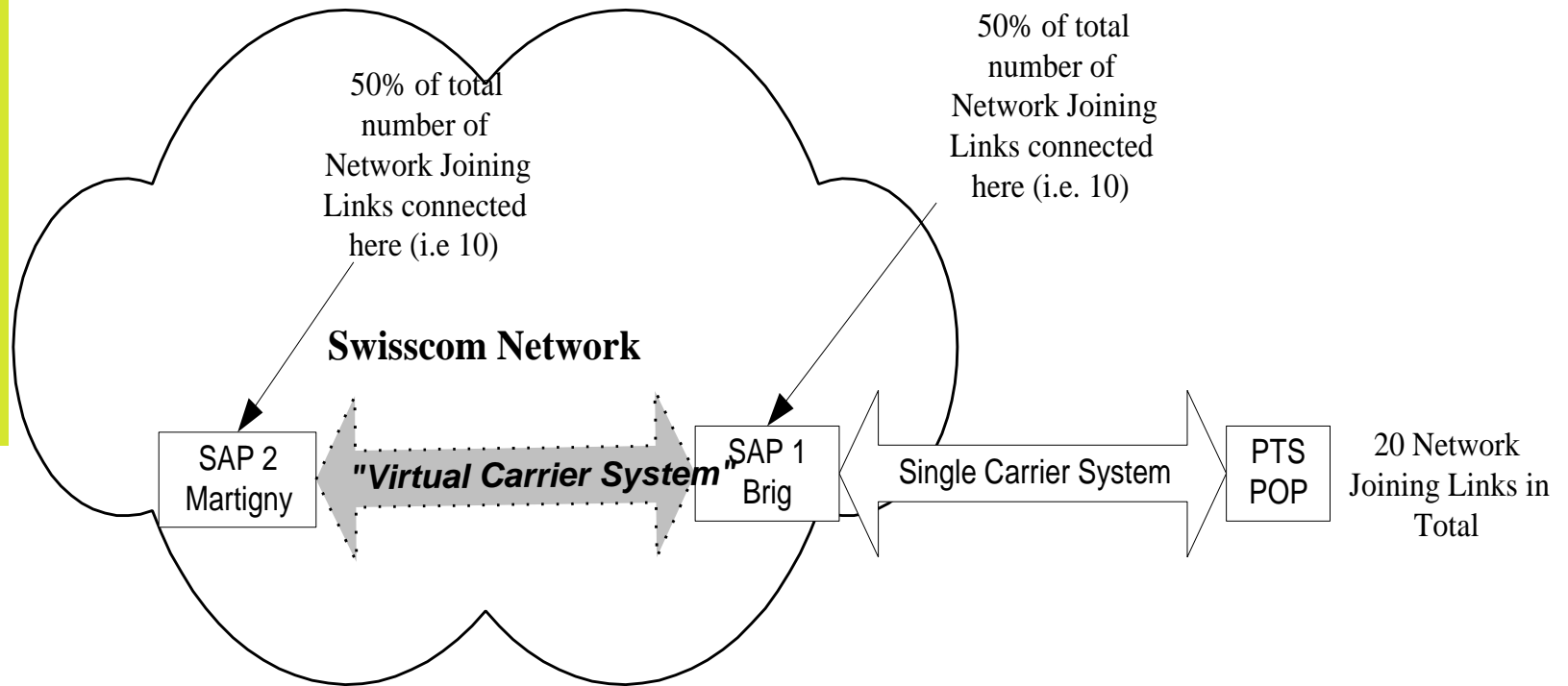


Swisscom Managed Network Implementation Service

- **An optional service offering a Single Carrier System connection.**
- **Pricing is market oriented rather than cost based**
 - **Not a regulated service**
- **Only offered where Access Pairs are not close together**
 - **Available in 11 of the 18 Access Areas**
- **A ‘Virtual Carrier System’ used to connect between the Swisscom Access Switches.**
- **Maximum of 31 Joining Links to each Access Switch for Managed Network Implementation Service**

Swisscom Managed Network Implementation Service

Example for 20 E1's at PTS POP





SAP's where Managed Network Implementation Service Offered

Area	SAP 1	SAP 2
2	6500 Bellinzona	6932 Breganzona
4	2502 Biel	4500 Solothurn
6	1630 Bulle	1700 Fribourg
10	2300 Le Chaux-de-Fonds	2000 Neuchatel
11	5000 Aarau	4600 Olten
12	8867 Niederurnen	8640 Rapperswil SG
13	9000 St. Gallen	9500 Wil SG
14	3900 Brig	1920 Martigny
15	3800 Interlaken	3600 Thun
16	8245 Feuerthalen	8400 Winterthur
18	5400 Baden	5610 Wohlen AG



Network Security

- Concern about network security in case of failure of Single Joining Link
- Swisscom likely to offer a **Network Rerouting Service** as part of a family of protection services commercially offered to PTS's.