

Chapter 4

IP Communications Network (FLET'S Service)

Conditions for Interconnection to IP Communications Network (FLET'S Service)

Interconnection to the IP communications network (FLET'S service) is a menu for ISPs that provide Internet access service to end-users. The preconditions in submitting an application for interconnection are as follows.

Interconnection Conditions

An applicant must be a Type I or Type II telecommunications carrier.

An applicant can assign a global IP address to each end-user.

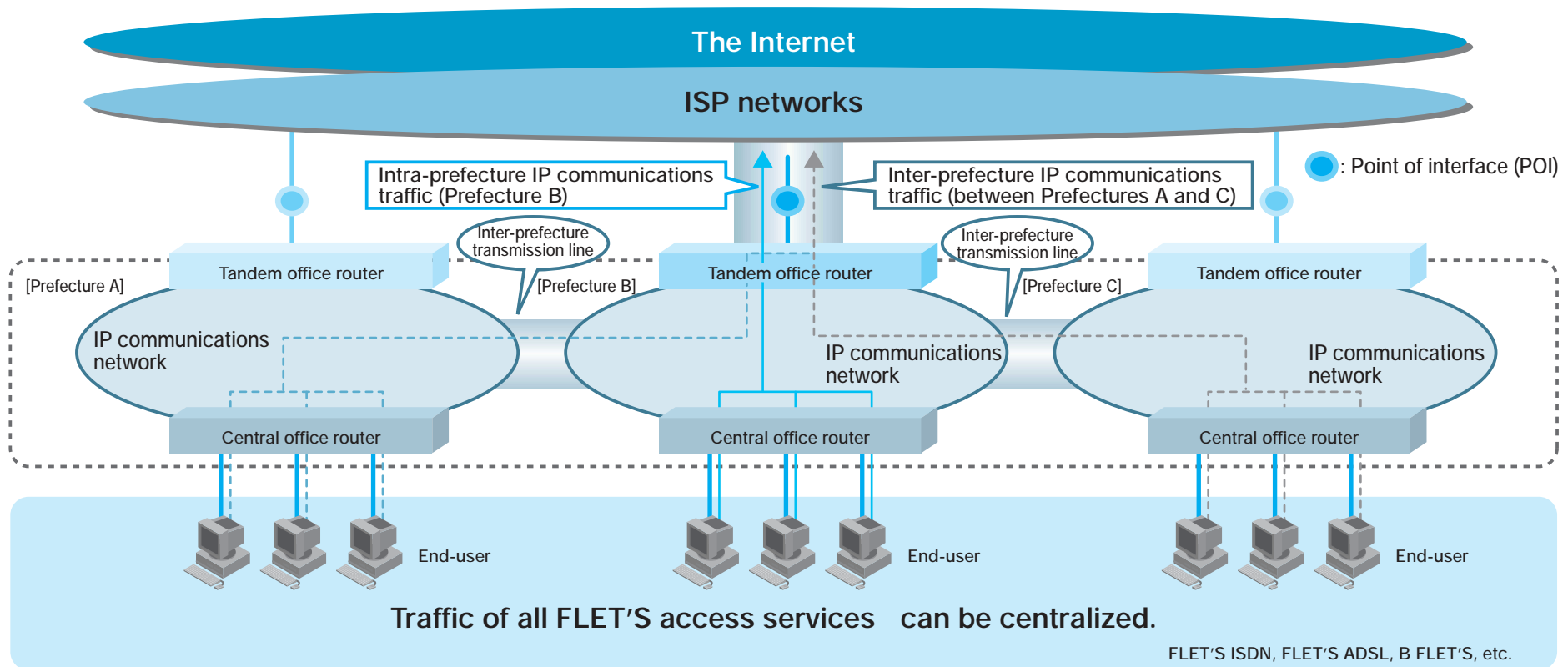
User authentication by RADIUS must be possible.



Cases in which service is not provided as telecommunications service and used on the in-house network, etc., of other carriers are not handled as interconnection.

With respect to FLET'S service, lines are provided for end-users only.

Patterns of Interconnection to IP Communications Network (FLET'S Service) (Overview)

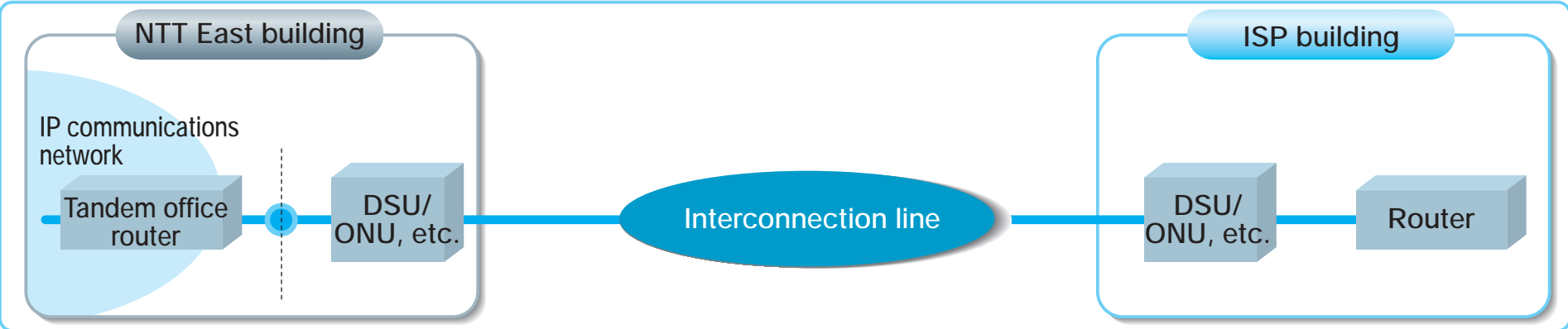
Connecting to a POI for each prefecture makes it possible to provide service to end-users in service areas within each prefecture.
 Connecting to a centralized POI in any prefecture makes it possible to provide service to end-users in service areas in all prefectures.



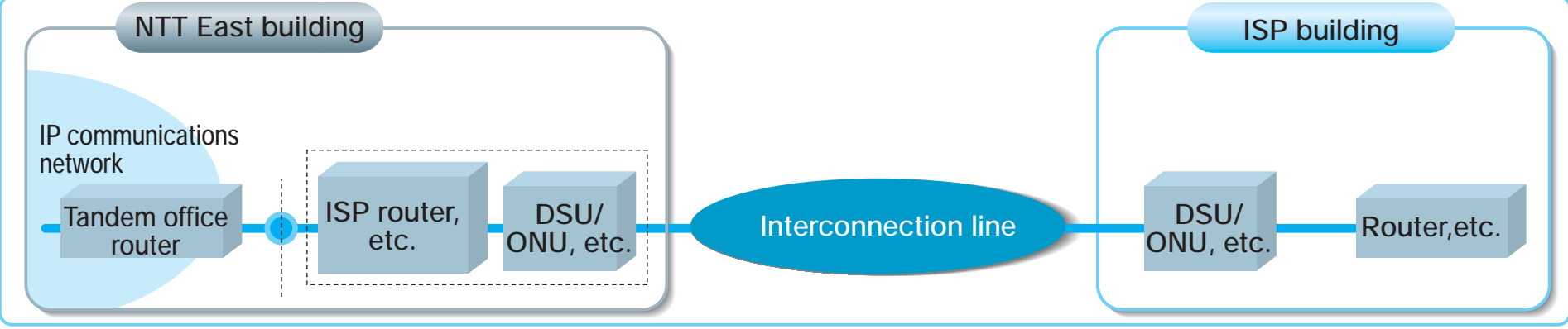
-  IP communications network: Can accommodate traffic of end-users for each prefecture on an individual basis.
-  Wide-area IP communications network: Can accommodate traffic of end-users beyond prefectural borders through centralization.

Patterns of Interconnection to IP Communications Network (FLET'S Service)

Cases of direct interconnection to digital leased lines (1.5 M, 6 M), ATM leased lines (0.5 ~ 135 M), and wide-area LAN type leased lines (100 M, 1 G)



Cases of interconnection to other carrier facilities that are collocated in an NTT East building



The location of a POI may vary depending on the pattern of interconnection. The above patterns are not necessarily used as the equipment to be installed differs depending on the pattern of interconnection.

● Point of interface (POI)

Interfaces for Interconnection to IP Communications Network (FLET'S Service)

The interfaces for interconnection to the IP communications network of NTT East are as follows.

Interfaces for Tandem Office Router Interconnection	Corresponding Leased Line, Etc.
ATM (MM/SM) interface	ATM leased line, ¹ etc.
100BASE-TX interface 100BASE-FX interface 1000BASE-LX interface 1000BASE-SX interface	Interconnection to collocated other carrier facilities Wide-area LAN type leased line, ² etc.
Leased line primary-rate or secondary-rate user-network interface	Digital leased line, ³ etc.

Explanation

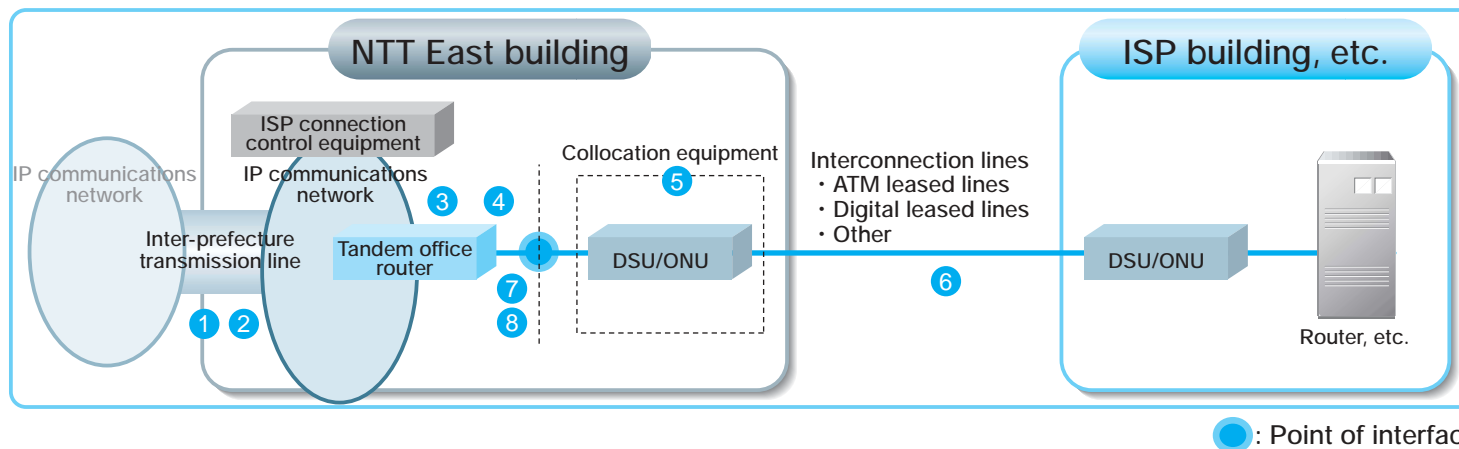
- ¹ ATM Megalink (Dual and Single) can provide this interface in the case of NTT East leased line services.
- ² MetroEther and SuperWide LAN (100 Mbit/s) can provide this interface in the case of NTT East leased line services.
- ³ Digital Access 1500 and 6000 can provide this interface in the case of NTT East leased line services.

If you have questions about interfaces other than the above, please contact us separately.

Expenses for Interconnection to IP Communications Network (FLET'S Service)

Expenses for interconnection to the IP communications network of NTT East include network modification charges, collocation charges, etc., that are required monthly (expenses for work and procedures represent one-time charges).

[Cases of interconnection using the IP communications network inter-prefecture transmission function via leased-line (ATM and digital leased lines) interfaces]



Application of the charge classification for the IP communications network inter-prefecture transmission function
 Charges will be applied in accordance with the interface speed requested by the relevant carrier at a POI between the relevant carrier facilities and NTT East facilities.

[Pattern 1]Charges are applied in accordance with the interface speed at the connection equipment for centralization.

[Pattern 2]Charges are applied in accordance with the tandem office router interface speed.

● : Point of interface

Expense Item		Description	Intra-prefecture IP communications	Inter-prefecture IP communications
—	Expenses for procedures for the line installation in the IP communications network inter-prefectural section	Charges for the procedure when the IP communications network inter-prefecture transmission function is used		
①	IP communications network inter-prefecture transmission function	Charges in accordance with the classification (interface speeds: medium capacity class and large capacity class)		
②	IP communications network inter-prefectural line management function	Charges for the management, etc., of usage information on the IP communications network inter-prefecture transmission function		
③	Work expenses for IP communications network data settings	Expenses for setting IP addresses, etc., in a tandem office router		
④	IP communications network interconnection interface function	Interconnection usage charges (expenses for the interface package of a tandem office router, connection equipment for centralization, etc.)		
⑤	Collocation expenses	Space charges, electricity usage charges, NTT East facility usage charges, maintenance expenses, etc., when other carrier routers, etc., are installed in an NTT East building		
⑥	Interconnection line expenses (leased lines, etc.)	Charges in accordance with the speed class when NTT East leased lines are used		
⑦	Optical signal intra-office transmission function	Expenses required when an optical signal intra-office transmission line (intra-office optical fiber) is used for interconnection between a tandem office router and other carrier facilities		
⑧	Optical signal intra-office line management function	Charges for the management, etc., of information on the usage of optical signal intra-office transmission function		

Obligation to Pay Expenses for Interconnection to IP Communications Network (FLET'S Service)

Obligation to Pay Interconnection Charges (Network Modification Charges)

Please note in advance that the payment of expenses for interconnection facilities prepared for other carriers will be handled as follows in accordance with Article 36-2 (Usage Cancellation, Etc., of Facilities Subject to Individual Management Through Application by a Contracting Carrier), Article 36-3 (Disposal or Diversion for Other Purposes of Facilities Subject to Individual Management), and Article 66 (Obligation to Pay Network Modification Charges) of the Articles of Agreement Concerning Interconnection in the event either of the following is applicable.

[In Case of Canceling the Usage of Interconnection Facilities]

Please submit an application for the usage cancellation of interconnection facilities now being used by completing Form 22-2.

The payment of network modification charges as calculated by the following formula is required for interconnection facilities whose usage is to be canceled.

<When diversion for other purposes is not possible>

- a. Cases in which the legal life of the relevant facility has not elapsed
Charge amount = Undepreciated balance + removal work expenses
- b. Cases in which the legal life of the relevant facility has elapsed
Charge amount = Residual value + removal work expenses

<When diversion for other purposes is possible>

- a. Cases in which the legal life of the relevant facility has not elapsed
Charge amount = Undepreciated balance + removal work expenses - usage value after diversion for other purposes

[In Case of Upgrading Interconnection Facilities]

Please submit an application for the usage cancellation of interconnection facilities now being used by completing Form 22-2. At the same time, please submit an application for the construction of interconnection facilities to be newly used (which is the procedure usually taken for such cases).

The payment of network modification charges as calculated by the following formula is required for interconnection facilities whose usage is to be canceled for upgrading, in addition to network modification charges for the interconnection facilities after upgrading.

<When diversion for other purposes is not possible>

- a. Cases in which the legal life of the relevant facility has not elapsed
Charge amount = Undepreciated balance + removal work expenses
- b. Cases in which the legal life of the relevant facility has elapsed
Charge amount = Residual value + removal work expenses

<When diversion for other purposes is possible>

- a. Cases in which the legal life of the relevant facility has not elapsed
Charge amount = Undepreciated balance + removal work expenses - usage value after diversion for other purposes

Please note in advance that the payment of expenses incurred is required in accordance with Paragraph 4, Article 27 of the Articles of Agreement Concerning Interconnection in the case of canceling the installation or modification of interconnection facilities after the application is submitted but before the start of interconnection.

The same procedures as those in and are applied for interconnection facilities (the interface package of a tandem office router, connection equipment for centralization, etc.) that become unnecessary as a result of POI centralization through the usage of the IP communications network inter-prefecture transmission function.

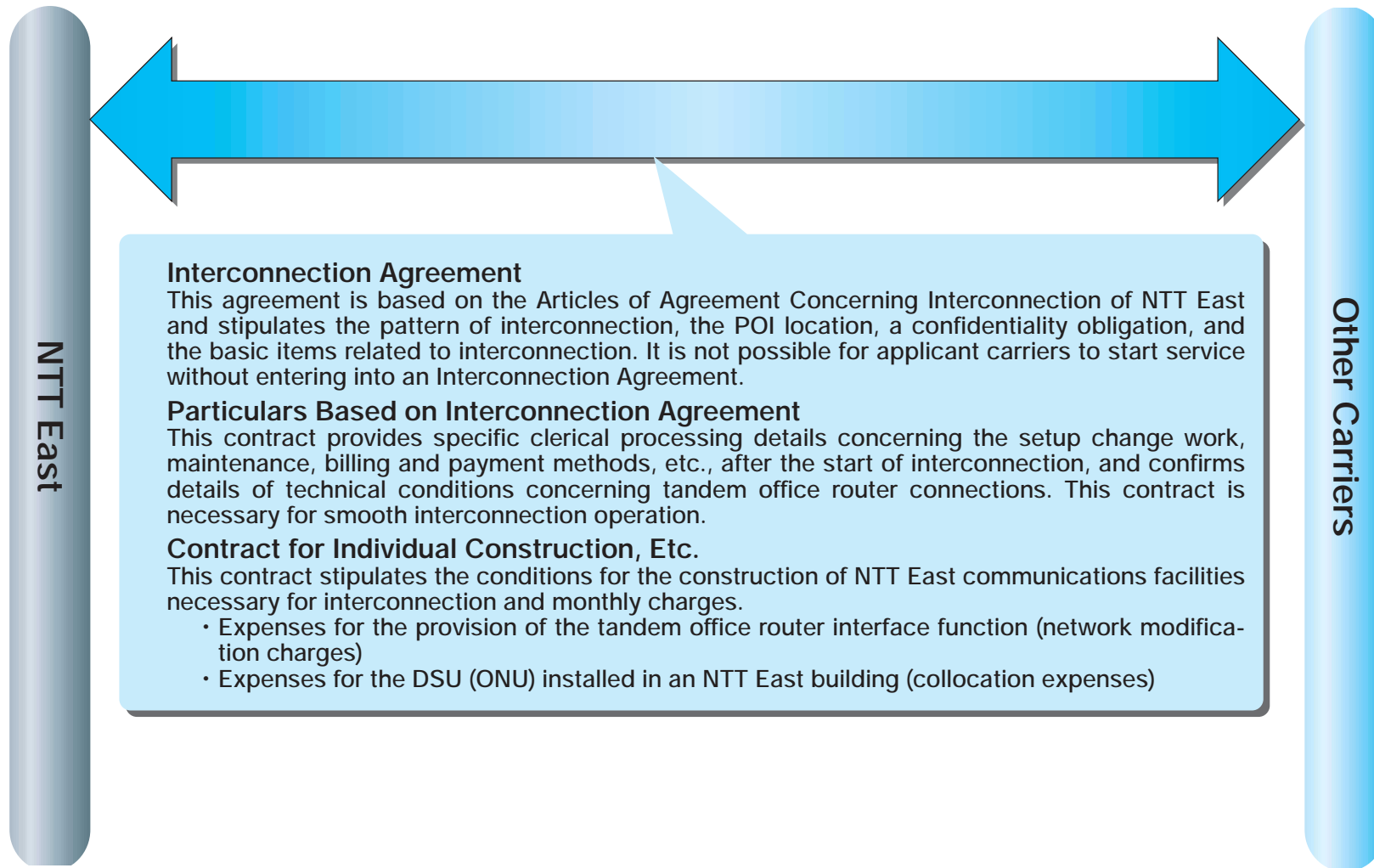
Explanation

If a change is made in the connection equipment (the interface package of a tandem office router, connection equipment for concentration, etc.) due to an increase in the number of end users, a shortage of bandwidth, etc., (e.g., from 100BASE-TX to 1000BASE-LX), the payment of network modification charges as calculated in accordance with the above cal-

culational formula for the connection equipment whose usage is to be cancelled is also required in addition to network modification charges for the connection equipment (such as the interface) to be newly used.

Contracts and Agreements Necessary for Interconnection to IP Communications Network (FLET'S Service)

Contracts necessary for interconnection to the NTT East IP communications network are as follows.



Various Types of Information Provided Concerning Interconnection to IP Communications Network (FLET'S Service)

Various types of information are provided on the Web for applicant carriers considering interconnection to the IP communications network.

Type	URL
Homepage for ISPs <ul style="list-style-type: none"> • Interconnection application forms • Information on service area expansion • Information on POI (point of interface) buildings • Seminar materials • Other <p>Application forms necessary for interconnection to NTT East facilities, such as the Preliminary Survey Application and the Interconnection Application and entry guidelines are shown.</p>	http://www.ntt-east.co.jp/info-st/ip_menu/index.html
Information on FLET'S service (information for end-users)	http://www.flets.com/
Information on leased lines	http://www.ntt-east.co.jp/senyo/
Possibility of diversion for other purposes with respect to facilities subject to individual management	http://www.ntt-east.co.jp/info-st/mutial/other/