



Busan IDC

Guidelines on Use of Service ver 1.5



2023.01



Revision History

Version	Distribution Date	Contents
Ver 1.0	Aug. 2016	First version
Ver 1.1	Jul. 2018	<ul style="list-style-type: none">• Other service added; equipment storage and remote hands• IPLC installation related rules changed to strengthen management and supervision of unfair trading environments
Ver 1.2	May. 2019	<ul style="list-style-type: none">• Definition of term; ‘Hosting’• Submission date for the list of customers clarified• Standards for use of IPLC Service (To be effective from May 2020) changed• Definition of X-Connect clarified and application period changed• PTP service deleted
Ver 1.3	May. 2020	<ul style="list-style-type: none">• New installation standards for water-cooling equipment established• New standards for CCTV installation, and photography established• Standards for use of IPLC Service changed• Application period for time synchronization service adjusted
Ver 1.4	Aug. 2022	<ul style="list-style-type: none">• Standards for use of IPLC Service changed
Ver 1.5	Jan. 2023	<ul style="list-style-type: none">• Definition of Term changed• Standards for Rack Placement changed• Standards for computer room management changed

※ Disclaimer: In the event of a discrepancy between the Korean original document and any other translations thereof, the Korean original must prevail.

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1. Contact Information

■ Sales and Contract

Department	Telephone	E-Mail
IT Infrastructure Business Department	82) 2-767-7545, 7234	DC_Sales@koscom.co.kr

■ Busan IDC Operation

Department	Telephone	E-Mail
Busan IDC Center	82) 2-767-7795, 7796	DC_Opers@koscom.co.kr

2. Definition of Term

The terms used in this 「Busan IDC Guidelines on use of service」 are defined as follows:

I Busan IDC

“**Busan IDC**” is a derivatives proximity datacenter, which is built and operated by KOSCOM Corporation (hereunder referred to as “KOSCOM”) at the closest distance from KRX Busan Derivatives Center in order to provide connectivity services which enable market participants to connect KRX Derivatives Matching Engines and Market Information Systems.

I White-space

“**White-space**” is caged computer rooms at Busan IDC where Members’ FEP system and Buy-Sides’ trading systems may be installed. Hosting service providers and network service providers can also use this white-space for their services.

I Hosting

“**Hosting**” refers to Hosting service providers’ service space offering for “user” to install servers. However, installation of telecommunication equipment owned by Network service providers are allowed.

I Stock-Net

“**Stock-Net**” is the dedicated network for the Korean capital market which is built and operated by KOSCOM. It consists of order line which connects the Member’s FEP system to the KRX Matching Engine and Market Data Line which delivers market data.

I FEP System

“**FEP (Front End Processor) System**” refers to Members’ interfacing system, which the Member uses to connect with the KRX Matching Engine. FEP System routes the order received from Buy-Side to KRX Matching Engine.

I Member

“**Member**” refers to a member of KRX. The Member has to obtain a license to engage in the investment trading or investment brokerage business pursuant to the Capital Market and Financial Investment Business Act.

I KRX

“**Korea Exchange (KRX)**” is the sole exchange for the listing and trading of stocks, bonds and derivatives in Korea.

I Derivatives

“**Derivatives**” refers to derivatives products listed in KRX, such as KOSPI200 Futures and Options, Single Stock Futures and Options, KTB Futures, USD Futures and Options, Gold Futures and etc.

I Network Service Provider

“**Network Service Provider**” refers to an international telecom company, which set up PoP within Busan IDC, providing international private leased circuits between Busan IDC and a specific location overseas.

I PoP

“**PoP (Point of Presence)**” is the connection point where two or more different networks or communication equipment are built to be connected.

I Hosting Service Provider

“**Hosting Service Provider**” refers to User who rents white-space and hosts its customer within the white-space.

I Buy-Side

“**Buy-Side**” refers to a firm which installs its own trading server within Busan IDC in order to route orders to the Member’s FEP System.

I User

“**User**” refers to any market participant that receives Busan IDC services directly or indirectly from KOSCOM such as Member, Buy-Side, Network Service Provider and Hosting Service Provider.

I X-Connect

“**X-Connect**” refers to circuit connection service in internal sections at Busan IDC.

I KOSCOM Communication Rack

“**KOSCOM Communication Rack**” is the facility on which KOSCOM’s communication equipment is installed in order to provide User with direct connection to the KRX Derivatives Matching Engine or to various domestic and overseas regions.

3. List of Service

Services available at Busan IDC are as follows

Category	Provided Service		Details
Server Room	White-Space		Rentals of white-space & rack with power supply
	Monitoring		24/7 Real-time monitoring/reporting Access control & monitoring
Net Work	Stock-Net	Order Line	Connectivity to KRX Matching Engine
		Market Data Line	Connectivity to the KRX Market Data Distribution System
	DPLC		Domestic Private Leased Circuit
	IPLC		International Private Leased Circuit
	X-Connect		Cross Connection between White-space and Racks within Busan IDC
Other	Timing synchronization		NTP /GPS Service
	Equipment Storage		Equipment storage service for user
	Remote Hands		Supporting urgent/scheduled work such as servers, network cables and etc.

4. Computer Room Management Policies & Guidelines

1. Standards for use of computer room

All user must abide by 「Standards for use of computer room」 .

I Members

Members must rent white-space by a unit of *pyeong* (3.3m²) equipped with security facilities in accordance with the Regulation on Supervision of Electronic Financial Activities by Financial Service Commission.

- KOSCOM communication racks are installed within members' white-space for Stock-Net, DPLC and IPLC service.
- The minimum rental unit of white-space is 4 *pyeongs* (13.2m²) to enhance cooling efficiency, secure room in case of any movement of equipment, and an appropriate distance between user' equipment.

I Hosting Service Provider / Network Service Provider / Buy-Side

User other than Members must rent white-space by a unit of *pyeong* (3.3m²) or rent racks installed in the common white space with security facilities to use services at Busan IDC.

- Buy-Side may also use white-space rented by members or hosting service providers.
- The minimum rental unit of white-space is 4 *pyeongs* (13.2m²) to enhance cooling efficiency, secure room in case of any movement of equipment, and an appropriate distance between user' equipment.

2. Standards for use of hosting service

Hosting service providers and buy-sides using white-space by hosting service providers must abide by 「Standards for use of hosting service」

I Notice of Guidelines

Hosting service providers must notify their customers of 「Guidelines on use of service at Busan IDC」 and confirm their acknowledgement.

I Participation in the Korean capital market

Buy-Sides can participate in the Korean capital market by placing their orders to the KRX Matching Engines through accredited Members.

I Regulations

In case that user use KRX Market Data, they must abide by relevant laws and regulations as members.

3. Standards for status reporting of hosting service

All hosting service providers and their customers at Busan IDC must abide by 「Standards on status reporting of hosting service」 .

I Report Subject

Hosting service providers must report the list of all their customers to KOSCOM.

- Use of the reported list of customers will be strictly limited to the purpose of auditing conducted by KRX and supervisory agencies, Financial Supervisory Service and will not be used for any commercial purposes.

I Report Format

Hosting service providers are required to make the list of customers every end of quarter and submit it on the first business day of January, April, July and October via email to DC_Opers@koscom.co.kr.

- The reporting format is as follows and the report must be written in the Excel File.

[Report Date: dd-mm-yy]

Customer Name (company name)	Installation Date	Rack Location
AAA.Inc	dd-mm-yy	#R01
BBB.Inc		

4. Standards for equipment installation

User must abide by 「Standards for equipment Installation」 , and they should install their equipment such as servers, switches and etc. at the designated area for stable operation and protection of facilities.

I Access Prohibition

User must use the equipment provided by KOSCOM with prudent man rule, and any of the equipment cannot be relocated, disassembled, or demolished without prior approvals by KOSCOM.

- In particular, unapproved approach or access by user to KOSCOM's communication racks installed to provide network service such as Stock-Net is strictly prohibited

I Power Supply

Busan IDC provides 2-4kW of electricity per rack. User must consider the electric capacity to decide the number of their equipment to be installed on racks such as server, switches and etc.

- For stable power supply to all user, the power use that exceeds 2kW per rack may partially be limited.

I Equipment Relocation

Maximum electricity Busan IDC provides is 4kW per rack.

- User installed 'blade server (high density server) must be alerted that they do not exceed the maximum power limit of 4kW per Rack.
- If electricity consumption measured exceeds the maximum limit of 4 kW for three consecutive months, KOSCOM may request the equipment to be relocated. In that case the user must cooperate with the request.
- KOSCOM may request equipment to be relocated to increase efficiencies in cooling and electricity usage. In that case the user must cooperate with the request.

I Water-cooling equipment

In case that installment of water-cooling equipment is needed, user may obtain prior authorization and do so by the standards below:

- Only those with sealed refrigerant inside allowed.
- Only those with safe refrigerant (insulation, etc.) and those may prove so, allowed.
- Racks where water-cooling equipment to be installed must be connected to the panel board using a water resistant receptacle.
- KOSCOM has no responsibilities for any damage caused by use of water-cooling equipment.
- If a user causes fails in service of KOSCOM or any other user while using water-cooling equipment, the user must compensate for any losses or damages.

5. Standards for Rack Placement

User must abide by 「Standards for rack placement」 to increase cooling efficiency, to ensure room for movement of equipment, and to secure an appropriate distance between User' equipment.

I Height of rack

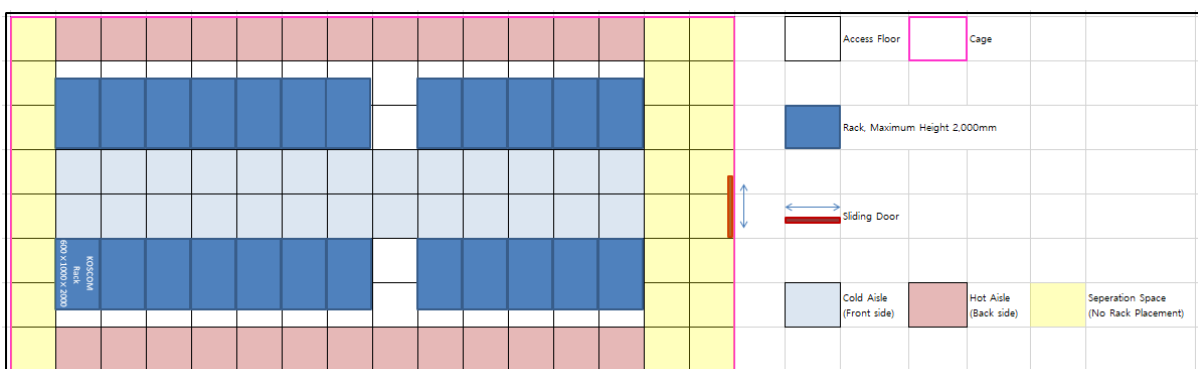
The maximum height of racks allowed at Busan IDC is 2,000mm.

I Location of rack

The rack placement standards are as follows depending on the locations:

- On the door-side: Leave at least two (2) access floors empty
- On the side that has contact with other user's white-space: Leave at least one (1) access floor empty
- On the front side of a rack (Cold Aisle): Leave At least two (2) access floors empty
- On the rear side of a rack (Hot Aisle): Leave At least one (1) access floor empty
- If a row contains more than seven (7) racks: Leave At least one (1) access floor empty

[Example] Rack Installation Guidelines



6. Standards for Power Supply

Busan IDC User must abide by 「Standards for Power Supply」 .

I Power Types

Busan IDC provides electricity of single phase 220V(20A), single phase 220V(30A) and three phase 380V(30A) for rack.

- Busan IDC provides two powers for rack, and each panel board are operated independently.

I Receptacle

Busan IDC regularly provides a 2-pin receptacle for single phase 220V(16A) for rack.

- User must prepare special receptacles such as single phase 220V(20A), three phase 380V(30A), etc.
- KOSCOM will carry out connection work between special receptacles and power cables on the board panel.
- The connection work between board panels and Racks must be conducted in the presence of KOSCOM.

7. Standards for computer room management

User must abide by 「Standards for computer room management」 for stable infrastructure operation.

I Hazardous Material

Combustible materials (e.g., boxes, wrapping materials, cables, plastic, wooden material etc.) or magnetic material are NOT allowed in computer room.

I Keeping it clean and tidy

User should keep it clean and tidy around the equipment installed in white-space for good cooling efficiency.

I Photography

It is prohibited to take photographs within Busan IDC premises. However, with a prior approval and an accompanied Busan IDC manager, photos are allowed to be taken under the supervision, and all the photos taken require approvals to be taken out of the premises.

I CCTV Installation

Installment of CCTV requires a prior approval and must be proceeded by the standards below:

- Only fixed type CCTVs that the main body and lenses are not remotely adjusted are allowed for installation.
- Any CCTV installation shall not effect (security breach, etc.) on other user in any ways (Setting up fence screens, etc.)
- Any installation or adjustment without prior approvals by KOSCOM is considered as an act of security breach.
- The footage from the installed CCTV must be provided immediately to KOSCOM if requested. If not submitted, it will also be considered as an act of security breach.

I Measures in case of Breach standards for computer room management

If any act of violation against Busan IDC standards for computer room management found through computer room monitoring, Koscom could request for corrective actions after immediate notification to the user.

- If the above request does not fix the problems, KOSCOM may take direct corrective actions and does not hold any responsibilities for consequences.

5. Network Management Policies & Guidelines

To ensure stable operation and fairness and to prevent any security breaches, KOSCOM directly and indirectly manages all network circuits at Busan IDC.

1. Standards for use of Stock-Net Service

User must abide by 「Standards for use of Stock-Net Service」 .

I Stock-Net Order Line

Direct access to KRX Matching Engines is allowed exclusively for members, and they can use order lines as follows:

- Once the application for an Order Line is submitted to and approved by KRX, KOSCOM, the operator of Stock-Net, will proceed with order line installation.
- For more details about the types of order lines and how to apply for them, go to KRX website (<https://global.krx.co.kr>); and visit the below in the following order:

「Regulations」 → 「General Regulations」 → 「Guideline on Connection to Member System」.

I Stock-Net Market Data Line

User become eligible for market data line by signing “Market Data Use Contract” with KOSCOM.

- If you have any inquiries regarding application for market data lines, visit KOSCOM ‘Market Data’ on our website (<https://data.koscom.co.kr>) → 「Customer Service」 → 「Contact Point」.

I Fairness

The length of the lines connected between Stock-net backbone and KOSCOM communication racks in members’ white-space are the same through dual routes.

2. Standards for use of DPLC

User must abide by 「Standards for use of DPLC」 .

I Application for Service

User who need line connections with domestic regions outside of Busan IDC may use the DPLC Service as follows:

- Only User may apply for DPLC service and to use DPLC service, user must apply directly to KOSCOM.
- User wish to use DPLC service must apply to KOSCOM at least two (2) weeks prior to service start date. However, for high-bandwidth lines (over 100Mbps) or lines connected to a specific building (business area of telecoms: e.g. Youido IFC) prior consultations will be required.
- Once the application for DPLC Service is submitted to Koscom by user, KOSCOM will proceed with DPLC installation within the time agreed.

3. Standards for use of IPLC

User must abide by 「Standards for use of IPLC」 .

I Application for Service

User may use IPLC service as follows if connections to overseas regions outside of Busan IDC are needed:

- To use IPLC service, user must apply to KOSCOM. However, Buy-Sides who use white-space of hosting service providers are also able to apply for IPLC service to their hosting service providers.
- Once the application for IPLC Service is submitted to KOSCOM by user, KOSCOM will proceed with IPLC installation within the time agreed.

4. Standards for use of X-Connect Service

User must abide by 「Standards for use of X-Connect Service」

I Application for Service

If connection between white-space of user is needed, user can use X-Connect service as follows:

- Only User may apply for X-Connect service and to use X-Connect service, user must apply directly to KOSCOM.
- Buy-Sides who use white-space of hosting service providers are also able to apply for X-Connect Service to their hosting service providers.
- X-Connect Service is only provided via optical fiber cables and the cables are of equal lengths.
- Only X-Connect Service between Members and Buy-Sides for transmitting orders, and X-Connect Service between same Buy-Side's equipment for management are permitted.
- X-connect Service between Members is prohibited in order to prevent it from hindering fair trade order.
- User who wish to use X-Connect Service must apply for the service to KOSCOM at least six (6) weeks prior to the service start date.
- Once the application for X-Connect Service is submitted to KOSCOM by user, KOSCOM will proceed with X-Connect installation within the time agreed.

I Server Location

Buy-sides must place their trading server inside members' white-space.

- However, if a Buy-Side wish to install one trading server within Busan IDC and connect it to one member's white-space, the server may be placed within the white-space of the Hosting Service Provider's.

6. Security Policies & Guidelines

1. Security Policies

User must abide by 「Security Policies」 .

I Ban on Security Breach

User should not partake in security breaches or any activities that unjustly modifies the system resources of KOSCOM or other user.

- User shall not cause any failures in service by KOSCOM or any other user.
- In case any failures caused by a user's action in service by KOSCOM or any other User, the user shall compensate for the losses of damages.

I Measures in case of security Breach

If any act of violation against Busan IDC security policy found through computer room monitoring, Koscom could request for corrective actions after immediate notification to the user.

- If the above request does not fix the problems, KOSCOM may take direct corrective actions and does not hold any responsibilities for consequences.

2. Standards for access control

User must abide by 「Standards for access control」 .

I Designation of Authorized personnel

User must notify KOSCOM of people in charge (up to three people). If there is a change in personnel, users should immediately notify KOSCOM via telephone or e-mail.

I Access Time

User can only access to Busan IDC during non-trading hours (except trading hours 08:00 -16:00).

- In case of any inevitable circumstances such as failures of any equipment or computers, the access during trading hours (08:00~16:00) may be permitted.
- In that case, User should obtain an emergency access approval by the Busan IDC manager.

I Reservation for visit

User who need an access to Busan IDC must make a reservation by e-mail prior to their visit.

- For reservation, it is necessary to provide personal information of the visitor including: name of company, name of visitor, date of birth (for foreigners, first 6 digits of passport number), date of visit, reason of visit, phone number and etc.
- In case that any difficulties occur in the reservation process due to emergency maintenance for system errors, user should obtain an emergency access approval by Busan IDC manager.

I Access Control

For security and safety in Busan IDC, KOSCOM operates an Access Control System

- Visitors must abide by access procedures at Busan IDC including wearing the visitor's pass as identification.
- All visitors to the premises must provide their identification to prove the person made the reservation and the visitor match. Visitors should also wear slippers to enter the computer rooms.
- Visitors should keep their personal items in a locker at the information desk, as any personal items (mobile phones, bags, notebooks and etc.) are not allowed. However, items authorized in advanced are allowed.

3. Standards for equipment in & out

User must abide by 「Standard for equipment in and out」 .

I Bringing in equipment

Given the nature of the common computer rooms, only the necessary equipment is allowed and make sure no related equipment or equipment accessories left unattended.

- Unboxing must be done in the hallway outside the computer rooms and bring in only the equipment after leaving the package outside.
- The unpacked boxes should be put in the designated area.
- Prepare a bag for recycle waste. Put waste in the bag and take it out in the designated area.

I Time of equipment carry in/out

User are allowed to carry in and out their equipment during non-trading hours (except for trading hours 08:00 -16:00).

- In case of any inevitable circumstances such as failures of any equipment or computers, user may bring in and take out their equipment during trading hours (08:00~16:00) may be permitted.
- In that case, User should obtain an emergency access approval by the Busan IDC manager.

I Prior Notification

User must notify Busan IDC of equipment carry in/out in advance.

- The notification must include: user's name, equipment model, quantity of equipment and etc.

I Record of equipment in & out

Busan IDC manager will check the equipment brought in and out and make records of all equipment in & out.

I Cancellation of Contract

User who cancel their contract must remove their equipment from the premises within fifteen (15) days (including the day of cancellation).

- The User must pay all outstanding payments including monthly charges until the date of cancellation, cancellation penalty fee and etc. before the date of equipment removal.
- If the user does not remove their equipment within fifteen (15) days of the cancellation date, KOSCOM will move the equipment to the designated area after the notification of the relocation.
- Even if the user does not reply or are not reachable, KOSCOM will proceed with the removal and movement procedures.
- Koscom has no responsibilities for damages or losses incurred due to the removal and movement of the equipment.
- If the user does not remove their equipment within fifteen (15) days from the date of cancellation (including the day of cancellation), the user must pay for the storage fees from the following day of the cancellation day to the actual date of removal. In this case, the storage fee is calculated on a daily basis of the monthly charge for white-space.
- The equipment not removed more than three (3) months, KOSCOM may dispose the equipment at its discretion.

7. Policies & Guidelines in Other Services

1. Standards for use of parcel receipt service

KOSCOM offers parcel receipt service with consideration for the characteristics of the area. User must abide by 「Standards for use of parcel receipt service」 .

I Prior Notification

User must notify Busan IDC manager of the arrival of the parcel at least one (1) week advance

- User's name
- Product information (details, quantity)
- Product weight
- Storage schedule and work schedule

I Parcel handover

KOSCOM hands over the parcel to the user at the temporary storage area in Busan IDC.

- KOSCOM is not responsible for any loss or damage of parcels, and does support the delivery of the parcels.

I Storage of parcel

KOSCOM has a temporary storage for parcels in Busan IDC.

- Parcels are stored in the temporary storage area for no longer than fifteen (15) days.
- The parcels stored longer than temporary storage period will be returned to user's address on a paid-on-delivery basis after notification to the user.

I Things to note

Parcel receipt may be limited in the following cases:

- Please note that parcels that arrive without a prior notification, or without a specified receiver will be rejected.
- Parcels are only received during business hours on working days (Monday~ Friday, 9.00am~5.00pm).
- For parcel receipt on other days than above business days due to urgent matters such as fixing failures, discussion with Busan IDC manager is required.
- Large, heavy, highly important, or fragile parcels must be received in the presence of the representative of the user, and the user must carry it.

2. Standards for use of time synchronization service

User who directly contract with KOSCOM may use Time Synchronization (NTP/GPS) Service. User must abide by 「Standards for use of Time Synchronization Service」 .

I NTP Service

NTP (Network Time Protocol) Service is provided for free of charge.

- One (1) port of NTP server per User is provided.

I GPS Service

GPS(Global Positioning Service) Service is provided for a fee.

- GPS(Global Positioning Service) refers to a service that connects coaxial cable between GPS signal distributor and User's time server.

I Application Period

User who need time synchronization service must apply to KOSCOM at least four (4) weeks prior to the start date of the service.

3. Standards for use of storage service

User who directly contract with KOSCOM may use storage service. User must abide by 「Standards for use of storage service」 .

I Applying for service

The use of storage service will be started from the day requested on the official document.

- It is charged monthly from the day when the user starts to use the service and the charge is calculated on the daily basis.

I Standards for use of service

User have responsibilities for management of storing and exporting goods in the assigned storage.

- Flammable materials such as oil, explosives and etc. are not permitted in the storage to prevent fire.
- The stored goods are managed directly by user, and KOSCOM will not record the history of the storage.
- KOSCOM will only provide security service such as access control by ‘6. Security Policies & Guidelines’.

4. Standards for use of remote hands service

User who directly contract with KOSCOM may use remote hands service. User must abide by 「Standards for use of remote hands service」 .

I Applying for service

Remote Hands service applications are serviced on a pre-planned basis, except in emergencies.

- Please fill out remote hands service application form without omission, and start the process of sending and receiving emails with the person in charge at Busan IDC at least one day prior to the beginning of the work.

I Emergency

The application for service in the event of an emergency must be discussed with the person in charge at Busan IDC, and the agreed details and time of the work must be mutually exchanged after the service.