





For Immediate Release

# IIJ Group and CM Plus Partner to Launch "Data Center Construction Engineering Solution"

-IIJ Group provides its clients the expertise it has cultivated through building and operating its own data centers-

TOKYO—October 27, 2020—Internet Initiative Japan Inc. (IIJ; TSE1: 3774); IIJ Engineering Inc. (IIJ-EG); and CM Plus Corporation (CMP) today announced the launch of the Data Center Construction Engineering Solution. Stemming from a partnership that aims to expand the data center engineering business worldwide, the solution is for operators and developers in Japan and overseas that are building new data centers.

Utilizing IIJ Group's technical experience gained through constructing and operating its own data centers as well as CMP's know-how for building high-quality production environments such as data centers and pharmaceutical facilities, full support is pledged to design and construct data centers from the view point of an actual user.

Digital transformation (DX) is accelerating in line with the development of new technologies—IoT, AI, and 5G—as well as with changes in the business environment represented by working style reforms. In response to this advance, Japan is experiencing an unprecedented boom in data center construction. In 2019 alone, more than 20 new data centers were built<sup>(\*1)</sup>, doubling the number from the previous year. Construction investment was JPY 124.5 billion in 2019, up 34.7% from the previous year, and it is expected to increase further, to JPY 141.2 billion, by 2023<sup>(\*2)</sup>.

\*1 From "Data Center Chosa Hokokusho 2020 [Findings from the 2020 Data Center Survey]," published by Impress Corporation \*2 From "Japan Data Center Facility Forecast," published by IDC Japan

As part of this trend, different types of data centers are in demand, including hyperscale data centers for cloud business development and modular data centers that are expected to be used in edge computing for IoT and 5G applications. In addition, against the backdrop of increased attention to sustainability, including the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015, data centers, which consume a large amount of electricity, have a social responsibility to take a more proactive approach to carbon reduction and energy conservation.

With these social requirements in mind, IIJ has been developing advanced data centers and has built and operated in-house the following two data centers:

- Matsue Data Center Park (Matsue DCP): Completed in 2011; Site area of approx. 16,000 m<sup>2</sup>; Shimane Prefecture; Japan's first energy-saving data center with a container-type modular structure.
- Shiroi Data Center Campus (Shiroi DCC): Completed in 2019; Site area of approx. 40,000 m<sup>2</sup>; Construction took 8 mos.; Chiba Prefecture; Hyperscale data center with a modular system structure (including integrated IT racks, electricity, air conditioning, and security).

IIJ created the basic design, IIJ-EG designed the operational systems, and their partner CMP was in charge of the project management and construction management. Together the three companies built high-quality, environmentally friendly data centers in a short period of time. IIJ also has experience operating more than 20 other data centers in Japan and overseas to develop its cloud business.

The Data Center Construction Engineering Solution offers comprehensive support by leveraging the experience and expertise gained through the IIJ Group's development of technologies and operations for its data centers and CMP's handling of all aspects of the construction industry. The solution supports from design to construction and operation, it also includes consulting and project management aimed at building data centers optimized to meet their customers' business strategy and market needs.

In collaboration with design and construction firms, we will develop business for customers in Japan as well as for enterprises and developers planning to expand into Japan from overseas. The solution is also suitable for government agencies and corporations overseas that need highly reliable data centers. The solution can also provide support for building small modular data centers for edge computing applications.

## Overview

- · Creating data center conceptual designs that reflect customers' business strategies
- Complying with local government bylaws and building standards law through permit applications on behalf of customers
- Ensuring project cost transparency using an open-book approach (\*)
  - \* Open-book approach: When ordering construction or design work, the prime contractor selects subcontractors through competitive bidding to ensure transparency of facility construction costs.
- Optimizing CAPEX and OPEX through design and construction management using data center-specific BIM (\*1) tools and CM (\*2) methods
  - \*1 Building Information Modeling (BIM): A design method for improving productivity in the design and construction management of buildings that visualizes building structure, component specifications, assembly periods, and other information using three-dimensional models. This approach allows for integrated management of the entire life cycle of a building, from construction to management.
  - \*2 Construction Management (CM): An operational management method for orders and designers to remain transparent procedure from the view point of QCD (Quality, Cost and Delivery) and EHS (Environmental, Health and Safety).
- Reducing heavy management costs due to adoption of a single general contractor by dividing construction orders for cost optimization
  - \* Example: Dividing construction work into the categories of construction, such as building facilities, electric works, communications, and security, and then selecting and ordering from contractors by category, make it possible to grip and optimize costs much more than with the conventional method of ordering from a single general contractor.
- · Designing and building operational systems based on experience in operating data centers
- · Allowing for the construction of IT and cloud platforms in combination with data center facilities

## **Solution Delivery Process**



For details, please visit the following website: https://www.iij.ad.jp/en/biz/dc-eng/

## About the Matsue DCP and Shiroi DCC

The Matsue DCP was not only one of the first to adopt prefabrication and modularization, which have become trends in recent years, but it has also achieved a power usage effectiveness (PUE) value of 1.2, among the highest in the world, which is one of the energy saving indicators for data centers. The Shiroi DCC is working on various initiatives to optimize power consumption by introducing large-capacity lithium-ion storage batteries and recharge/discharge control, with a view to actively employing renewable energy sources in the future.

## **About IIJ Group**

Internet Initiative Japan Inc., (TSE1: 3774) was founded in 1992 as the first Japanese commercial Internet service provider. IIJ Group currently supplies approximately 12,000 companies with Internet connectivity, outsourcing services, WAN services, cloud services, and other network services. Additionally, it offers system building, operational management, systems integration, and other network solutions. IIJ Engineering, an IIJ Group company, provides a variety of outsourcing services related to network operations and management, including operations monitoring and help desk operations at data centers. For more information, please visit: https://www.iij.ad.jp/en/.

## **About CM Plus**

CM Plus is a group of professionals who provide construction and management services for construction projects involving highly environmentally controlled facilities, including those for pharmaceuticals and life sciences; semiconductor and electronic component manufacturing facilities; detergent, cosmetic, and home care manufacturing facilities; and food manufacturing facilities, in addition to data centers. It has a successful track record for projects in Japan, Southeast Asia, India, and the US, where it has established a seamless total-project support system that includes project conception, planning, engineering and design, permit applications, and construction supervision. For more information on CMP, please visit: https://cm-plus.co.jp/en/.

The statements within this release contain forward-looking statements about our future plans that involve risk and uncertainty. These statements may differ materially from actual future events or results.

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