

September 21, 2017  
Hitachi, Ltd.  
Mizuho Financial Group, Inc.  
Mizuho Bank, Ltd.

## **Hitachi and the Mizuho Financial Group to Begin Proof of Concept Regarding the Utilization of Blockchain Technology in the Supply Chain management Field**

**Tokyo, September 21, 2017** --- Hitachi, Ltd. (TSE: 6501, Hitachi), the Mizuho Financial Group, Inc., (TSE: 8411) and Mizuho Bank, Ltd. will begin proof of concept (PoC) in October 2017, with the goal of advancing the utilization of blockchain technology<sup>1</sup> in the supply chain field.

Through this PoC, Hitachi and Mizuho hope to work toward the implementation of blockchain technology in supply chain management systems, while also examining the future implementation of supply chain finance<sup>2</sup>.

International procurement operations that span multiple countries involve the complicated task of managing information (ledgers) related to ordering and deadlines at each entity and for each business. Because it takes a long time to register orders, to reconcile order forms and invoices against each other for verification purposes, and to manage overall costs, these tasks have become an issue for many companies which procure internationally. By utilizing blockchain technology for procurement operations, ordering and credit data can be shared among sites and businesses, making it easy to understand the overall state of the supply chain. In addition, by recording information such as the supplier of each part, highly reliable traceability management can be achieved.

In this PoC, Hitachi and Mizuho will work together to implement blockchain technology for part of the Hitachi Group's global supply chain, and to verify the results. Specifically, in October 2017, they will begin development of a prototype application that will utilize blockchain technology to manage the supply chains for devices and parts for which global materials procurement is necessary. This application will be built on the IoT platform Lumada<sup>3</sup>, and the effects of the integrated management of information such as ordering and credit data for several Hitachi Group offices in Asia, as well as information about parts, will be evaluated and verified.

As a result, Hitachi plans to improve the efficiency of its procurement and inventory management, thereby reducing the associated workload. This application should also make

it possible to quickly make decisions regarding ordering. In addition, Mizuho expects to be able to seamlessly link enterprise ordering systems with bank services in order to implement supply chain finance, which offers benefits such as the ability to quickly provide settlement and loan services based on ordering information. It is also possible that this application will lead to the creation of new business opportunities through the accumulation and utilization of big data such as ordering information and settlement histories.

Hitachi is currently accelerating their efforts in the field of blockchain technology, for example, by participating in Hyperledger<sup>4</sup>, an international joint development project established by The Linux Foundation<sup>5</sup>, a non-profit organization based in the United States. They are currently focusing on efforts, such as this experiment and utilization of the Lumada platform, that will allow them to continue offering new services for financial institutions in the future.

Mizuho is currently accelerating the improvements in their ability to provide services to meet their customers' diverse needs by utilizing technologies such as FinTech and big data technology.

1 blockchain technology:

Distributed ledger technology that maintains a single ledger by synchronizing identical records on communication devices, such as servers, that are distributed among multiple sites.

2 supply chain finance:

A set of financial services that contribute to improvements such as the optimization of settlement in a supply chain, or more efficient enterprise financing.

3 Lumada:

An IoT platform that allows IoT solutions to be developed and easily customized by synergizing IT and OT (Operational Technology) accumulated in Hitachi's broad range of business fields.

4 Hyperledger:

A joint development project that was started in order to advance the utilization of blockchain technology across industries. The goals of this project include the joint development of an open-source distributed ledger framework by major companies in each industry.

5 The Linux Foundation:

An organization founded in 2000 with the purpose of constructing an ecosystem for accelerating the development of open technology and its deployment for commercial use. Through cooperation with open-source communities throughout the world, the

organization has created the largest shared technological investment in history, which it uses to solve difficult technological issues.

**Hitachi's Finance Solutions Website**

<http://www.hitachi.co.jp/finance/en/>

**About Hitachi, Ltd.**

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society's challenges. The company's consolidated revenues for fiscal 2016 (ended March 31, 2017) totaled 9,162.2 billion yen (\$81.8 billion). The Hitachi Group is a global leader in the Social Innovation Business, and it has approximately 304,000 employees worldwide. Through collaborative creation, Hitachi is providing solutions to customers in a broad range of sectors, including Power / Energy, Industry / Distribution / Water, Urban Development, and Finance / Government & Public / Healthcare. For more information on Hitachi, please visit the company's website at <http://www.hitachi.com>.

**About Mizuho Financial Group**

The Mizuho Financial Group is one of the largest financial institutions in the world, offering a broad range of services including banking, trust banking and securities, and other business related to financial services through its group companies. The group has approximately 59,000 staff working in approximately 900 offices inside and outside Japan, and total assets of over US \$1.7 trillion (as of March 2017). Under the umbrella of the holding company Mizuho Financial Group, the major group companies include Mizuho Bank (MHBK), Mizuho Trust & Banking (MHTB) and Mizuho Securities (MHSC). Visit us online at <https://www.mizuho-fg.com>

###

---

Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.

---