



October 26, 2017

To whom it may concern

TOKAI Holdings Corporation  
Katsuhiko Tokita, President & CEO  
(Code No. 3167 Tokyo Stock Exchange First Section)

## **Expansion of Service Area of 4K/8K-Compatible Optical Fiber Broadcasting Service and Ultrahigh-Speed Optical Fiber Internet Connection Service -- Services Now Available in Suwa-shi, Nagano--**

LCV Corporation (Head Office: Suwa-shi, Nagano; Representative Director and President: Kimihiro Yoshizawa; hereinafter “LCV”), an affiliated company of the TOKAI Group engaging in the CATV business, has started to provide “LCV Hikari de TV,” a 4K/8K-compatible broadcasting service using optical fiber lines, and “LCV Hikari-de-net,” an ultrahigh-speed Internet service with a maximum upstream and downstream speed of 1Gbps\*<sup>1</sup>, in some areas in Suwa-shi, Nagano Prefecture, as detailed in the attachment.

According to the Ministry of Internal Affairs and Communications (hereinafter “MIC”), the domestic market for 4K TV is expected to reach a cumulative total of 26,340,000 units, with a household penetration rate of approx. 50%, by 2020\*<sup>2</sup>. Since cable TVs are options to watch 4K broadcasting along with satellite broadcasting, the importance of CATV business as social infrastructure is expected to increase in the future.

By regarding such expected increase in the demand for 4K/8K broadcasting services as great opportunities to expand its CATV business, the Company is promoting the development and widespread use of FTTH (optical fiber lines) and optical fiber broadcasting service to each household. As part of such initiative, the Company has started to offer a broadcasting service and an ultrahigh-speed Internet connection service using optical fiber lines in Nagano.

Customers who sign up for “LCV Hikari de TV” are able to smoothly watch 4K broadcasting when practical 4K broadcasting starts in the future (MIC announcement: December 1, 2018) without going through time-consuming procedures such as replacement of antennas with 4K-compatible satellite antennas and installation of 4K-compatible tuners.

As a pioneer of CATV business operators, the Company will enhance services for the existing customers ahead of widespread use of 4K tuner TV and 4K-compatible satellite antenna in the near future. In addition, the Company will promote sales expansion by positioning “LCV Hikari de TV” as a strategic product to acquire new customers.

Under the TLC (Total Life Concierge) vision, the TOKAI Group proposes comprehensive lineup of various lifestyle infrastructure services, including energy, information and communications, and CATV. Currently, 2.82 million customers are using the Group services. Going forward, by continuing to actively work toward providing products and services that can contribute to solving regional and social issues, the Group will aim to improve customer satisfaction.

\*1 Best effort service

\*2 Press release issued by MIC on July 30, 2015 “Second Interim Report of Follow-up Meeting on 4K/8K Roadmap”

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October 2, 2017

To whom it may concern

TOKAI Cable Network Corporation

## **Launch of “LCV Hikari de TV” 4K/8K-Compatible Broadcasting Service and “LCV Hikari-de-net” Ultrahigh-Speed Internet Service at Tokai Group’s LCV Corporation**

TOKAI Cable Network Corporation (Headquarters: Numazu-shi, Shizuoka; President & CEO: Yasuhiro Fukuda; hereinafter, the “Company”) is promoting the adoption of FTTH (optical fiber lines) and the development and widespread use of optical-fiber broadcasting services to accommodate itself to the start of practical 4K/8K satellite broadcasting services\*<sup>1</sup> scheduled in December 2018\*<sup>2</sup>.

LCV Corporation (Head Office: Suwa-shi, Nagano; Representative Director and President: Kimihiro Yoshizawa; hereinafter “LCV”) started to provide “LCV Hikari de TV,” a 4K/8K-compatible broadcasting service, and “LCV Hikari-de-net,” an ultrahigh-speed Internet service with a maximum upstream and downstream speed of 1Gbps\*<sup>3</sup>, using optical fiber lines in some areas\*<sup>4</sup> in Suwa-shi, Nagano Prefecture, on October 1.

“LCV Hikari de TV” is a 4K/8K-compatible broadcasting service using optical fiber lines that offers terrestrial/satellite pass-through\*<sup>5</sup> broadcasting service without frequency conversion. According to the roadmap for next generation broadcasting\*<sup>6</sup> issued by the Ministry of Internal Affairs and Communications (MIC), the number of 4K TV units in operation in Japan is expected to reach a cumulative total of 26,340,000 units (household penetration rate: approx. 50%) by 2020 and 55,310,000 units (household penetration rate: 100%) by 2025. In order to respond to the growing demand for 4K/8K broadcasting services in the future, LCV will promote installation of optical fiber lines to each household to accommodate itself to the launch of practical 4K satellite broadcasting service. Customers who subscribe to “LCV Hikari de TV” are able to smoothly watch 4K broadcasting when practical 4K broadcasting starts in the future without replacement of antennas with 4K-compatible satellite antennas, etc.

“LCV Hikari de Net” is an ultrahigh-speed Internet service, offering a maximum upstream and downstream speed of 1Gbps by using optical fiber lines with WiFi function for comfortable Internet access. LCV has changed its head-end equipment from GE-PON to 10G-EPON, and will promote the expansion of data transmission capacity with an eye toward offering further ultrahigh-speed Internet services.

Customers who sign up for “LCV Hikari-de-net” are able to use fixed-line telephone service “LCV Hikari de Talk.” Customers using “LCV Hikari de Talk” service, if they use smartphone services of au\*<sup>7</sup> or SoftBank, are eligible for choosing “Cable-plus Phone\*<sup>8</sup>” or “Hikari de Talk S” services, which offer discount on smartphone usage charges.

The Company will further promote the adoption of FTTH in its Group companies and widespread use of optical broadcasting services, and endeavor to improve and strengthen facilities and enhance services toward providing those that satisfy our customers.

■ Service overview

Service name	LCV Hikari de TV									
Service details	<p>Next-generation broadcasting service using optical fiber lines</p> <table> <tr> <td>Digital terrestrial</td> <td>7ch</td> <td rowspan="4">} Total 22ch</td> </tr> <tr> <td>BS digital</td> <td>11ch</td> </tr> <tr> <td>CS digital</td> <td>2ch</td> </tr> <tr> <td>Self-production broadcasting</td> <td>2ch</td> </tr> </table> <p>* A terrestrial/BS/CS pass-through broadcasting service.            * Supports the practical 4K/8K broadcasting service scheduled for launch in December 2018.            * Municipal TV channels and multichannel pay TV services are also available.</p>	Digital terrestrial	7ch	} Total 22ch	BS digital	11ch	CS digital	2ch	Self-production broadcasting	2ch
Digital terrestrial	7ch	} Total 22ch								
BS digital	11ch									
CS digital	2ch									
Self-production broadcasting	2ch									
Monthly fee	2,500 yen									

Service name	LCV Hikari-de-net & LCV Hikari de Talk	
Service details	<p><b>“LCV Hikari-de-net”</b>            An Internet service with Wi-Fi function, offering a maximum upstream and downstream speed of 1 Gbps.</p> <p><b>“LCV Hikari de Talk”</b>            A fixed-line phone service available for customers who sign up for “LCV Hikari-de-net” and such customers can choose either “Cable-plus Phone” service or “Hikari de Talk” service.</p>	
Monthly fee	<p><b>Service for single-family homes</b>            5,430 yen</p> <p><b>Service for condominiums</b>            4,530 yen</p> <p>* Prices are after applying a “set discount.”            * Prices include ISP fee, Internet access fee, ONU rental fee, and basic monthly charge for “Hikari de Talk”.            * Calling charges for “LCV Hikari de Talk” will apply separately.</p>	
Calling rates	<p><b>“Cable-plus Phone”</b>            General subscriber phones and IP phones in Japan (flat rate across Japan)            8.00 yen / 3 min</p>	<p><b>“Hikari de Talk S”</b>            General subscriber phones and IP phones in Japan (flat rate across Japan)            7.99 yen / 3 min</p>
Applicable discount services	<p>“au Smart Value*<sup>9</sup>” set discount will apply for customers of “LCV Hikari de Talk” service who use au smartphones</p>	<p>“Ouchiwari-hikari set*<sup>10</sup>” discount will apply for customers of “Hikari de Talk S” who use SoftBank smartphones</p>

Service details of “Set discount”
<p>Customers who sign up for “LCV Hikari de TV” service at the same time as “LCV Hikari-de-net &amp; LCV Hikari de Talk” service will be offered a special discount on the basic monthly charge.</p> <p><b>Service for single-family homes</b>            7,530 yen</p> <p>* Calling charges for “LCV Hikari de Talk” will apply separately.</p>

\* All prices do not include tax.

- \*1 4K broadcasting has four times as many pixels as the existing Full HD broadcasting and 8K broadcasting 16 times as many pixels as the existing Full HD broadcasting.
- \*2 Press release issued by MIC on January 24, 2017 “Authorization of practical 4K/8K broadcasting business through BS/east longitude 110 degrees CS”
- \*3 This service is provided on a best effort basis and the Internet connection speed is the maximum theoretical speed, and the actual speed may decrease due to factors such as Internet use environment and network congestion.
- \*4 Service areas will be expanded gradually.
- \*5 To view BS/CS digital broadcasting by a pass-through mode, devices that support BS/CS broadcasting systems (TV set, recorder, branching filter, etc.) are required.
- \*6 Press release issued by MIC on July 30, 2015 “Second Interim Report on Follow-up Meeting on 4K/8K Roadmap”
- \*7 “au” is a registered trademark of KDDI Corporation.
- \*8 “Cable-plus Phone” is a registered trademark of KDDI Corporation.
- \*9 “au Smart Value” is a registered trademark of KDDI Corporation.
- \*10 “ouchiwari” is a registered trademark of SoftBank Corporation.
- \* The content of information provided, prices of services/products, specifications, contact for inquiries and other information are the latest information available at the release date of this document, and are subject to change without prior notice.

**[Inquiries regarding the service]**

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