

November 28, 2019

### **Installation of Alcohol Detector Linked to Smartphone Onboard our Fleet Vessels**

~ Addressing further strict control of alcohol onboard our vessels ~

We have been endeavoring to achieve safe navigation through strict alcohol management onboard. As a further step, we have started to install alcohol detector linked to smartphone, developed by the system development company “Pai-R Co., Ltd.,” to vessels under the management of “K” LINE group company in order to further strengthen management in our efforts to successfully achieve promotion of safe navigation.

An alcohol detector is connected to the smartphone to launch the dedicated application, then one blows into the detector. The face photo of subject being tested is automatically taken and sent to the cloud on shore via satellite communication along with the test result. This detection data is saved and managed by the shore server and can be accessed and confirmed by management on the vessel as well as in the shore office. In case alcohol is detected, an alert e-mail will be sent to the registered e-mail address that will enable monitoring the alcohol test onboard the vessel in real time.

With introduction of this system, we expect to have the advantage in further enhancement of alcohol management and reduction in workload that will contribute to Work Style Reform onboard our vessels compared to previous alcohol test methods such as using simple alcohol detectors and managing the record of test results by ship’s crew.

We will continue installing them from November 2019 with the target of having them installed in all our managed vessels during first half of year 2020.

“K” LINE is aiming to introduce new technology, improve our high-value-added transportation services and obtain the best possible satisfaction and reliability from our esteemed customers. We are dedicated to continuing to seek the best as well as the safest services through strong cooperation and alliances with multiple business partners across various and different fields.

