# Sompo Japan Nipponkoa Insurance to Jointly Develop a System to Automatically Determine Fault Percentages in Car Accidents Based on Analysis of Drive Recorder Footage Using AI

Sompo Japan Nipponkoa Insurance, Inc. (hereinafter, "Sompo Japan Nipponkoa"; President: Keiji Nishizawa) and Genext Co., Ltd. (hereinafter, "Genext"; President: Hajime Kasahara) have agreed to jointly develop a system to automatically determine fault percentages in car accidents through the accurate analysis of the circumstances of accidents using video footage of collisions filmed by and obtained from drive recorders and GPS location data.

Through the development of this system, Sompo Japan Nipponkoa aims to introduce a clear and objective process for determining fault percentages in car accidents and rapidly resolve accident claims.

## 1. Background and purpose

The widespread use of drive recorders has led to an increasing number of cases where drive recorder video footage of car accidents are used to determine fault percentages for accidents. On the other hand, expert knowledge and technology, as well as a lot of time, are needed to accurately analyze the information obtained from video footage filmed by drive recorders when data such as vehicle speed and relative distance are used to investigate the causes of accidents and determine fault percentages for accidents.

Against this backdrop, Sompo Japan Nipponkoa, together with Genext, began jointly developing a system to automatically analyze drive recorder video footage. The purpose of the system is to enable the rapid resolution of claims by using digital technology to increase the efficiency of processes which had previously been the responsibility of customers, such as confirming the circumstances of accidents and investigating the cause of accidents.
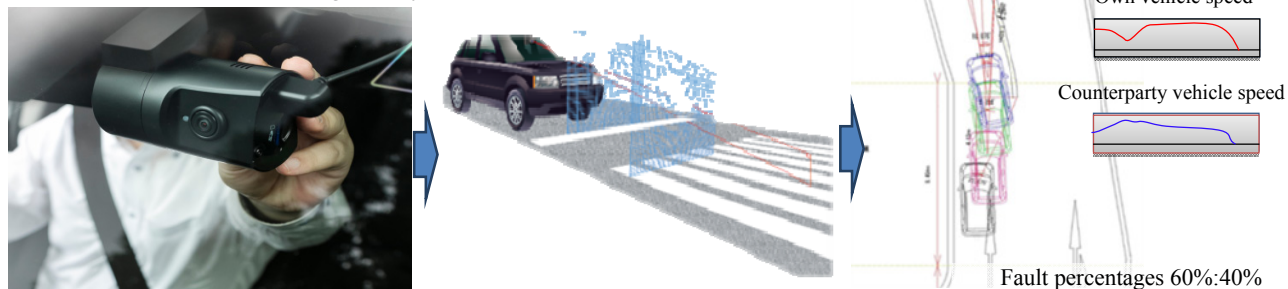
## 2. Summary of analysis of drive recorder video footage

Since drive recorders use panoramic lenses to film video imagery, the panoramic lenses can produce distortions. Genext holds patented technologies capable of analyzing accurate vehicle speeds, relative distances, and position data even from such video footage.

Combining the analytical technology held by Genext and artificial intelligence (AI) to recognize and determine vehicle behavior and the profile of roads in video footage, the new system will enable accurate readings of a wide range of information from the video footage of collisions,

including vehicle movement, road conditions and other factors leading up to accidents. Based on the information read from video footage, the accident-related knowledge accumulated by Sompo Japan Nipponkoa, and other data, the system will automatically and rapidly determine highly accurate fault percentages.

【Illustration of video footage analysis】



Own vehicle speed

Counterparty vehicle speed

Fault percentages 60%:40%

| Obtain video footage from drive recorders | Analyze video footage using AI | Reproduce collisions (example) |

## 3．Outlook

Sompo Japan Nipponkoa will utilize its store of accident data and analysis findings to prevent accidents and mitigate accident damage, thereby helping to further improve customer service and achieve a safe and secure society.