Railway serious incident investigation report

Railway operator: Kyushu Railway Company
Serious incident type: Others, the railway serious incident related with the situation associate with the situation listed in the previous items, i.e., the situations that the train drive through red signal, and the train obstruct the route of the other train or vehicle in the main line, prescribed in Number 10, Clause 1, Article 4 of the Ordinance on Report on Railway Accidents, etc.

Date and time: About 12:23, May 22, 2015
Location: In the premises of Hizen-Ryuo station, Nagasaki Line, Shiroishi Town, Kishima District, Saga Prefecture

SUMMARY
On May 22, 2015, the outbound limited express 2019M train, composed of 7 vehicles, started from Hakata station bound for Nagasaki station of Kyushu Railway Company, departed from Hakata station on schedule, 11:15. While, the train was cruising at about 100 km/h between Hizen-Shiroishi station and Hizen-Ryuo station, the driver felt an abnormal sound after the finger-pointing and call about the proceed signal indication of the down line entry signal of Hizen-Ryuo station, and applied an emergency brake immediately to stop the train. After that, the driver reported to the train dispatcher about the situation to stop the train.
The train dispatcher, after received the report from the driver of the 2019M train, changed the interchange point of the outbound limited express 2019M train and the inbound limited express 2020M train, from Hizen-Kashima station to Hizen-Ryuo station.
The driver of the outbound limited express 2019M train, after checked the spot where the abnormal sound was noticed and inspected the train, restart train operation obeying the instruction of the train dispatcher. Then the driver noticed that the train entered into the No.1 line of Hizen-Ryuo station that was different from the scheduled route, and applied an emergency brake immediately to stop the train.
On the other hand, the driver of the inbound limited express 2020M train, started the train from Hizen-Kashima station as he received the notice about modification of the interchange point from the train dispatcher. When the train stopped at the designated point in No.1 line of Hizen-Ryuo station, the driver found that the outbound limited express 2019M train was stopped in front of the same No.1 line.

PROBABLE CAUSES
It is probable that the railway serious incident occurred as the outbound limited express train, stopped beyond the down line entry signal of Hizen-Ryuo station indicating proceed signal, restarted operation obeying the instruction by the train dispatcher after the entry signal indicated stop signal, resulted in the state of red signal violation against the entry signal, and entered into the safety margin for overrunning section for the inbound limited express train scheduled to stop in the
No.1 line of the station, induced the possibility that the two trains were operating at the same time in the section of the safety margin for overrunning, when the inbound limited express train, operated obeying the instruction of the train dispatcher and signal indication, passed through the entry signal for the up line.

It is probable that the outbound limited express train was in the state of red signal violation against the entry signal for the down line, and entered into the section of the safety margin for overrunning against the inbound limited express train, because the driver of the outbound limited express train restarted the train without confirmation of the indication of the entry signal, as he had understood that the train already entered into the premises of the station, in the situation that the recognition about the stopped position of the outbound limited express train, was different between the driver of the outbound limited express train and the train dispatcher, in addition to the following situations.

(1) The train dispatcher replaced the entry signal for down line to set the route to No.1 line of Hizen-Ryuo station for the inbound limited express train, resulted that the turnout in the section of the safety margin for overrunning was switched to No.1 line side.

(2) The train dispatcher had instructed the driver of the outbound limited express train to restart the train, without sure confirmation about the stopped position of the train.

Here, it is probable that the reason why the train dispatcher instructed the driver of the outbound limited express train to restart the train, was related that the train dispatcher had judged as the outbound limited express train would stop following the stop signal indication of the entry signal after restart the train, because the train dispatcher understood that the train had been stopped in approach of the entry signal and apart from the entry signal in the direction to Hizen-Shiroishi station, not in the vicinity of the entry signal of Hizen-Ryuo station.

Also, it is probable that the recognitions about the stopped position of the train differed between the driver of the outbound limited express train and the train dispatcher, was related with that the company rules about methods of report and confirmation about the stopped position were not obeyed. Here, it is probable that there was the situation in the background that the company did not understand the actual situation of implementation of report and confirmation.