Legislative Council Panel on Transport Subcommittee on matters relating to railways

Review of the notification regime for railway incidents and matters

Purpose

This paper sets out the Government's actions to follow up the recommendations in the report of the Review Panel on the Reporting of East Rail Incidents ("the Review Panel").

The existing notification system

Statutory requirement

- 2. The notification requirements for railway corporations are provided for under the regulations of the two corporations and supplemented by the procedures and arrangement agreed between them and Government. In gist, under the regulations of the two corporations, railway incidents are classified into "accidents" and "occurrences", as follows-
 - (a) for accidents ¹ that occurred on the railway, railway corporations should "immediately after the occurrence" of the accident make a verbal report to Government. On this,

¹ Under Regulation 2 of the KCRC Regulations (Cap. 372A), an accident is notifiable if it occurs on the railway and-

(b) it involves a train (i) colliding with, or striking against, another train or any other object; or(ii) leaving the rails, and doing so either on a line used for the carriage of passengers or goods or in circumstances where the normal operation of such a line is affected.

It also provides that a person suffers serious injury if he suffers amputation of a limb, a fracture or dislocation, internal injuries, loss of an eye, burns or any other injury of a kind which results in his being admitted to a hospital immediately following the accident for observation or treatment.

⁽a) as a result thereof any person dies or suffers serious injury; or

we have agreed with the railway corporations that notification should be made to the Hong Kong Railway Inspectorate ("HKRI") by phone or pager immediately after the occurrence of the accident; and

(b) apart from accidents, the Schedule to the regulations sets out notifiable occurrences, which cover seven types of occurrences "directly affecting persons" and 12 types of occurrences "affecting railway premises, plant and equipment". Railway corporations should "as soon as practicable after the occurrence" complete and deliver a written report on the occurrence to Government. While these occurrences are also serious matters with safety implications, they are of less immediate safety concerns and hence do not require immediate notification.

Administrative requirement

3. In the light of the spate of railway incidents in mid 2005, there has been increasing public expectation for higher transparency on railway incidents which have safety or service implications but not necessarily covered by the law. On this, in August 2005, the Government asked the railway corporations, as part of their public duty, to notify Government of incidents which are of "public concerns and media interests". This is to facilitate explanations to address public concerns about the safety-related incidents and to initiate follow-up actions where necessary. In terms of service disruption, since early 2004, the railway corporations have been required to notify Government of service disruption incidents which may cause disruption to service for 8 minutes or more.

Recommendations of the Review Panel

4. The Review Panel published its Report on 12 July 2006. The Panel considered that Kowloon-Canton Railway Corporation ("KCRC") should have been more sensitive and alert to the need for more communication throughout the notification process, and that the Corporation should have communicated more even if they considered the incident to be an issue of perceived public safety and not of real public

safety. In its Report, the Panel reaffirmed the importance of requiring the railway corporations to notify Government of railway incidents.

- 5. Apart from setting out a number of recommendations for KCRC to introduce improvement measures, the Review Panel suggested that Government should consider refining the present arrangements for notification of railway incidents. In gist, the suggestions include drawing up a new list of incidents which require notification without introducing legislative amendments to the Regulations, and also a list of specific examples of matters of "public concerns and media interests" to be reported to Government. The Panel also recommended that the Government and KCRC should review the standard notification forms to see if they could succinctly bring to the attention of Government the crux of the issue concerned.
- 6. On the interface between HKRI and KCRC, the Review Panel recommended that in future, verbal instructions from HKRI should be promptly followed up by written record of the instructions given so as to avoid misunderstanding of any telephone discussions, that HKRI should be more proactive in its relationship with the Corporation, and that there should be more meetings and more two-way communication between the Corporation and HKRI.

Government's follow-up actions

7. To follow up the Review Panel's recommendations, we have initiated meetings with the two railway corporations to reaffirm the importance of the notification system and to outline the measures planned to improve the present arrangements. These improvement measures, with the views of the railway corporations incorporated where appropriate, are set out in the ensuing paragraphs.

Objectives of the notification system

8. We have reaffirmed with the railway corporations the objectives of our notification system. It is important that the railway corporations should fully brief their staff that the notification system is not just a

reporting formality, but that it would enable the regulator to assess whether the rectification measures taken by the corporations in handling railway incidents are appropriate and to give advice on how to improve the level of railway safety. To recapulate, the objectives of the notification system are as follows-

- (a) ensure that Government, in particular HKRI as the safety regulator, is advised on incidents which endanger or could endanger the safe operation of the railway;
- (b) enable HKRI to assess the safety implications of each incident, both in itself and in relation to previous similar incident, in order to check that the railway corporations are taking all necessary remedial or preventative measures in relation to the reported incident; and
- (c) enable HKRI to assess whether it is necessary to commence investigations in order to make recommendations on what should be done by the railway corporations with a view to improving the level of rail safety and prevent future incidents.

Duties of the railway corporations

- 9. The primary responsibility of notification rests with the railway corporations. To achieve the above objectives, we have pointed out to the railway corporations and they have accepted that the following should be borne in mind in their notification of railway incidents-
 - (a) notification should cover incidents that occurred at any part of the entire railway premises which have a direct bearing on the safe operation of the railway;
 - (b) notification should be made without waiting until all the information is available. Further information should be supplied when it becomes available;

- (c) the railway corporations shall exercise their best judgment and based on their reasonable belief in deciding what to notify according to the information available at the time. It is important for the corporations to judge the effect of the incident on safety. If in doubt, an event should be notified; and
- (d) some incidents may not be notifiable under one category but notifiable under another. In such cases, the railway corporations should still notify HKRI of the incidents.
- 10. While the railway corporations should strictly comply with the notification requirements under the law, in the light of the increasing public expectation on railway incidents services, they should also notify HKRI of safety-related incidents which are of "public concerns and media interests". While it would be difficult to give an exhaustive definition of the nature of such incidents, in the light of the Review Panel's recommendation and to facilitate compliance by the railway corporations, we have discussed with the railway corporations and advised them that they could regard incidents of "public concerns and media interests" as comprising incidents of potential safety problems and incidents which are perceived to have safety problems. The former are incidents which, under slightly different conditions, might have led to a death, serious injury or may transform into a significant hazard or an The latter are incidents which would give rise to passengers' concerns over railway safety.

Examples of notifiable incidents

11. To follow up the recommendation of the Review Panel, we have drawn up lists of examples of incidents notifiable under the law and incidents of "public concerns and media interests" respectively mainly based on historical cases in Hong Kong. Some of the examples of incidents notifiable under the law and incidents of "public concerns and media interests" mainly based on historical cases are attached at *Annex A and Annex B* respectively.

12. The lists could serve as a reference to help the railway corporations judge what are notifiable to the HKRI. However, such lists are by no means exhaustive. If there is doubt as to whether an incident should be notified, the incident should be notified. HKRI is always prepared to give advice and answer enquires where necessary. The railway corporations also support our view that the lists of examples should be reviewed regularly and updated, where necessary.

Timing of notification and notification forms

- 13. We have reaffirmed with the railway corporations that they should continue to observe the notification arrangements set out in paragraph 2 above and that safety-related incidents which are of "public concerns and media interests" should also be reported to HKRI as soon as possible.
- 14. Regarding the notification forms, they will be refined such that they could more succinctly bring to the attention of HKRI the crux of the incident concerned. The revised forms would capture all the key information including detailed description of the incident with sequence of events, preliminary assessment by the corporations, immediate follow-up actions taken, and any special features of the incident.

Conduct of investigation

15. The Review Panel recommended that in future, for investigation of more complex or serious incidents, there could be more awareness and flexibility to employ independent party/parties either to work with the Corporation or to lead an independent Incident Investigation Team. The independent parties could include HKRI and other experts and professionals. On this, while HKRI has no problem to exchange views with the railway corporations, HKRI will not conduct joint investigation with them in order to ensure that its independent role would not be compromised. It is important that the railway regulator must not allow others to decide what and how it investigates, or inappropriately interfere with the conclusions or recommendations arising from any investigation.

Enhancement of two-way communication

16. With effect from February 2006, HKRI has made it a standing arrangement that written advice would also be issued to the railway corporations for verbal instructions given to them. To step up the closer follow-up actions with railway corporations, HKRI will formalize the arrangements of requesting the railway corporations to provide progress reports on incidents reported until HKRI considers that the investigation

of the cases is completed.

17. In terms of two-way communication, the two railway corporations have also agreed with HKRI's suggestion to increase the frequency of the regular meetings which have hitherto been held quarterly. Details are now being worked out. In fact, the regular meetings are only part of HKRI's normal liaison with the railway corporations. Apart from regular meetings, HKRI liaises and meets with the corporations frequently on routine monitoring and inspection issues and on follow-up

actions on incidents.

Way forward

18. We are now working out some of the implementation details with the railway corporations and aim to fully implement all the above

measures by mid-August 2006.

ETWB July 2006

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<u>List of Examples on Incidents which Require Notification Under the Regulations of the Railway Corporations</u>

A. Regulation 2 of KCRC Regulations (similar wording for the Mass Transit Railway Regulations)

- "(1) An accident is notifiable under regulation 4 if it occurs on the railway and-
 - (a) as a result thereof any person dies or suffers serious injury; or
 - (b) it involves a train -
 - (i) colliding with, or striking against, another train or any other object; or
 - (ii) leaving the rails,

and doing so either on a line used for the carriage of passengers or goods or in circumstances where the normal operation of such a line is affected."

Examples

Regulation (2)(1)(a)

- Train hits a person walking along the track
- Accident on a level crossing and a pedestrian crossing involving rolling stock, resulting in the death of a person or serious injury to a person
- Death of any person on the railways (including death as a result of suicide, trespass, assault, and natural causes)
- Serious injury of any person on the railways (including serious injury as a result of attempted suicide, trespass, and assault)

Regulation (2)(1)(b)

• Collision involving a train (passenger train, locomotive, etc) on a running line that is open to passenger service, e.g. collision

between Light Rail vehicles and other road vehicles

• Derailment on the track near the exit of the depot which blocks trains from entering the mainline for passenger service, resulting in disruption to normal operation of such a line.

B. Part I of the Schedule to the KCRC Regulations (similar wording for the Mass Transit Railway Regulations)

"1. Any accident connected with the operation of the railway or with the maintenance thereof, not being an accident which is notifiable under regulation 2, as a result of which an employee of the Corporation or of a contractor with the Corporation is unable, for a period exceeding 3 days immediately after the accident, to fully carry out his normal duties."

Examples

- Staff fall from train roof in depot
- Staff hit by fallen objects in possession
 - "2. Any occurrence, not coming within paragraph 1, in which a person-
 - (a) falls off a platform or crosses a line whether or not he is struck by a train;
 - (b) falls out of a carriage during the running of a train;
 - (c) falls between a train and a platform;
 - (d) comes into contact with live overhead electric traction wires or other live electrical equipment;
 - (e) suffers injury, which is reported to the Corporation, by the opening or closing of carriage doors at a station or by the operation of an escalator, lift or moving path used by the public as part of the railway;
 - (f) suffers injury, which is reported to the Corporation, as the result of any action of an employee of the Corporation, or of a contractor with the Corporation."

Examples

Item 2(a)

- A passenger falls off from the platform
- Trespassing along the track

Item 2(b)

• A passenger falls off from the train due to opening of the train door when the train is moving

Item 2(c)

- A passenger falls into platform gap
- A passenger falls down from the platform at train gangway position or the position between two coupled Light Rail train cars

Item 2(d)

- A worker touches live overhead lines during maintenance
- A worker gets electric shock during maintenance of train

Item 2(e)

- A person hit by train door (including Platform Screen Door or Automatic Platform Gap) and suffers injury
- A person falls down from escalators and suffers injury
- A person trips at the travelator and suffers injury

Item 2(f)

• A person hit by tools or materials due to action of staff and suffers injury

C. Part II of the Schedule to the KCRC Regulations (similar wording for the Mass Transit Railway Regulations)

"1. Any failure of an axle, wheel or tyre on a train, including tyres unfit to run.

- 2. Any failure of any part of a power unit on a train which endangers or could endanger the safe operation of the railway.
- 3. Any fire, severe electrical arcing or fusing on a train or on any part of the railway or on any part of the railway premises or on premises occupied or used by the Corporation in the running of the railway.
- 4. Any accidental division of a train.
- 5. Any fracture of a rail in the permanent way.
- 6. Any buckling of a running track.
- 7. Any failure of a tunnel, bridge or elevated section or any part the same which endangers or could endanger the safe operation of the railway.
- 8. Any flooding of any part of the permanent way which endangers or could endanger the safe operation of the railway.
- 9. The loss of control of any passenger escalator, lift or moving path.
- 10. Any failure of a signal structure or of any part of the fixed electrical equipment which endangers or could endanger the safe operation of the railway.
- 11. The accidental entry of any road vehicle on to the permanent way.
- 12. Any other failure of the permanent way or of any machinery, plant or equipment which endangers or could endanger the safe operation of the railway."

Examples

Item 1

• Broken or cracked wheel or tyre which renders the wheel or tyre not serviceable

Item 2

• Diesel locomotive's motive power failure resulting in overspeed of the locomotive

Item 3

- Fire on train, station or tunnel
- Smoke or fume emitted due to electric short circuit, severe electrical arcing and fusing

Item 4

• Unintentional separation of train or cars coupled together (excluding pullaway test)

Item 5

- Breakage through the whole cross section of a rail
- Crack on rail requiring an immediate stoppage of traffic for repair or imposition of speed restriction

Item 6

• Buckled or misaligned rail requiring an immediate stoppage of traffic for repair or imposition of speed restriction

Item 7

- Severe crack in tunnel causing water, soil or mud entering tunnel obstructing safe train movement or resulting in imposition of speed restriction
- Falling down of structure or material on track endangering safe operation of railway

Item 8

• Flooding obstructing safe train movement, requiring immediate train stoppage, or resulting in a speed restriction to be imposed

Item 9

• A passenger escalator, lift or travelator that cannot be stopped

Item 10

• Falling down or misalignment of overhead line resulting in speed

- restriction to be imposed or service to be suspended or delayed for immediate repair
- Falling down of signal post that may obstruct the moving trains

Item 11

An unauthorized road vehicle enters railway track of Light Rail

Item 12

- Detection of a series of cracks in the permanent way, any machinery, plant or equipment during scheduled maintenance
- Train carrying passengers moving with train door open
- Train carrying passengers moving with platform screen door or automatic platform gate opened inappropriately
- Collapse or falling down of building material, fixture, equipment or other object from stations or railway premises that could endanger train movement or passenger movement
- Wrong side failure of signaling system
- Passenger/Freight train fails to stop at designated stopping point due to ineffective brake
- Passenger/Freight train fails to stop at designated stopping point due to failure of lubricator resulting in loss of adhesion on track

-END-

<u>List of examples of safety-related incidents of public concerns and</u> media interests

A. Potential Safety Problem (i.e. incidents which, under slightly different conditions, might have led to a death, serious injury or may transform into a significant hazard or an accident.)

- Train enters running lines from depot or crossing running lines or pass signal at danger without authorization
- Collision of trains inside depot which causes damage to the train bodies and renders the trains not serviceable
- Employees of the corporation or of a contractor entering running lines inappropriately with the potential danger of being hit by trains
- Employees of the corporation or of a contractor not keeping safety distance from live overhead line
- An animal of sufficient size and weight encroaching the track, which under slightly different circumstance may have led to collision with trains

B. Perceived Safety Problem (i.e. incidents which would give rise to passengers' concerns over railway safety)

- Unintended station skipping (including trains non-stop at station and all train doors not opened at station)
- Train-to-track detrainment
- Train enters wrong platform or wrong line in right travel direction
- Train carrying passengers enters depot or other restricted areas, or runs beyond terminal station

- Foreign objects entangled with overhead lines
- Any system irregularities causing a big and abnormal sound, or emission of smoke

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