

# Noise Survey on Existing MTR Operating Railway



**CLIENT:** MTR CORPORATION LIMITED

**LOCATION:** HONG KONG

**DATE:** JULY 2011 – JUNE 2015

**TAGS:** NOISE SURVEY, AD-HOC NOISE MEASUREMENT

**USE OF TECHNOLOGY:** SOUND LEVEL METER, ACOUSTIC CALIBRATOR

## ***Background***

Environmental issues associated with the railway operation have drawn considerable public attention. In order to manage the environmental issues pertaining to train operation more effectively and assess the noise levels of trains as well as the noise climate of the Noise Sensitive Receivers (NSRs) along the operating railway, the Mass Transit Railway Corporation Limited (MTR Corporation) decided to undertake noise surveys at some of the representative NSRs along the operating railways.

## ***Our Roles***

ANewR Consulting Limited was commissioned by MTR Corporation to assess noise levels of trains as well as the noise climate of the NSRs along the MTR Corporation operating railway. We recorded noise data with a 1s time interval and 1/3 octave frequency band spectrum of each train pass-by event for 30 minutes in A-weighting equivalent continuous sound pressure level ( $L_{Aeq}$ ) for subsequent analysis according to the "Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Place or Construction Sites".

## ***Key Values to Client***

ANewR helped the Client identify the nearest noise sensitive façade of the NSRs which was the most susceptible to noise intrusion caused by the open section of the operating railway lines, assess noise levels emitted by operating trains during pass-by and identify any noise level exceedances such that rectification works can be implemented to minimise noise impact to NSRs.

