# Characterising Objective Metrics Using Large-Scale Database

## JEG Hybrid

### VQEG March 2019

# Context

- **Inspired by** *Wojciech Szmyd, Paweł Szulc, Lucjan Janowski* "Different quality metrics analyzed in the context of diverse sequences types" presented at VQEG meeting in Krakow

- **Inspired by** *Ahmed Aldahdooh, Enrico Masala, Glenn Van Wallendael and Marcus Barkowsky* "Comparing temporal behavior of fast objective video quality measures on a large-scale database in 32nd Picture Coding Symposium, PCS, IEEE (2016)

- **Constraints with existing validation procedures**
  - The applicability of objective metrics is limited by the scope of the subjective quality tests
  - An objective metric deployed to evaluate video quality in production environments is exposed to a greater variety of videos and conditions than those anticipated in the subjective tests
  - In such scenarios, we see false positives / negatives

- **Exploring new approaches**
  - Create and evaluate successively a large-scale database such that is not feasible to test subjectively
  - Cases where the metrics  agree/disagree
  - Able to identify systematic weaknesses in objective metrics and how well each performs in a variety of conditions

# Progress

- Finalise & approve collaboration agreement letter end of March 2019

- Develop test plan April 2019

- Updates at next VQEG meeting

- Scope of work: Open source and commercial VQ metrics