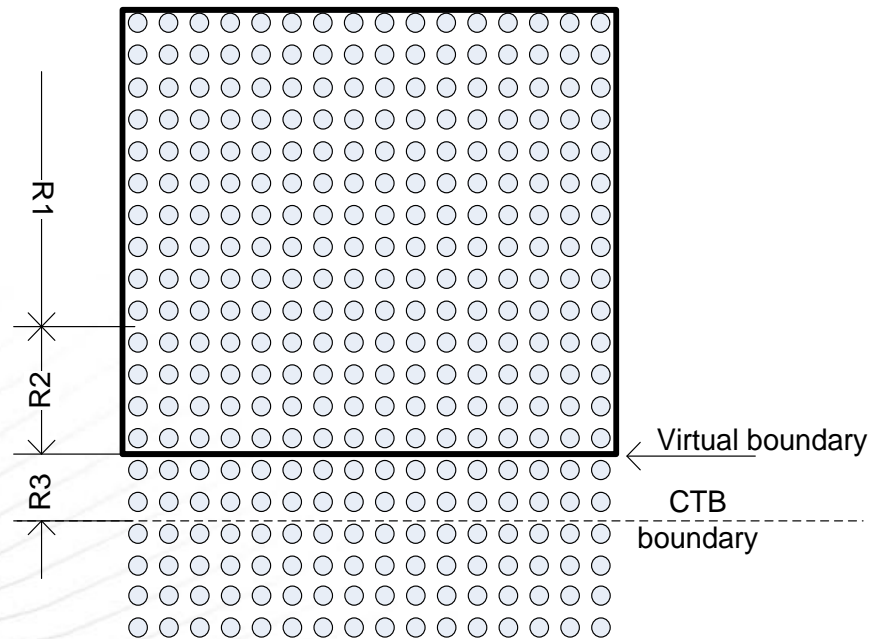


FIX FOR ALF PADDING PROCESS



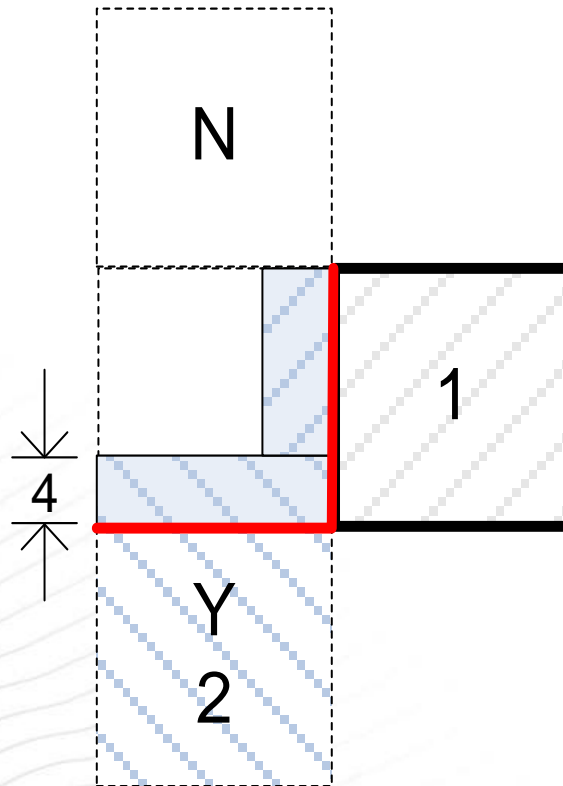
Peisong Chen, Wade Wan

- Virtual boundary processing has been proposed to remove ALF line buffer in LCU-based decoding systems



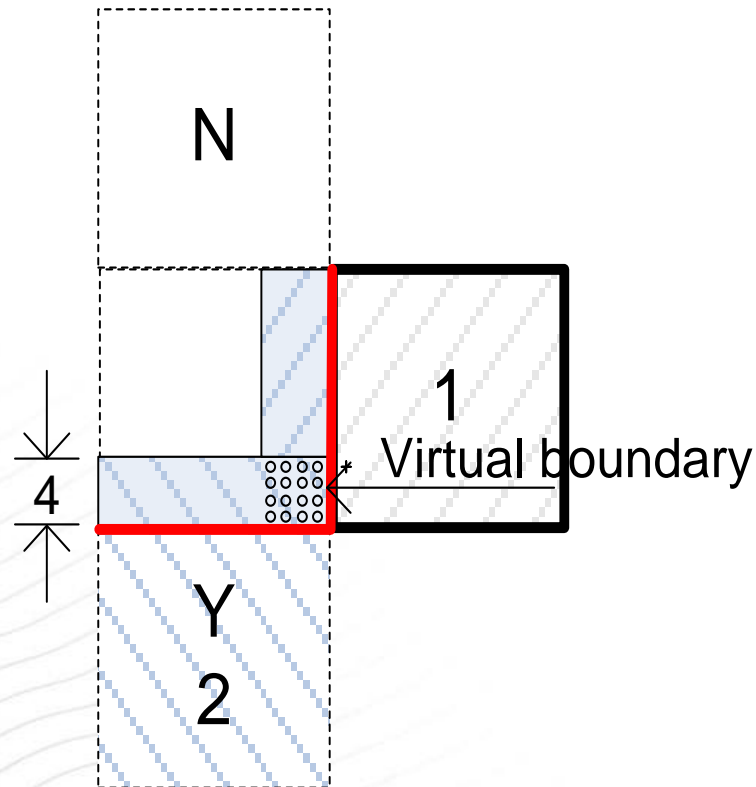
PADDING PROCESS

- When `slice_loop_filter_across_slices_enabled_flag` is set to 0, there is a padding process to extrapolate missing pixels



PROBLEM

- The current padding process for chroma introduced the dependency between pixels on both sides of the virtual boundary



Inconsistence between padding process and virtual boundary processing

- **Limit the upward extrapolation for chroma**
 1. When top edge is also the picture boundary, use three rows for extrapolation padding
 2. Otherwise, use two rows for extrapolation padding (See example)
- **Negligible performance impact (0.0% AI-HE10, RA-HE10, LB-HE10)**

