



REDEFINING MOBILITY



Derivation of picture and slice level information for resampled interlayer reference picture (JCTVC-N0334)

J. Chen, V. Seregin, X. Li, K. Rapak, M. Karczewicz
(Qualcomm Inc.)

Introduction

■ Background:

- Resampled inter-layer picture generation
 - Resampling of picture sample values
 - Motion field mapping
 - » Inter-layer picture can be used as collocated picture for TMVP derivation
- Information used in TMVP derivation process
 - Motion field of collocated picture
 - Picture/slice level information
 - » POC of collocated picture
 - » Slice type of each slice in collocated picture
 - » Reference picture list of each slice in collocated picture

■ Problem

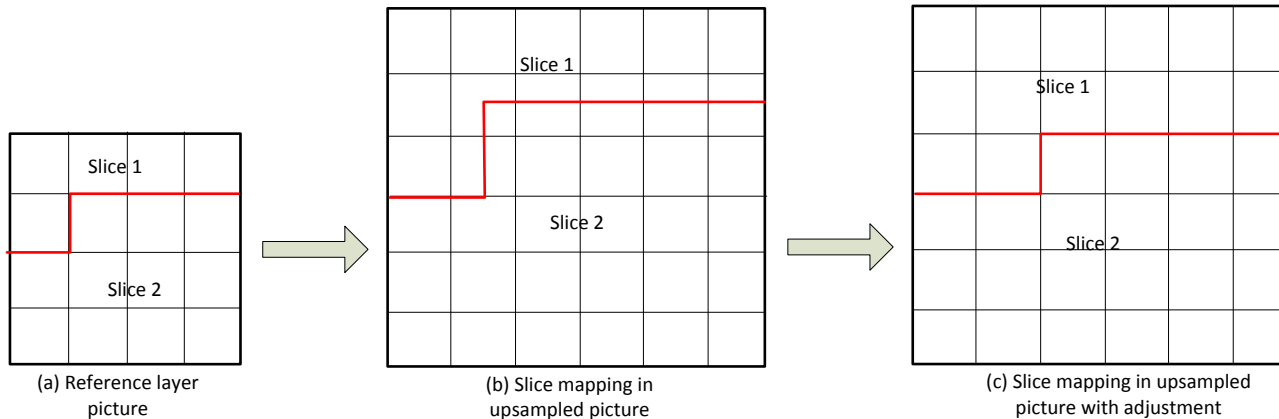
- Picture/slice level information are not defined in current SHVC draft text

Status

- Picture/slice level information as in the software
 - POC of resampled picture is set equal to POC of the corresponding reference picture
 - One slice is defined for the whole resampled picture
 - slice_type is set equal to that of the first slice in the corresponding reference picture.
 - Reference picture list is set equal to those of the first slice in the corresponding reference picture
- Suggestion:
 - Add related text in the SHVC draft text

Further discussion

- The solution may have problem when base layer picture contains multiple slices
 - For example, slice 2 has difference reference picture list to slice 1
 - Reference picture list information in slice 2 region is not correct since slice 1 reference picture list is used



■ Further proposal

- Impose a conforming constraint that the resampled interlayer is only allowed to be used as collocated picture when
 - All slices in the corresponding reference layer picture identical slice type and reference picture list