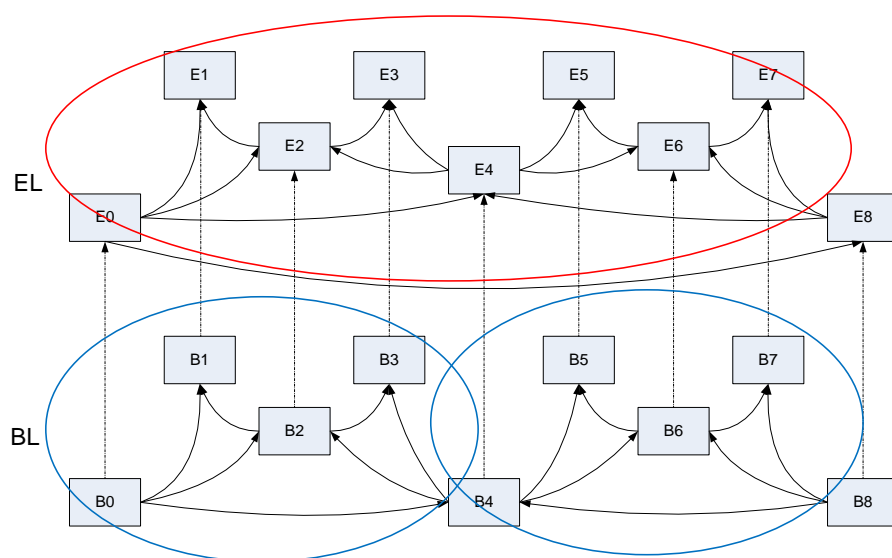# JCTVC-N0211
ON AVC BASE LAYER CODING STRUCTURE INDICATION

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Introduction

- HEVC RPS indicates the prediction structure in a GOP
- Pictures with same output time can be decoded consecutively for identical coding structure
- Unequal GOP structure requires GOP based decoding order
- AVC does not have RPS signaling in SPS so the prediction structure could be unclear at high level.

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Proposed AVC base GOP structure indication

vps_extension( ) {	Descriptor
while(!byte_aligned( ))	
vps_extension_byte_alignment_reserved_one_bit	u(1)
avc_base_layer_flag	u(1)
if (avc_base_layer_flag)	
avc_identical_coding_structure_flag	u(1)
splitting_flag	u(1)
...	
}	

avc_identical_coding_structure_flag equal to 1 specifies that the short and long term temporal reference pictures of all coded pictures in the base layer are co-located with all short term and long term reference pictures of all co-located pictures in the enhancement layers. avc_identical_coding_structure_flag equal to 0 indicates that the short and long term temporal reference pictures of all coded pictures in the base layer may not co-located with all short term and long term reference pictures of all co-located pictures in the enhancement layers. avc_identical_coding_structure_flag is inferred to 1 when it is not present.

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Conclusion

- AVC coding structure indication benefits the standard scalability system to identify the coding structure
  - Decoder operation initialization
  - Decoder memory allocation
- Suggest to adopt the indication into SHVC

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