

# **Non-CE9: Merging candidate reordering**

**JCTVC-G181**

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# 1. Overview

# Overview

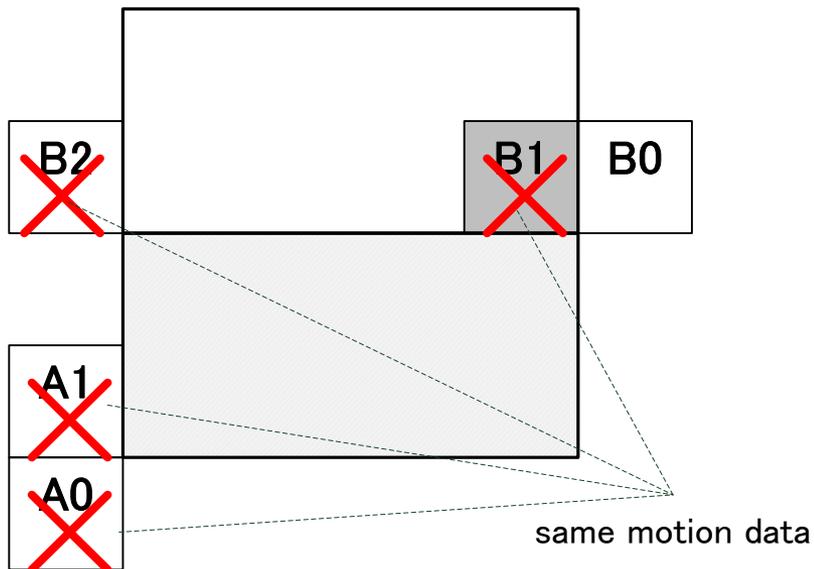
- Proposed technique
  - Reordering merging candidate based on partition type
- Algorithm
  - Not applied avoiding merging candidates process
  - Apply merging candidate reordering process
- Crosscheck
  - JCTVC-G468 by Mitsubishi
- Simulation results
  - Overall BD-rate gain 0.1% for RA and 0.1-0.2% for LD



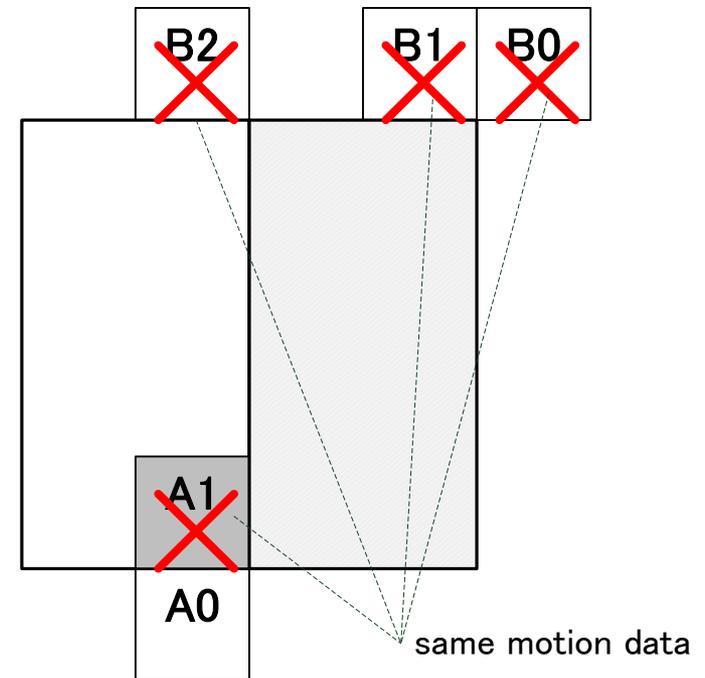
# 2. Algorithm

# HM4.0 avoiding merging candidates process

- Invoked avoiding merging candidates process before 1<sup>st</sup> pruning process
- Need to compare all spatial candidates



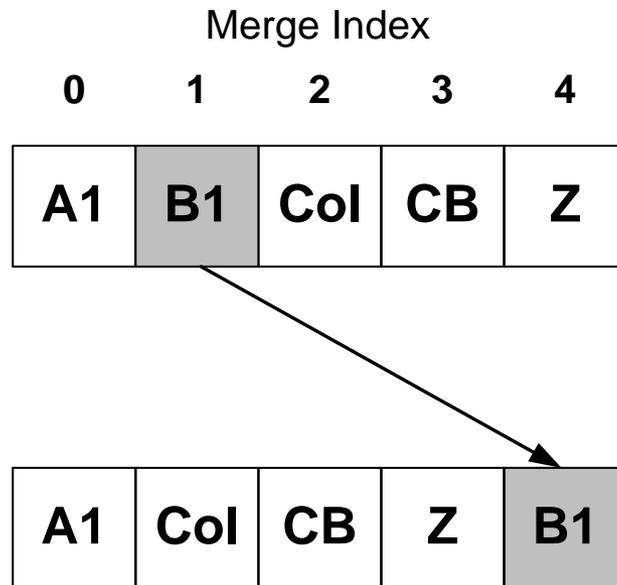
(a) 2NxN Partition1



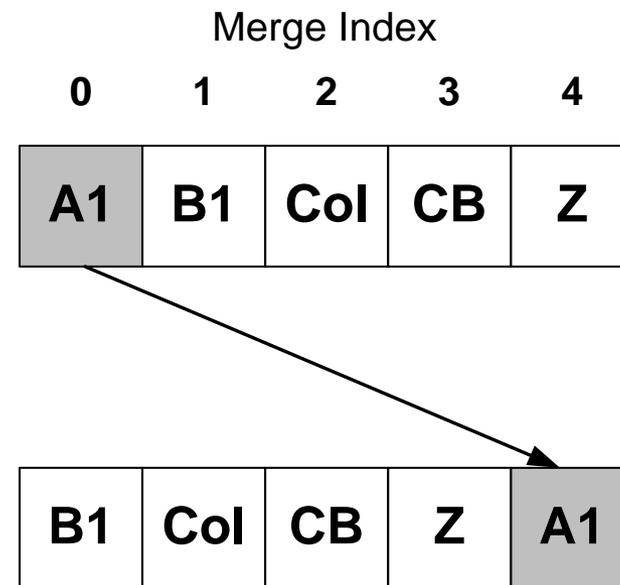
(b) Nx2N Partition1

# Algorithm

- Not applying avoiding merging candidates process
- Identical availability with AMVP
- **Apply merging candidate reordering process**



(a) 2NxN Partition1



(b) Nx2N Partition1

# 3

## 3. Experiments

# Experiments

- Overall BD rate gain
  - 0.1% for RA, 0.1%-0.2% for LD

	Random Access HE			Random Access LC		
	Y	U	V	Y	U	V
Class A	-0.1%	-0.3%	-0.3%	-0.1%	0.0%	-0.1%
Class B	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	0.0%
Class C	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	0.0%
Class D	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.1%
Class E						
Overall	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.1%</b>
	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Enc Time[%]		99%			99%	
Dec Time[%]		100%			99%	

	Low delay B HE			Low delay B LC		
	Y	U	V	Y	U	V
Class A						
Class B	-0.1%	-0.3%	-0.4%	-0.2%	-0.1%	-0.1%
Class C	-0.2%	-0.3%	0.0%	-0.1%	-0.1%	-0.3%
Class D	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%
Class E	0.0%	0.1%	0.1%	-0.2%	0.4%	-0.3%
Overall	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>-0.1%</b>
	-0.1%	-0.1%	-0.1%	-0.2%	0.0%	-0.1%
Enc Time[%]		100%			99%	
Dec Time[%]		100%			99%	

# 4. Conclusion

# Conclusion

- Algorithm
  - Not applied avoiding merging candidates process
  - Apply merging candidate reordering process
  
- Simulation results
  - Overall BD-rate gain 0.1% for RA and 0.1-0.2% for LD
  
- Suggestion
  - Adopted to the next WD and HM

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