

# **Non-CE9: AMVP syntax for bi-prediction**

**JCTVC-G182**

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# 1. Overview

# Overview

- Proposed technique
  - Change the order of AMVP syntax for bi-prediction
- Algorithm
  - Change the position of ref\_idx\_l1
- Crosscheck
  - JCTVC-G341 by Toshiba
- Simulation results
  - No coding loss for all configurations

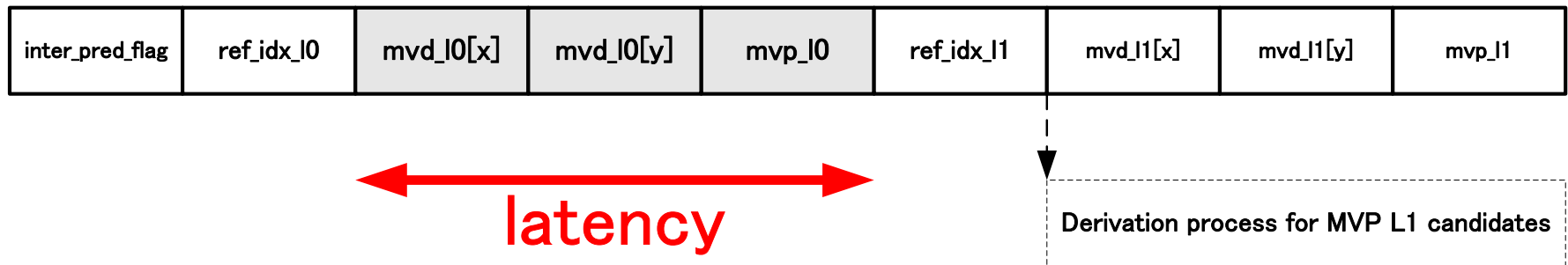


## **2. Algorithm**

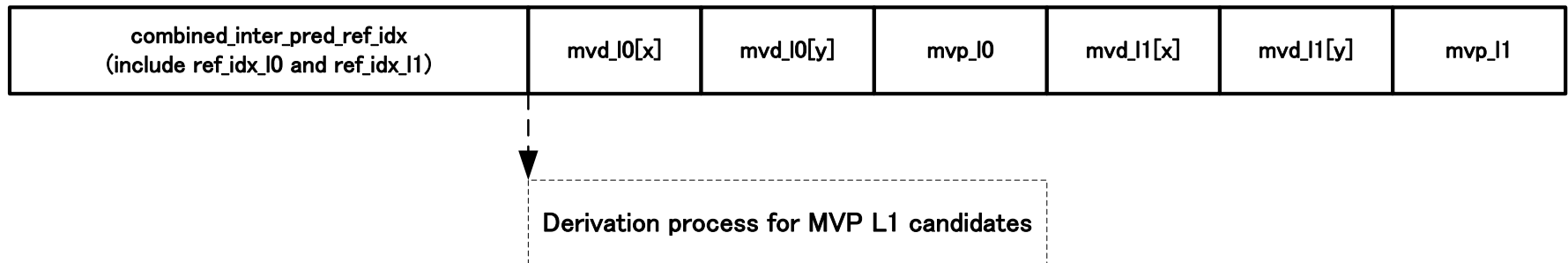
# AMVP latency issue

- Cause latency of AMVP derivation process for bi-prediction
- No latency in signaling only combined\_inter\_pred\_ref\_idx

(a) signaling inter\_pred\_flag

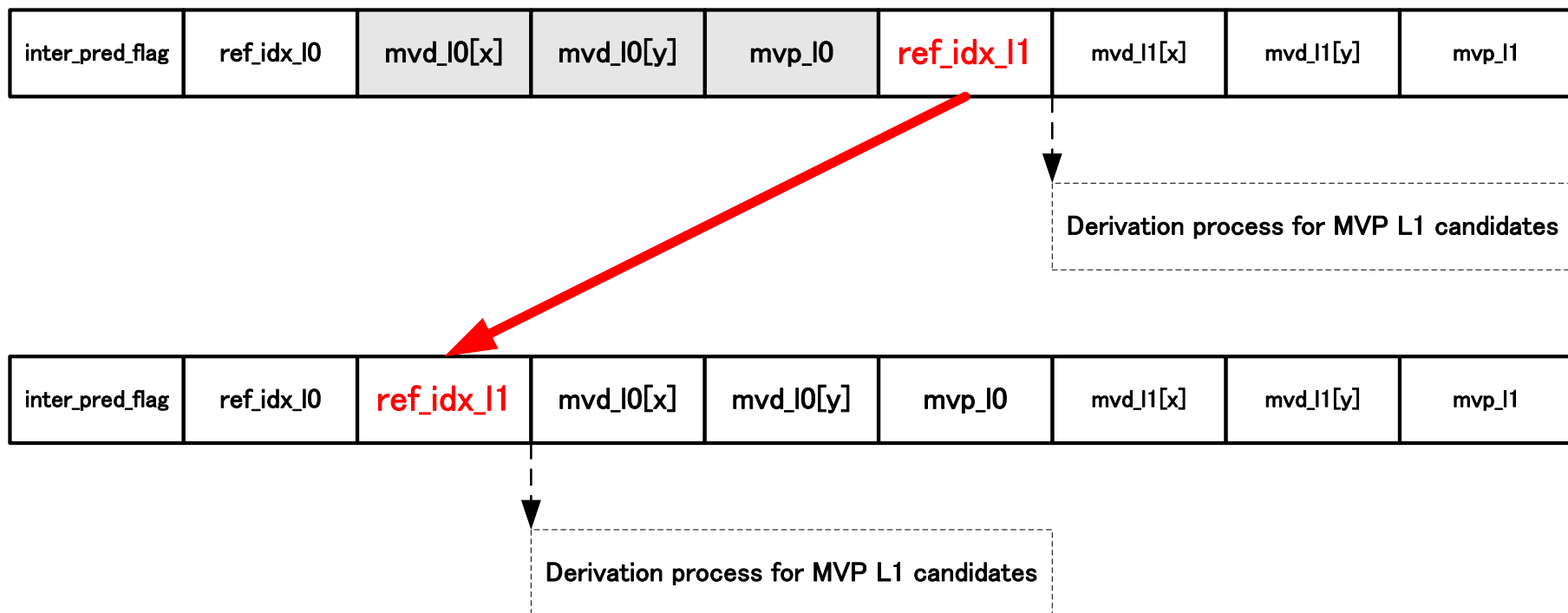


(b) signaling only combined\_inter\_pred\_ref\_idx



# Proposed algorithm

- Move a position of `ref_idx_l1` in front of `mvd_l0`





# 3. Experiments

# Experiments

- No coding loss for all configurations

	Random Access HE			Random Access LC		
	Y	U	V	Y	U	V
Class A	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Class B	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Class C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Class D	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Class E						
Overall	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Enc Time[%]	100%			100%		
Dec Time[%]	100%			100%		

	Low delay B HE			Low delay B LC		
	Y	U	V	Y	U	V
Class A						
Class B	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
Class C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Class D	0.0%	0.3%	-0.2%	0.0%	0.0%	0.0%
Class E	0.0%	-0.1%	0.6%	0.0%	0.0%	0.0%
Overall	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Enc Time[%]	100%			100%		
Dec Time[%]	100%			100%		



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## 4. Conclusion

# Conclusion

- Advantage
  - Solve AMVP latency issue
  
- Simulation results
  - No coding loss for all configurations
  
- Suggestion
  - Adopted to the next WD and HM

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