

AHG13: On interlace indication (JCTVC-H0056/ M22925)

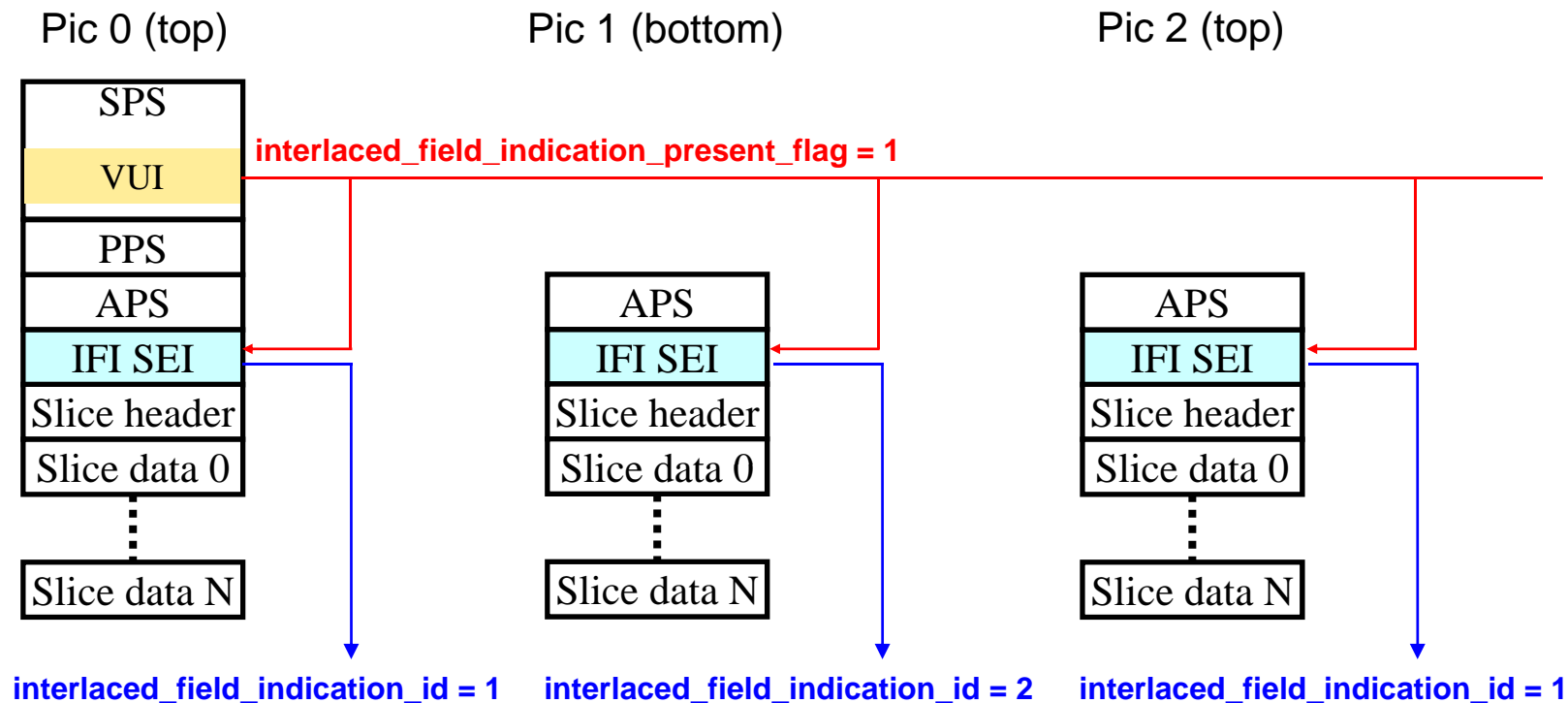
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Summary

- Review of AHG13 starting text
- Proposals
 - ✓ Modifications to the AHG13 starting text
 - Change VUI definition and move it to SPS
 - Change the length of the field of SEI message from 4-bit to 1-bit
 - ✓ Modified access unit delimiter RBSP (**This aspect is informative.**)
- Recommendation
 - Discuss interlace indication and create text during the 8th JCTVC meeting to be integrated into the CD

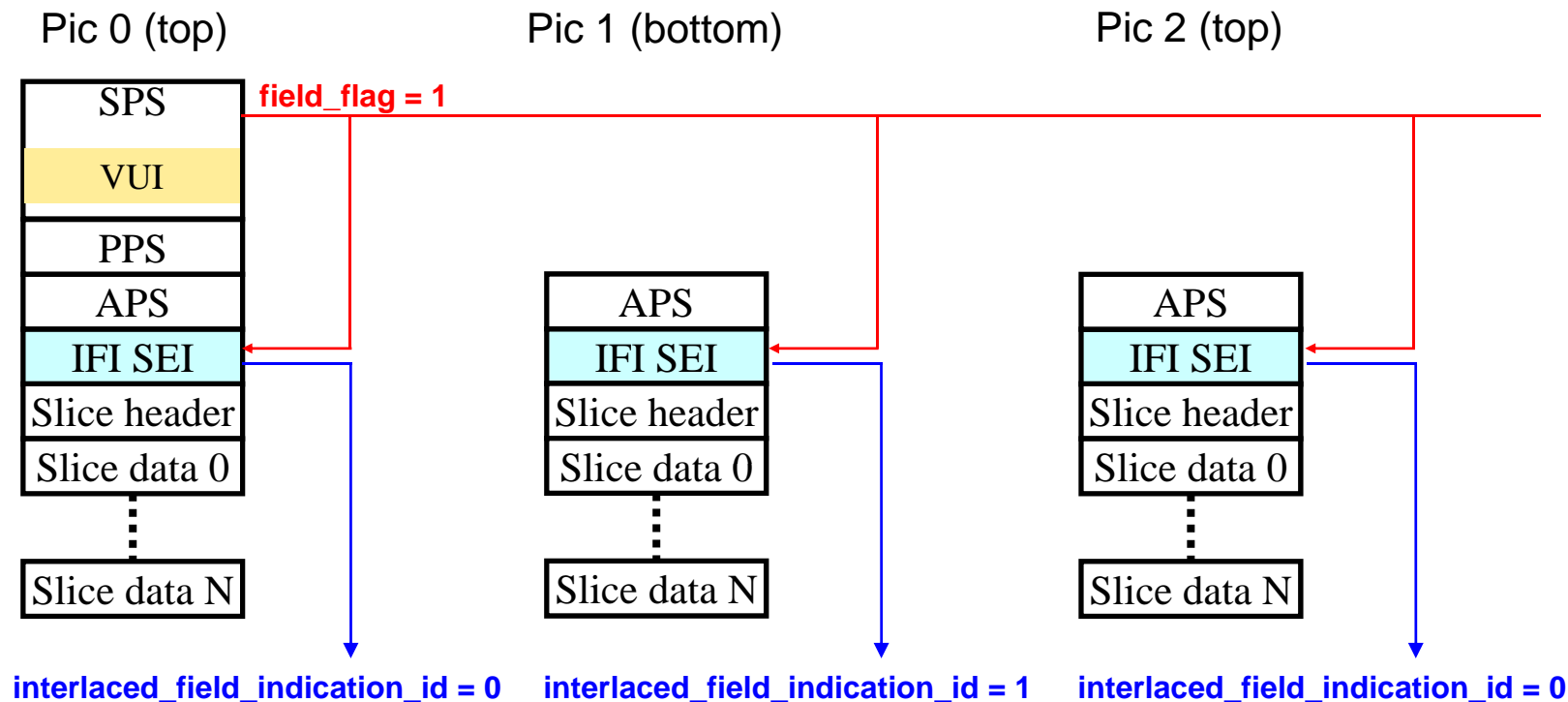
Review of AHG13 starting text

- interlaced_field_indication_present_flag in **VUI** specifies **the presence of interlace field indication SEI messages** (IFI SEIs).
- interlaced_field_indication_id (**4-bit**) in IFI SEIs indicates the field of picture (0: unspecified, 1: top, 2: bottom, 3-15: reserved)



Modifications to AHG13 starting text

- **field_flag** in **SPS** specifies **whether a sequence comprises of frames only or fields only** in addition to the presence of IFI SEIs.
- **interlaced_field_indication_id** (**1-bit**) in IFI SEIs indicates the field of picture (0: top, 1: bottom)



Benefits of AHG13 text modifications

- Explicit statement that HEVC does not support picture-level adaptive frame/field control for given a sequence
- Signaling a flag in SPS allows to skip signaling other VUI fields
- Better profiling of use of interlace indication SEI messages

Modified access unit delimiter RBSP

- Access unit delimiter RBSP conveys non-normative information (type of slices in primary coded picture)
- The current field is 3-bit long; remaining 5-bit may be used for indicating type of sample arrangements of a coded picture as follows:

access_unit_delimiter_rbsp() {	Descriptor
primary_pic_type	u(3)
primary_pic_struct	u(2)
primary_frame_packing	u(3)
rbsp_trailing_bits()	
}	

primary_pic_struct	Indicated picture structure
0	frame
1	top field
2	bottom field
3	unspecified

primary_frame_packing	Interpretation
0	mono
1	stereo side-by-side
2	stereo top-bottom
4-8	reserved

Conclusions

- Review of AHG13 starting text
- Modifications to the AHG13 starting text
 - Change the definition of VUI flag to specify type of a coded sequence as well as the presence of interlace SEI messages
 - Move VUI flag to SPS
 - Change the length of the field of interlace SEI message from 4-bit to 1-bit
- Recommendation
 - Discuss interlace indication and create text during the 8th JCTVC meeting to be integrated into the CD

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