#### WPP and dependent slices

#### *Alternative 1*

#### Picture parameter set RBSP semantics

**entropy\_coding\_sync\_enabled\_flag** equal to 1 specifies that a specific synchronization process for context variables is invoked before decoding the first coding tree block of a row of coding tree blocks in each tile in each picture referring to the picture parameter set and a specific memorization process for context variables is invoked after decoding two coding tree blocks of a row of coding tree blocks in each tile in each picture referring to the picture parameter set. entropy\_coding\_sync\_enabled\_flag equal to 0 specifies that no specific synchronization process for context variables is required to be invoked before decoding the first coding tree block of a row of coding tree blocks in each tile in each picture referring to the picture parameter set and no specific memorization process for context variables is required to be invoked after decoding two coding tree blocks of a row of coding tree blocks in each tile in each picture referring to the picture parameter set.

It's a requirement of bitstream conformance that the values of tiles\_enabled\_flag and entropy\_coding\_sync\_enabled\_flag shall be the same for all picture parameter sets that are activated within a coded video sequence.

When entropy\_coding\_sync\_enabled\_flag is equal to 1 and the first coding block in a slice is not the first coding block in the first coding tree block of a row of coding tree blocks in a tile, it is a requirement of bitstream conformance that all of the following shall be correct:

* the last coding block in the slice belongs to the same row of coding tree blocks as the first coding block in the slice.
* dependent\_slice\_flag is equal to 0 for the first slice that belongs to the next row of coding tree blocks.

#### *Alternative 2*

#### Picture parameter set RBSP semantics

**entropy\_coding\_sync\_enabled\_flag** equal to 1 specifies that a specific synchronization process for context variables is invoked before decoding the first coding tree block of a row of coding tree blocks in each tile in each picture referring to the picture parameter set and a specific memorization process for context variables is invoked after decoding two coding tree blocks of a row of coding tree blocks in each tile in each picture referring to the picture parameter set. entropy\_coding\_sync\_enabled\_flag equal to 0 specifies that no specific synchronization process for context variables is required to be invoked before decoding the first coding tree block of a row of coding tree blocks in each tile in each picture referring to the picture parameter set and no specific memorization process for context variables is required to be invoked after decoding two coding tree blocks of a row of coding tree blocks in each tile in each picture referring to the picture parameter set.

It's a requirement of bitstream conformance that the values of tiles\_enabled\_flag and entropy\_coding\_sync\_enabled\_flag shall be the same for all picture parameter sets that are activated within a coded video sequence.

When entropy\_coding\_sync\_enabled\_flag is equal to 1 and the first coding block in a slice is not the first coding block in the first coding tree block of a row of coding tree blocks in a tile, it is a requirement of bitstream conformance that all of the following shall be correct:

* the last coding block in the slice shall belong to the same row of coding tree blocks as the first coding block in the slice.
* either dependent\_slice\_enabled\_flag is equal to 0 or dependent\_slice\_flag is equal to 1.

#### Tiles and dependent slices

#### *Alternative 1*

**7.4.7.1 General slice header semantics**

**dependent\_slice\_flag** equal to 1 specifies that the value of each slice header syntax element not present is inferred to be equal to the value of corresponding slice header syntax element in the preceding slice containing the coding tree block for which the coding tree block address is ctbAddrTStoRS[ ctbAddrRStoTS[ slice\_address ] − 1 ]. When not present, the value of dependent\_slice\_flag is inferred to be equal to 0.

The variable BaseSliceAddrRS is derived as follows.

* If dependent\_slice\_flag is equal to 0, BaseSliceAddrRS is set equal to slice\_address.
* Otherwise BaseSliceAddrRS is set equal to BaseSliceAddrRS of the preceeding slice containing the coding tree block for which the coding tree block address is ctbAddrTStoRS[ ctbAddrRStoTS[ SliceCtbAddrRS ] − 1 ].

When tiles\_enabled\_flag is equal to 1, the first coding block in a slice is not the first coding block in a tile and the dependent\_slice\_flag is equal to 0, it is requirement of the bitstream conformance that the dependent\_slice\_flag shall be equal to 0 for the first slice that belongs to the next tile.

#### *Alternative 2*

**7.4.7.1 General slice header semantics**

**dependent\_slice\_flag** equal to 1 specifies that the value of each slice header syntax element not present is inferred to be equal to the value of corresponding slice header syntax element in the preceding slice containing the coding tree block for which the coding tree block address is ctbAddrTStoRS[ ctbAddrRStoTS[ slice\_address ] − 1 ]. When not present, the value of dependent\_slice\_flag is inferred to be equal to 0.

The variable BaseSliceAddrRS is derived as follows.

* If dependent\_slice\_flag is equal to 0, BaseSliceAddrRS is set equal to slice\_address.
* Otherwise BaseSliceAddrRS is set equal to BaseSliceAddrRS of the preceeding slice containing the coding tree block for which the coding tree block address is ctbAddrTStoRS[ ctbAddrRStoTS[ SliceCtbAddrRS ] − 1 ].

When tiles\_enabled\_flag is equal to 1, the first coding block in a slice is the first coding block in a tile and the dependent\_slice\_flag is equal to 1, it is requirement of the bitstream conformance that all of the following shall be correct:

* The first CTB of the preceding slice is the first CTB of a tile.
* The first CTB of the proceeding slice is the first CTB of a tile.