

WHAT IS CLAIMED IS:

1. A method for video decoding in a decoder, comprising:
 - receiving, from a coded video bitstream, coding information for a current picture, at least one flag in the coding information indicating one or more allowable coding types for sub-partitions in the current picture, the one or more allowable coding types including at least one of intra coding and inter coding for the sub-partitions;
 - determining, based on the at least one flag, whether to decode intra syntax elements used only for coding intra sub-partitions and whether to decode inter syntax elements used only for coding inter sub-partitions;
 - decoding the intra syntax elements in the coding information based on the intra syntax elements being determined to be decoded; and
 - decoding the inter syntax elements in the coding information based on the inter syntax elements being determined to be decoded.
2. The method of claim 1, wherein the at least one flag includes at least one of a first flag indicating whether an inter-coded sub-partition is allowed in the current picture and a second flag indicating whether an intra-coded sub-partition is allowed in the current picture.
3. The method of claim 2, wherein
 - the at least one flag includes only the first flag, the first flag indicating that no inter-coded sub-partition is allowed in the current picture, the one or more coding types being the intra coding for the sub-partitions; and
 - the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:
 - determining that no inter syntax element is to be decoded for the current picture;
 - and
 - determining that the intra syntax elements are to be decoded for the sub-partitions.
4. The method of claim 2, wherein
 - the at least one flag includes the first flag and the second flag, the first flag indicating that the inter-coded sub-partition is allowed in the current picture, the second flag indicating that no intra-coded sub-partition is allowed in the current picture; and

the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:

determining that the inter syntax elements are to be decoded for the sub-partitions with the inter coding; and

determining that no intra syntax element is to be decoded for the current picture.

5. The method of claim 2, wherein

the at least one flag includes the first flag and the second flag, the first flag indicating that no inter-coded sub-partition is allowed in the current picture, the second flag indicating that the intra-coded sub-partition is allowed in the current picture; and

the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:

determining that no inter syntax element is to be decoded for the current picture;

and

determining that the intra syntax elements are to be decoded for the sub-partitions.

6. The method of claim 2, wherein

the at least one flag includes the first flag and the second flag, the first flag indicating that the inter-coded sub-partition is allowed in the current picture, the second flag indicating that the intra-coded sub-partition is allowed in the current picture; and

the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:

determining that the inter syntax elements are to be decoded for at least one of the sub-partitions with the inter coding; and

determining that the intra syntax elements are to be decoded for at least one of the sub-partitions with the intra coding.

7. The method of claim 1, wherein the at least one flag is signaled in a picture parameter set (PPS) for one or more pictures including the current picture or in a picture header for the current picture.

8. The method of claim 1, wherein the sub-partitions include at least one slice, at least one tile, or at least one tile group in the current picture.

9. An apparatus for video decoding, comprising processing circuitry configured to: receive, from a coded video bitstream, coding information for a current picture, at least one flag in the coding information indicating one or more allowable coding types for sub-partitions in the current picture, the one or more allowable coding types including at least one of intra coding and inter coding for the sub-partitions;

determine, based on the at least one flag, whether to decode intra syntax elements used only for coding intra sub-partitions and whether to decode inter syntax elements used only for coding inter sub-partitions;

decode the intra syntax elements in the coding information based on the intra syntax elements being determined to be decoded; and

decode the inter syntax elements in the coding information based on the inter syntax elements being determined to be decoded.

10. The apparatus of claim 9, wherein the at least one flag includes at least one of a first flag indicating whether an inter-coded sub-partition is allowed in the current picture and a second flag indicating whether an intra-coded sub-partition is allowed in the current picture.

11. The apparatus of claim 10, wherein

the at least one flag includes only the first flag, the first flag indicating that no inter-coded sub-partition is allowed in the current picture, the one or more coding types being the intra coding for the sub-partitions; and

the processing circuitry is configured to:

determine that no inter syntax element is to be decoded for the current picture;

and

determine that the intra syntax elements are to be decoded for the sub-partitions.

12. The apparatus of claim 10, wherein

the at least one flag includes the first flag and the second flag, the first flag indicating that the inter-coded sub-partition is allowed in the current picture, the second flag indicating that no intra-coded sub-partition is allowed in the current picture; and

the processing circuitry is configured to:

determine that the inter syntax elements are to be decoded for the sub-partitions with the inter coding; and

determine that no intra syntax element is to be decoded for the current picture.

13. The apparatus of claim 10, wherein

the at least one flag includes the first flag and the second flag, the first flag indicating that no inter-coded sub-partition is allowed in the current picture, the second flag indicating that the intra-coded sub-partition is allowed in the current picture; and

the processing circuitry is configured to:

determine that no inter syntax element is to be decoded for the current picture;

and

determine that the intra syntax elements are to be decoded for the sub-partitions.

14. The apparatus of claim 10, wherein

the at least one flag includes the first flag and the second flag, the first flag indicating that the inter-coded sub-partition is allowed in the current picture, the second flag indicating that the intra-coded sub-partition is allowed in the current picture; and

the processing circuitry is configured to:

determine that the inter syntax elements are to be decoded for at least one of the sub-partitions with the inter coding; and

determine that the intra syntax elements are to be decoded for at least one of the sub-partitions with the intra coding.

15. The apparatus of claim 9, wherein the at least one flag is signaled in a picture parameter set (PPS) for one or more pictures including the current picture or in a picture header for the current picture.

16. The apparatus of claim 9, wherein the sub-partitions include at least one slice, at least one tile, or at least one tile group in the current picture.

17. A non-transitory computer-readable medium storing instructions which when executed by a computer for video decoding cause the computer to perform:

receiving, from a coded video bitstream, coding information for a current picture, at least one flag in the coding information indicating one or more allowable coding types for sub-

partitions in the current picture, the one or more allowable coding types including at least one of intra coding and inter coding for the sub-partitions;

determining, based on the at least one flag, whether to decode intra syntax elements used only for coding intra sub-partitions and whether to decode inter syntax elements used only for coding inter sub-partitions;

decoding the intra syntax elements in the coding information based on the intra syntax elements being determined to be decoded; and

decoding the inter syntax elements in the coding information based on the inter syntax elements being determined to be decoded.

18. The non-transitory computer-readable medium of claim 17, wherein the at least one flag includes at least one of a first flag indicating whether an inter-coded sub-partition is allowed in the current picture and a second flag indicating whether an intra-coded sub-partition is allowed in the current picture.

19. The non-transitory computer-readable medium of claim 18, wherein the at least one flag includes only the first flag, the first flag indicating that no inter-coded sub-partition is allowed in the current picture, the one or more coding types being the intra coding for the sub-partitions; and

the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:

determining that no inter syntax element is to be decoded for the current picture;

and

determining that the intra syntax elements are to be decoded for the sub-partitions.

20. The non-transitory computer-readable medium of claim 18, wherein the at least one flag includes the first flag and the second flag, the first flag indicating that the inter-coded sub-partition is allowed in the current picture, the second flag indicating that no intra-coded sub-partition is allowed in the current picture; and

the determining whether to decode the intra syntax elements and whether to decode the inter syntax elements includes:

determining that the inter syntax elements are to be decoded for the sub-partitions with the inter coding; and

determining that no intra syntax element is to be decoded for the current picture.