CLAIMS:

1. A method of encoding a coded picture of a coded video sequence, the method being performed by at least one processor and the method comprising:

encoding, from a parameter set, a plurality of candidate resolutions;

encoding, in a transient header structure applicable to a group of samples, an index for selecting a candidate resolution among a plurality of candidate resolutions; and

generating the coded video sequence comprising the plurality of candidate resolutions and the index,

wherein a sample associated with the coed video sequence is resampled based on meta-information obtained during decoding of previous parts of the coded picture or coded video sequence and previously reconstructed and loop-filtered sample values, and

wherein prediction is enabled using the resampled sample.

2. The method of claim 1, wherein the transient header structure is any one or any combination of a picture header, a tile group header, a tile header, a slice header, and a Group of Blocks header.

3. The method of claim 2, wherein the index is coded in an Exp-Golomb code.

4. The method of claim 2, wherein the transient header structure is the tile group header and the tile group header comprises a resampling factor.

5. The method of claim 2, wherein the transient header structure is the tile group header and the tile group header comprises adaptive resolution change (ARC) reference information.

6. The method of claim 5, wherein the ARC reference information refers to a subset of ARC information available in the parameter set.

7. The method of claim 1, wherein the candidate decoded resolution is coded in an Exp-Golomb code coded syntax element preceding the candidate decoded resolution.

8. An apparatus for encoding a coded picture of a coded video sequence, the apparatus comprising:

at least one memory configured to store computer program code; and

at least one processor configured to access the at least one memory and operate according to the computer program code, the computer program code comprising:

first encoding code configured to cause the at least one processor to encode, from a parameter set, a plurality of candidate resolutions;

second encoding code configured to cause the at least one processor to encode, in a transient header structure applicable to a group of samples, an index for selecting a candidate resolution among a plurality of candidate resolutions; and

generating code configured to cause the at least one processor to generate the coded video sequence comprising the plurality of candidate resolutions and the index,

wherein a sample associated with the coded video is resampled based on meta-information obtained during decoding of previous parts of the coded picture or coded video sequence and previously reconstructed and loop-filtered sample values; and

wherein prediction is enabled using the resampled sample.

9. The apparatus of claim 8, wherein the transient header structure is any one or any combination of a picture header, a tile group header, a tile header, a slice header, and a Group of Blocks header.

10. The apparatus of claim 9, wherein the index is coded in an Exp-Golomb code.

11. The apparatus of claim 9, wherein the transient header structure is the tile group header and the tile group header comprises a resampling factor.

12. The apparatus of claim 9, wherein the transient header structure is the tile group header and the tile group header comprises adaptive resolution change (ARC) reference information.

13. The apparatus of claim 12, wherein the ARC reference information refers to a subset of ARC information available in the parameter set.

14. The apparatus of claim 8, wherein the candidate decoded resolution is coded in an Exp-Golomb code coded syntax element preceding the candidate decoded resolution.

15. A method of encoding a coded picture of a coded video sequence, the method being performed by at least one processor and the method comprising::

generating the coded video sequence comprising a plurality of candidate resolutions and an index,

wherein the plurality of candidate resolutions are encoded from a parameter set,

wherein the index is encoded in a transient header structure applicable to a group of samples,

wherein the index is for selecting a candidate resolution among a plurality of candidate resolutions; and

wherein a sample associated with the coded video sequence is resampled based on meta-information obtained during decoding of previous parts of the coded picture or coded video sequence and previously reconstructed and loop-filtered sample values, and

wherein prediction is enabled using the resampled sample.

16. The method according to claim 15, wherein the transient header structure is any one or any combination of a picture header, a tile group header, a tile header, a slice header, and a Group of Blocks header.

17. The method according to claim 16, wherein the index is coded in an Exp-Golomb code.

18. The method according to claim 16, wherein the transient header structure is the tile group header and the tile group header comprises a resampling factor.

19. The method according to claim 16, wherein the enabling the prediction using the resampled sample is further based on meta-information obtained during decoding of previous parts of the coded picture or coded video sequence and previously reconstructed and loop-filtered sample values.

20. The method according to claim 15, wherein the candidate decoded resolution is coded in an Exp-Golomb code coded syntax element preceding the candidate decoded resolution.

21. A non-transitory computer-readable storage medium storing a bitstream, wherein the bitstream is generated by using the method according to any one of claims 1 to 7 or any one of claims 15 to 20.