CLAIMS

1. A method of processing video data, the method comprising: receiving a video parameter set (VPS) and a sequence parameter set (SPS), the VPS comprising a plurality of Hypothetical Reference Decoder (HRD) parameters syntax structures comprising respective sets of HRD parameters, the VPS further including, for each respective HRD parameters syntax structure in the VPS, syntax elements indicating a respective set of layer identifiers for the respective HRD parameters syntax structure, and the SPS comprising a HRD parameters syntax structure comprising a set of HRD parameters; selecting a set of HRD parameters applicable to a particular operation point, wherein the set of HRD parameters in the HRD parameters syntax structure in the SPS is applicable to the particular operation point based on a layer identifier set of the particular operation point being identical to a set of all layer identifiers present in a bitstream that is under test for a bitstream conformance test, and the set of HRD parameters in a particular HRD parameter syntax structure of the plurality of HRD parameters syntax structures in the VPS is applicable to the particular operation point based on the layer identifier set of the particular operation point being specified by the syntax elements indicating the layer identifiers for the particular HRD parameters syntax structure in the VPS; and performing an HRD operation using the selected set of HRD parameters.

2. The method of claim 1, wherein the set of HRD parameters applicable to the particular operation point includes at least parameters indicative of an initial coding picture buffer (CPB) removal delay, a CPB size, and a bit rate.

3. The method of claim 1, further comprising: determining a target temporal identifier of the particular operation point that is equal to a greatest temporal identifier present in the bitstream.

4. The method of claim 1, wherein performing the HRD operation comprises performing the bitstream conformance test, the bitstream conformance test determining whether the bitstream conforms to a video coding standard.

5. The method of claim 4, wherein performing the bitstream conformance test comprises determining that the bitstream does not conform to the video coding standard when, for all sets of HRD parameters in a coded video sequence, more than one of the sets of HRD parameters in the coded video sequence applies to the same operation point.

6. The method of claim 4, wherein performing the bitstream conformance test comprises determining that the bitstream does not conform to the video coding standard when more than one set of HRD parameters in the VPS applies to the same operation point.

7. The method of claim 4, wherein performing the bitstream conformance test comprises determining that the bitstream does not conform to the video coding standard when the VPS includes a set of HRD parameters that applies to operation points having layer identifier sets containing only the value 0.

8. A video processing device comprising: a storage medium storing encoded video data; and one or more processors configured to: receive a video parameter set (VPS) and a sequence parameter set (SPS), the VPS comprising a plurality of Hypothetical Reference Decoder (HRD) parameters syntax structures comprising respective sets of HRD parameters, the VPS further including, for each respective HRD parameters syntax structure in the VPS, syntax elements indicating a respective set of layer identifiers for the respective HRD parameters syntax structure, and the SPS comprising a HRD parameters syntax structure comprising a set of HRD parameters; select a set of HRD parameters applicable to a particular operation point, wherein the one or more processors are configured to determine that the set of HRD parameters in the HRD parameters syntax structure in the SPS is applicable to the particular operation point based on a layer identifier set of the particular operation point being identical to a set of all layer identifiers present in a bitstream that is under test for a bitstream conformance test, and configured to determine that the set of HRD parameters in a particular HRD parameter syntax structure of the plurality of HRD parameters syntax structures in the VPS is applicable to the particular operation point based on the layer identifier set of the particular operation point being specified by the syntax elements indicating the layer identifiers for the particular HRD parameters syntax structure in the VPS; and perform an HRD operation using the selected set of HRD parameters.

9. The video processing device of claim 8, wherein the set of HRD parameters applicable to the particular operation point includes at least parameters indicative of an initial coding picture buffer (CPB) removal delay, a CPB size, and a bit rate.

10. The video processing device of claim 8, wherein the one or more processors are configured to: determine a target temporal identifier of the particular operation point that is equal to a greatest temporal identifier present in the bitstream.

11. The video processing device of claim 8, wherein the one or more processors are configured to perform the bitstream conformance test, the bitstream conformance test determining whether the bitstream conforms to a video coding standard.

12. The video processing device of claim 11, wherein the one or more processors are configured to determine that the bitstream does not conform to the video coding standard when, for all sets of HRD parameters in a coded video sequence, more than one of the sets of HRD parameters in the coded video sequence applies to the same operation point.

13. The video processing device of claim 11, wherein the one or more processors are configured to determine that the bitstream does not conform to the video coding standard when more than one set of HRD parameters in the VPS applies to the same operation point.

14. The video processing device of claim 11, wherein the one or more processors are configured to determine that the bitstream does not conform to the video coding standard when the VPS includes a set of HRD parameters that applies to operation points having layer identifier sets containing only the value 0.

15. A video processing device comprising: means for receiving a video parameter set (VPS) and a sequence parameter set (SPS), the VPS comprising a plurality of Hypothetical Reference Decoder (HRD) parameters syntax structures comprising respective sets of HRD parameters, the VPS further including, for each respective HRD parameters syntax structure in the VPS, syntax elements indicating a respective set of layer identifiers for the respective HRD parameters syntax structure, and the SPS comprising a HRD parameters syntax structure comprising a set of HRD parameters; means for selecting a set of HRD parameters applicable to a particular operation point, wherein the set of HRD parameters in the HRD parameters syntax structure in the SPS is applicable to the particular operation point based on a layer identifier set of the particular operation point being identical to a set of all layer identifiers present in a bitstream that is under test for a bitstream conformance test, and the set of HRD parameters in a particular HRD parameter syntax structure of the plurality of HRD parameters syntax structures in the VPS is applicable to the particular operation point based on the layer identifier set of the particular operation point being specified by the syntax elements indicating the layer identifiers for the particular HRD parameters syntax structure in the VPS; and means for performing an HRD operation using the selected set of HRD parameters.

16. The video processing device of claim 15, further comprising: means for determining a target temporal identifier of the particular operation point that is equal to a greatest temporal identifier present in the bitstream.

17. A non-transitory computer-readable data storage medium having instructions stored thereon that, when executed by one or more processors of a video processing device, configure the video processing device to: receive a video parameter set (VPS) and a sequence parameter set (SPS), the VPS comprising a plurality of Hypothetical Reference Decoder (HRD) parameters syntax structures comprising respective sets of HRD parameters, the VPS further including, for each respective HRD parameters syntax structure in the VPS, syntax elements indicating a respective set of layer identifiers for the respective HRD parameters syntax structure, and the SPS comprising a HRD parameters syntax structure comprising a set of HRD parameters; select a set of HRD parameters applicable to a particular operation point, wherein the set of HRD parameters in the HRD parameters syntax structure in the SPS is applicable to the particular operation point based on a layer identifier set of the particular operation point being identical to a set of all layer identifiers present in the bitstream that is under test for a bitstream conformance test, and the set of HRD parameters in a particular HRD parameter syntax structure of the plurality of HRD parameters syntax structures in the VPS is applicable to the particular operation point based on the layer identifier set of the particular operation point being specified by the syntax elements indicating the layer identifiers for the particular HRD parameters syntax structure in the VPS; and perform an HRD operation using the selected set of HRD parameters.

18. The non-transitory computer-readable data storage medium of claim 17, wherein the instructions configure the video processing device to: determine a target temporal identifier of the particular operation point that is equal to a greatest temporal identifier

present in the bitstream.

19. The method of claim 1, wherein the HRD operation determines conformance of the bitstream to a video coding standard or determines conformance of a video decoder to the video coding standard.