RTP Payload Format for MVC Video – draft-wang-avt-rtp-mvc-01

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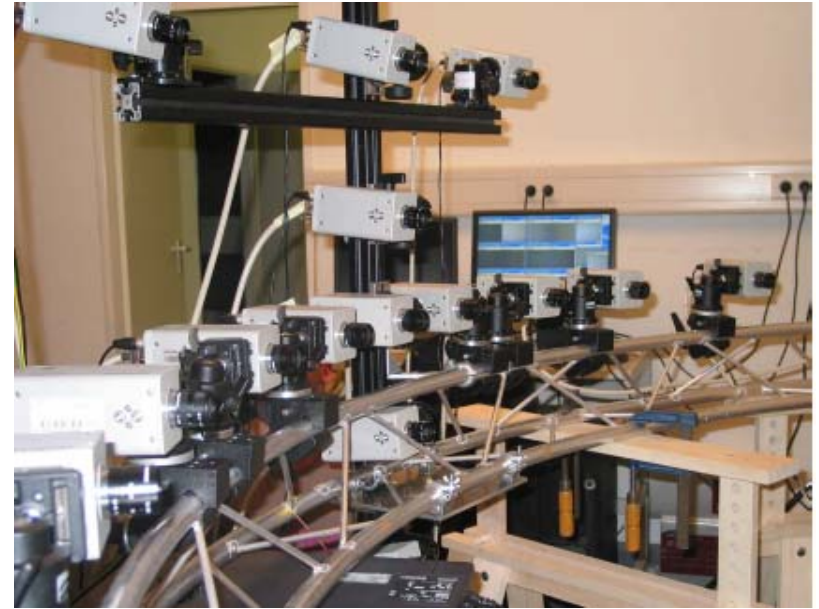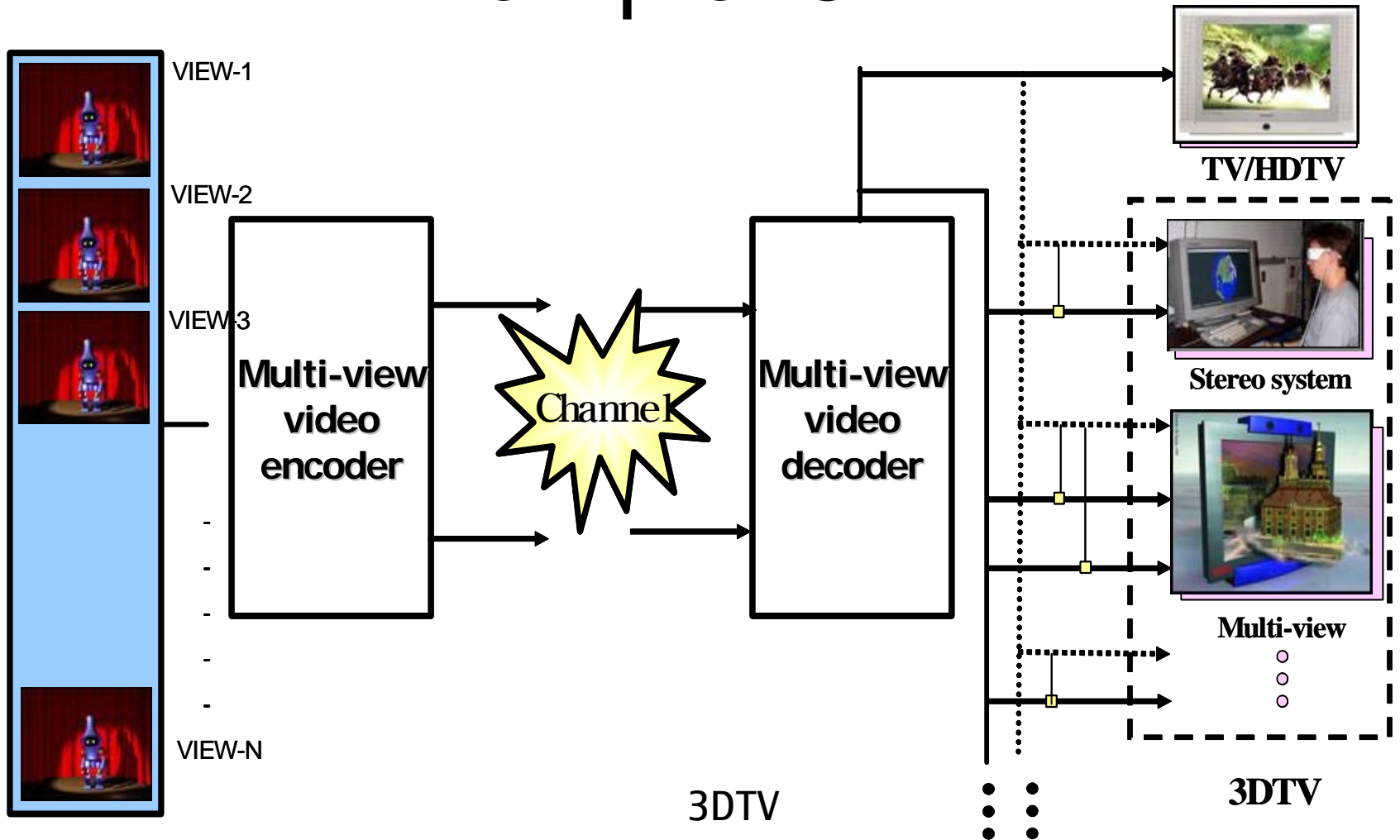
11 March 2008, Philadelphia

Outline

- MVC introduction
- Summary of the draft
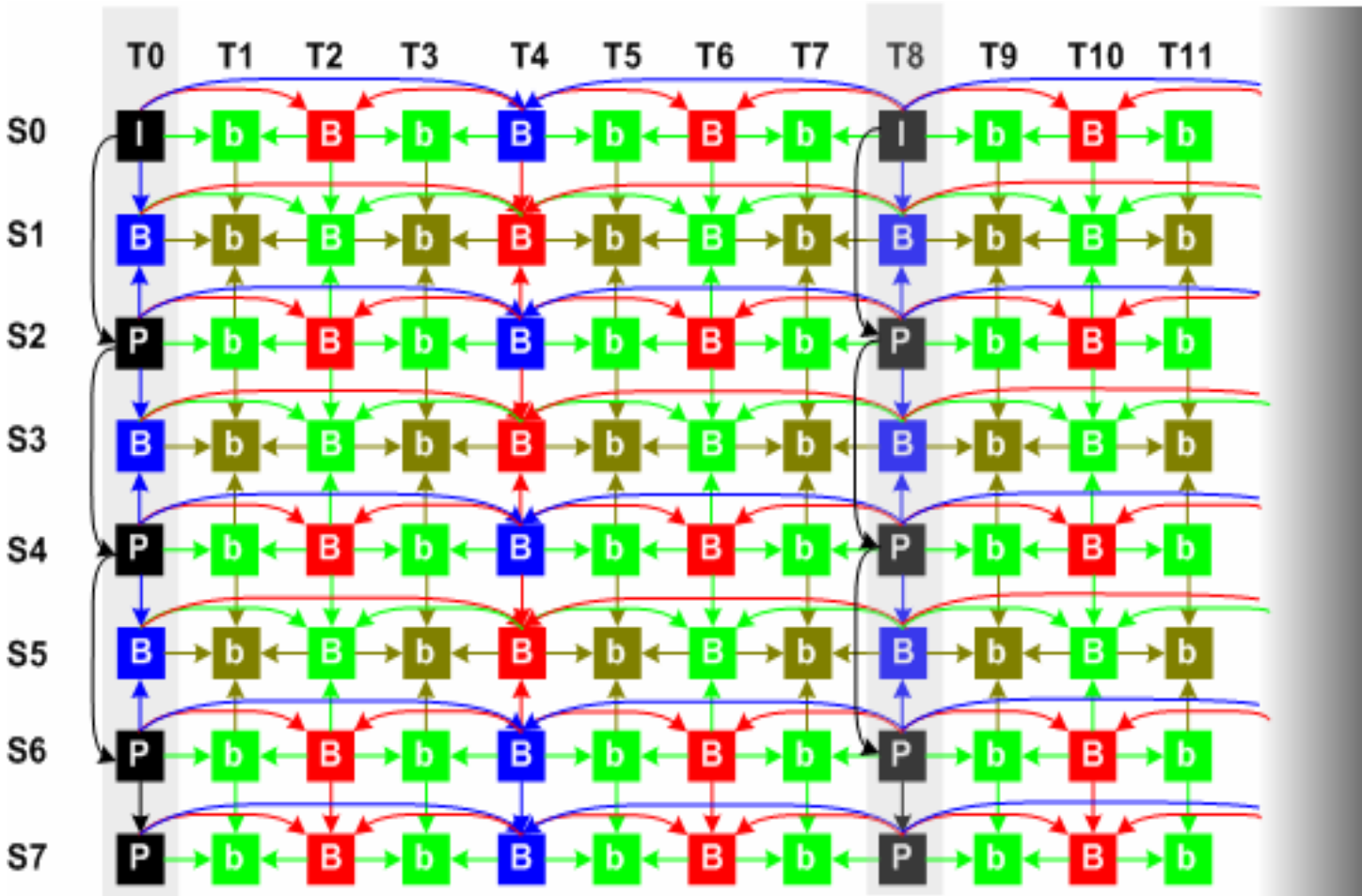- Changes to -00
- Question to WG

Multiview video coding

- Coding video sequences captured by multiple cameras from the same scene

Example: 3DTV

A typical MVC coding structure

MVC v.s. SVC

MVC is similar to SVC in many places

- Another extension to H.264/AVC
  - Inherited NAL unit based bitstream structure
    - But the NAL unit header structure is different
  - Inherited the parameter set concept
  - Base view must be H.264/AVC compatible
  - Each view itself may be temporally scalable
- Inter-view prediction is used to improve coding efficiency, similar to SVC inter-layer prediction

Status of MVC Standardization

- Latest Joint Draft (JD) in JVT-Z209, and Joint Multiview Video Model (JMVM) in JVT-Z207, both (will soon be) publicly available from http://ftp3.itu.ch/av-arch/jvt-site/2008_01_Antalya/

- According to the current schedule, the standard will be ratified in 2008
  - Desirable to have a payload format available shortly thereafter

Summary of the draft

- Due to the similarity between MVC and SVC, the MVC RTP draft is also similar to the SVC RTP draft
  - Packetization rules re-used
  - PASCI NAL unit (table of contents of aggregation packet) re-used with changed
  - Session multiplexing process to be re-used
- A new media type is defined
- It seems that the MVC draft does not require new packet formats or other non-signaling mechanisms
- There are open issues in the SVC draft, especially regarding session multiplexing. These issues will be addressed in the same way as for SVC.

Changes to -00

- Aligned to the latest MVC coding draft in JVT-Z209 and the latest SVC payload draft

Question to WG

- Take this work as an WG item?