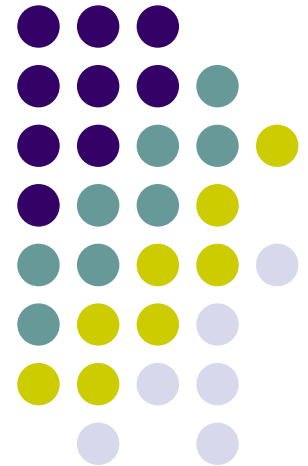
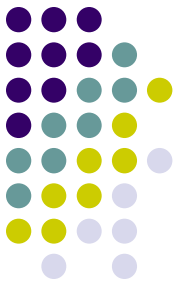


Introduction of Round-Robin Test



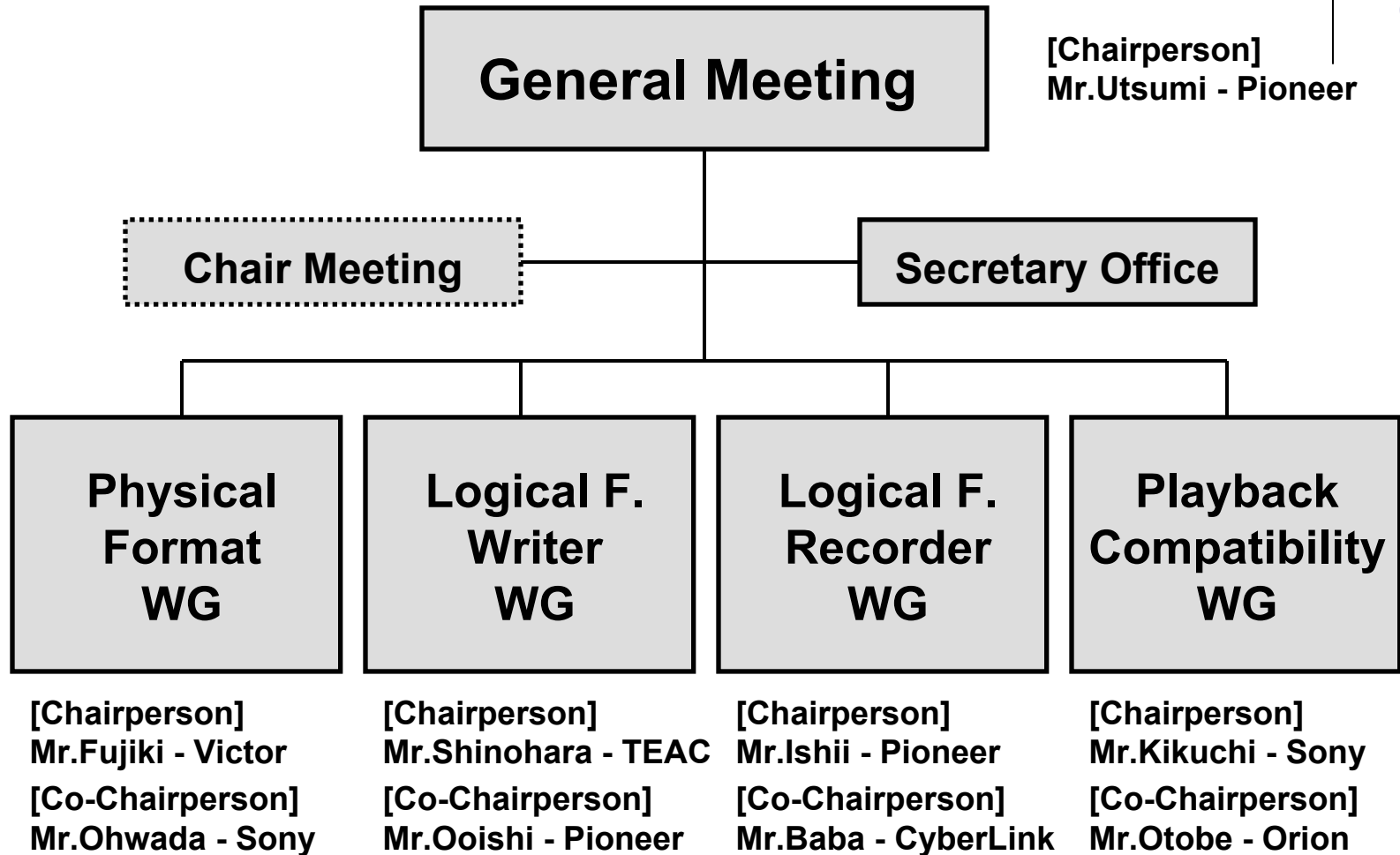
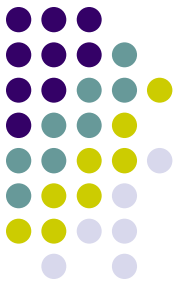
Purpose of RRT

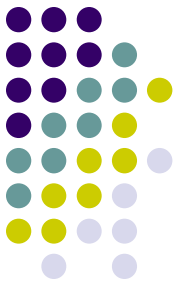


- The purpose of the Round-Robin Tests is to enhance the recording/playback compatibility of DVD-R/RW related devices and systems in order to maintain their stability and quality the market

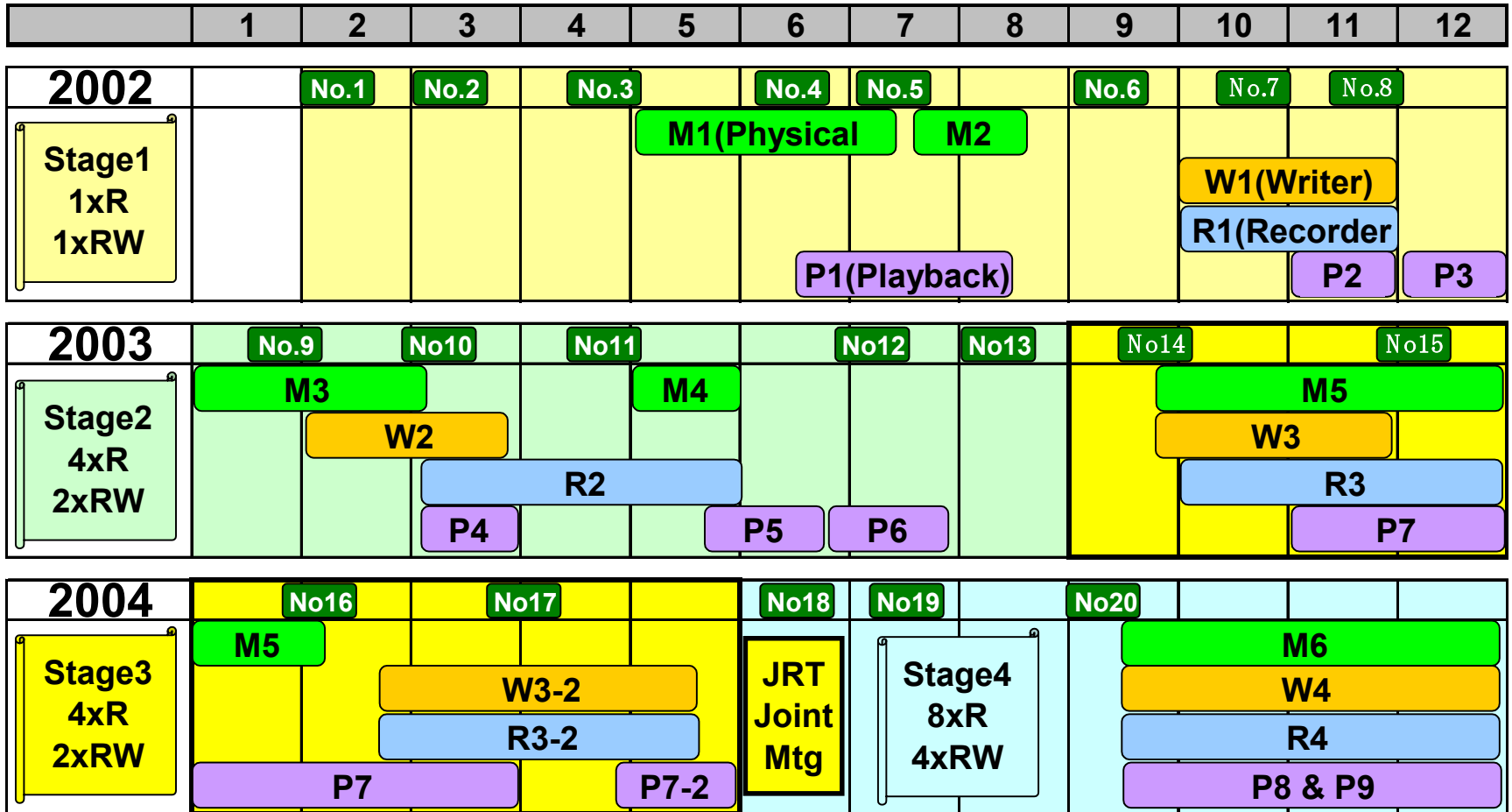


Organization of RRT





History of RRT

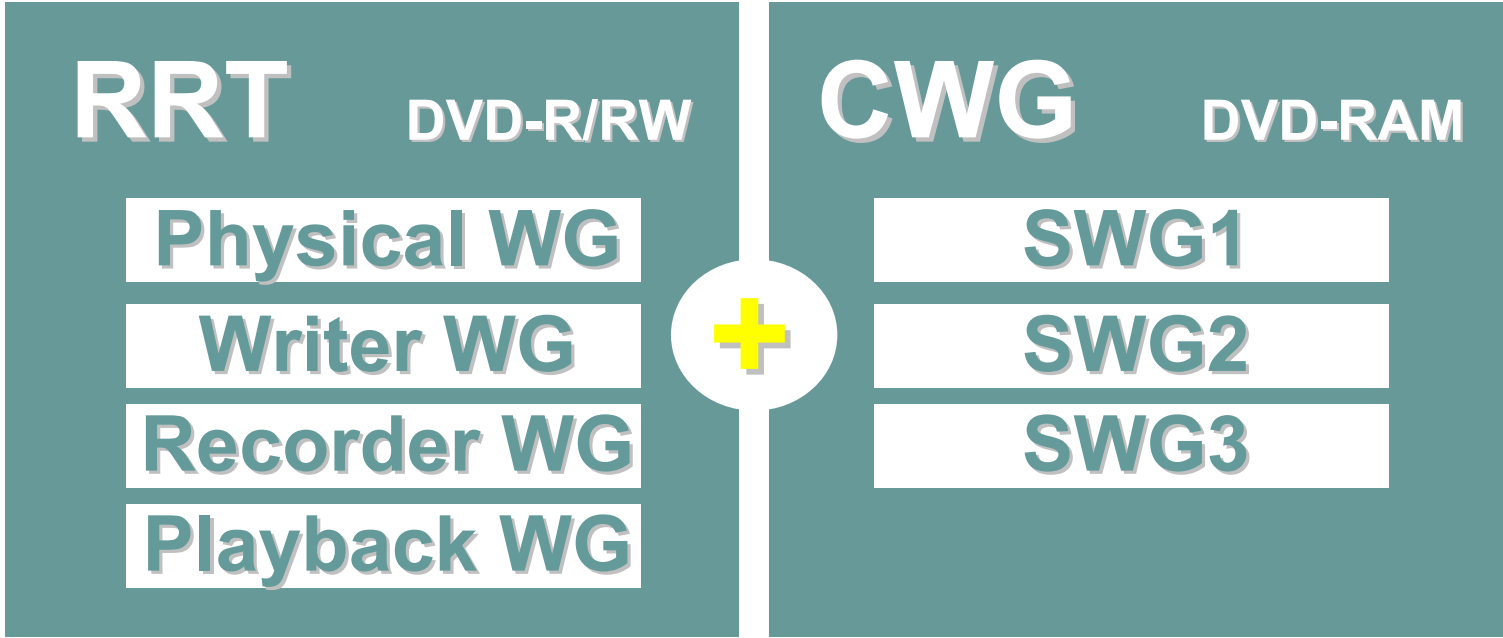




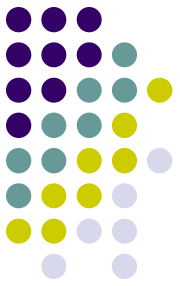
Organization of JRT - Joint Round-robin Test

RWPPI

RDVDC

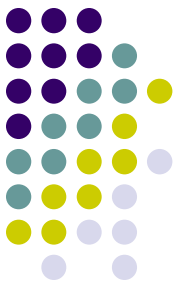


JRT Joint Meeting

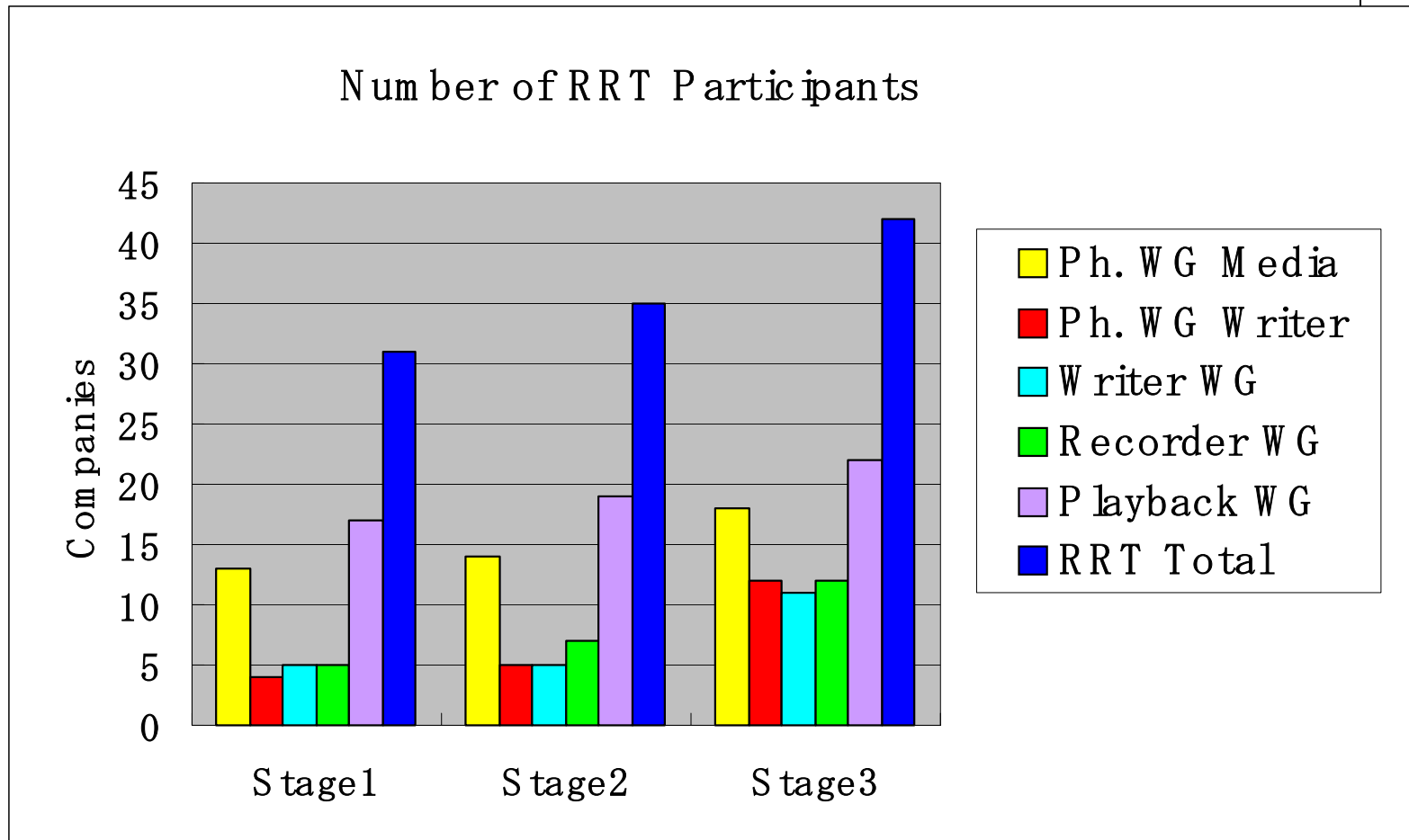


- The world's largest joint compatibility test in the recordable DVD industry confirmed compatibility among 133 products of 52 participating companies
- These tests were for recordable DVD products , including 4x DVD-R, 2x DVD-RW, and/or 3x DVD-RAM. The test results were reported to their test participating members in a joint meeting on June 16, 2004





Progress of RRT

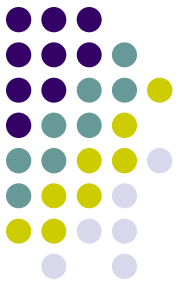




Background of Stage3

- CWG/RDVDC and RRT/RWPPI started Joint Round-Robin Test (JRT) September '03
- The JRT allowed most of the worldwide manufacturers of DVD-R/RW devices and systems to work together in Stage 3
- Participants' worldwide market representation:
 - DVD-R/RW Disc: about 76%
 - DVD-R/RW Writer: about 92%
 - DVD-R/RW Recorder: about 89%

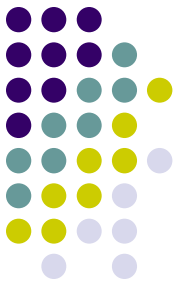
Purpose of Stage3



- To check and improve the actual compatibility of our products/pre-production products related to 4x speed DVD-R and 2x speed DVD-RW through the test of physical and logical based items



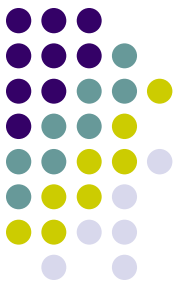
Results of WG Activity



- Physical Format WG – Test M5
 - Histograms of jitter and PI error are regarded as a very useful method of overall quality monitoring.
 - More than **95%** of above items regarding both DVD-R and RW has achieved the passing level of physical properties.
 - The results of devices containing pre-production samples were regarded as sufficiently good.



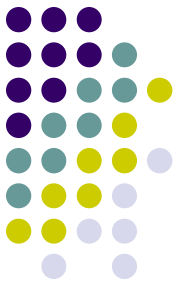
Results of WG Activity



- Logical Format Writer WG – Test W3
 - Most of the major functions – append, border-close, finalize, quick/full-format, and overwrite – were evaluated by four kinds of tests as Test W3.
 - Almost **100%** of the test items has reached the successful levels through Test W3-1 and W3-2.
 - Although the number of combinations increased greatly, the results were very excellent compared with previous tests as Test W1 and W2.



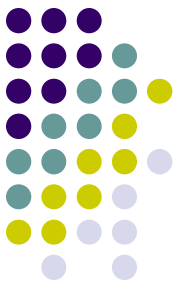
Results of WG Activity



- Logical Format Recorder WG – Test R3
 - Most of the major functions of both Video format and VR format – playback, random access, append, overwrite and edit – were evaluated by two kinds tests as Test R3.
 - **100%** of test items reached successful levels through Test R3-1 and R3-2, including not only finalized mode, but also intermediate mode among recorders and authoring software.



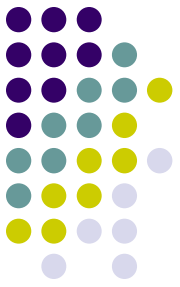
Results of WG Activity



- Playback Compatibility WG – Test P7
 - The discs made by Logical Format Recorder WG as Test R3 were offered for Test P7, and evaluated major playback functions such as normal play, random access, playlist playback, etc.
 - 23 companies, 19 hardware companies, and 4 PC software companies joined Test P7 as evaluators, and approximately **98%** of test items reached the successful levels of Test P7.

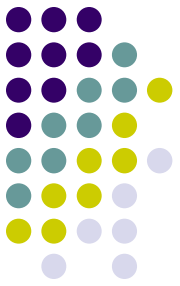


Summary of Stage3



- We have finally achieved the very high ratio of successful applicants of each WG through the 9 months-activity of Stage3 Round Robin Test
- Some useful evaluation methods and means for common understanding were introduced
- JRT with CWG/RDVDC was recognized as very beneficial to improving and maintaining compatibility among worldwide DVD-R/RW devices and systems

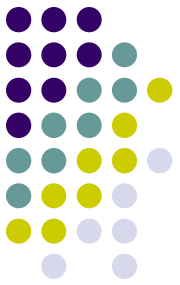




Benefits of RRT

- **Manufacturer**
 - Highest and Widest Compatibility
 - Cost Saving for Compatibility Test
 - View own products Objectively
 - Latest Technical Information
 - Communication with other engineers
- **Consumer**
 - Increasing Consumer Confidence





Thank you!

RWPPI Round-Robin Test

