1. **Homework Status/Voting Members**
   - Allied Vision – GenTL Validation Framework, SFNC proposal
   - Automation Technology – SFNC 3D proposal
   - Basler – GenApi 2.4, GenApi 3.0
   - Baumer – SFNC proposals, GenApi 3.0
   - JAI – Meeting host, C-structs for GenCP
   - MathWorks – GenApi 2.4, GenApi 3.0
   - MATRIX VISION – GenApi 2.4, GenApi 3.0, GenTL
   - Matrox Imaging – SFNC 2.1, SFNC proposals
   - MVTec – Administration, GenApi 2.4, GenApi 3.0, GenTL
   - National Instruments – GenApi 3.0
   - Pleora – SFNC proposals, GenApi 3.0
   - Point Grey – SFNC proposals
   - SICK – 3D proposal
   - STEMMER IMAGING – GenCP 1.1, GenTL 1.4, GenApi 3.0
   - Teledyne DALSA – SFNC proposals, GenApi 3.0
   - Toshiba TELI – GenApi 3.0

2. **GenICam v2.4 (Fritz Dierks, Basler)**
   - Voted and released on 2014-02-11
   - Includes the following module versions:
     - GenApi v2.4
     - SFNC v2.1
     - GenTL v1.4
     - GenTL SFNC v1.0
     - GenCP v1.0
     - CLProtocol v1.1
   - Thanks to GenApi platform maintainers:
     - Hartmut Nebelung, Basler (Windows)
     - Thomas Hopfner, MVTec (Linux)
     - Shankar Subramanian, MathWorks (Mac OS X)
     - Stefan Battmer, MATRIX VISION (Linux/ARM)
   - New bug reported by Teledyne DALSA regarding verifying children links

3. **GenApi v3.0 – Status & Roadmap (Fritz Dierks, Basler)**
   - Key objectives: Make it smaller, faster, and ready for deep embedded use
   - Large progress made since last meeting by the following contributors:
     - Eric Bourbonnais (Teledyne DALSA)
     - Sascha Dorenbeck (STEMMER IMAGING)
     - Francois Gobeil (Pleora)
     - Ryan Robe (National Instruments)
- Tom Hopfner (MVTec)
- Stefan Battmer (MATRIX VISION)
- Silvio Voitzsch (Baumer)
- Thies Möller, Fritz Dierks (Basler)
- Kazunari Kudo (Toshiba Teli)

- Performance Results (on Lenovo T430)
  - Cache file size has shrunk to 20%
  - Code size has shrunk to 20-45%
  - Peak private memory has shrunk to 25%
  - 1st loading time has shrunk to 12%
  - Cache loading time has shrunk to 20%

- Review homework packages
  - XMLLoader – Teledyne DALSA
  - NodemapXXX – STEMMER IMAGING
  - Build System – National Instruments
  - GenApiTest – MATRIX VISION / Baumer
  - Performance – Pleora
  - Maintaining – Basler
  - Mac OS Issues – Toshiba Teli, MathWorks
    - Generate Xcode project via cmake (Kazunari Kudo, Toshiba Teli)
    - 2 GenApi versions for Mac OS X (g++ 4.2 and clang 5.0)

- Open topics / New homework packages
  - VC++ Compiler Versions
  - Private Installations
  - Improving Run-Time Performance
  - Cleaning Up
  - Testing
  - Deep Embedded
  - Infrastructure

- Roadmap
  - Pre-release candidate until e/o June
  - Everybody please test, test, test in July & August
  - Provide RC in September 2014 right for the next technical meeting

4. **GenTL (Rupert Stelz, STEMMER IMAGING)**
   - GenTL v1.4 has been released in December 2013
   - Growing number of released implementations
   - Open issues for v1.5/v2.0
     - 3D buffer proposal from Jan
     - Support static/dynamic number of streams
     - Better grabber support
     - Self-describing buffers
   - Improvements to TLSimu
   - Validation framework (Holger Eddelbüttel & Stefan von der Weihe, Allied Vision)
     - Updated version available
     - Several solved and improved issues
• Boost library will not be removed (for future multithreading tests)
• Next steps
  ➢ Contribute to GenTL v1.5 to strengthen the GenTL standard in order to enable the development of a real compliance test framework
  ➢ Port validation framework to Linux (#1226)

5. GenTL Certification (Christoph Zierl, MVTec)
   • Based mainly on self-certification
   • GenTL Producers must prove compliancy with official Validation Framework
   • Prove interoperability with 3 compliant “counterparts” from different manufacturers
   • Make plugfest attendance mandatory? Probably not.
   • Open issue: How to manage/minimize the paperworks
• Logo usage:
  ➢ All products providing a compliant GenTL Producer or Consumer are allowed to use the (redesigned?) GenICam GenTL logo
  ➢ Public list of compliant GenTL Producers/Consumers
• Impact on Validation Framework:
  ➢ Introduce more functional use cases to ensure not only syntactical compliancy, but in particular functional compliancy
  ➢ For this, add more mandatory requirements to next GenTL version to enable developing functional use cases
  ➢ Improve output of validation framework to support test protocol
• Next steps
  ➢ List all current use cases in „human-readable“ form in Wiki
  ➢ Extend validation framework by more (functional!) use cases
  ➢ Develop formal proposal for certification procedures
  ➢ Contribute to GenTL v1.5 for necessary enhancements

6. GenCP (Rupert Stelz, STEMMER IMAGING)
   • New issues for v1.1
     ➢ Make heartbeat mandatory on serial links
     ➢ Custom commands
   • Roadmap
     ➢ Prepare RC for next meeting
   • Work package
     ➢ Provide a simulator

7. GenTL SFNC (Christoph Zierl, MVTec)
   • Open issues for v1.1
     ➢ Adaption to changes in GenTL v1.4
     ➢ Timeouts for Interface-/DeviceUpdateList
     ➢ New features for better GEV IP-Assignment
     ➢ Version info of implemented TL standards
     ➢ Additional buffer handling mode “NewestOnly”
     ➢ Create proposal for GenTL module events
8. 3D (Mattias Johannesson, SICK & Thomas Hopfner, MVTec)
   - Introduction
   - 3D PFNC proposal (Thomas Hopfner, MVTec)
     - Generic formats with A/B/C components
     - C is always the depth/range component
     - 3D coordinate pixel formats with prefix “Coord3D_”
     - Full 3D data (Coord3D_ABC) vs. 2.5D data (Coord3D_C)
     - Confidence pixel formats with mask, e.g., Confidence1p, Confidence8, Confidence32f
     - Support of floating pixel based on IEC 60559:1989 (IEEE 754)
     - Avoid NaN in floating point data due to performance reasons
     - 2-component pixels, e.g., Coord3D_AC16 for line scan devices
     - Final proposal version already integrated in PFNC 2.0 Draft A
   - GenTL Multipart proposal (Thomas Hopfner, MVTec)
     - Covers several use cases like multiple ROIs, not only 3D
     - New payload type PAYLOAD_TYPE_MULTI_PART and buffer info commands
     - Proposal ready to be integrated into GenTL and GenTL SFNC
   - 3D SFNC proposal (Mattias Johannesson, SICK)
     - Image Format Control: RegionMode[RegionSelector]
     - New root node Scan3dControl
     - Extended chunks using ChunkPartSelector

9. Marketing & Operations (Christoph Zierl, MVTec)
   - Membership issues
     - Get rid of unused Trac accounts
       - Delete new accounts which never logged in within 4 weeks
       - Delete old accounts which never logged in Trac yet (work in progress)
     - Sync member list with Trac accounts and mailing list (work in progress)
   - Marketing issues since last meeting
     - Press release regarding GenICam v2.4 release
     - Contribution to FSF brochure about MV standards
     - Demo setups at SPS/ipc/Drives in Nürnberg and iTE in Yokohama
   - Open issues
     - Extent content at www.genicam.org
     - Activities for Stuttgart VISION show in November
       - 3D demo?
       - How to demonstrate GenApi v3.0, e.g., on an embedded system?
       - Presentation at Industrial Vision Forum
     - Possible press releases
       - San Jose meeting
       - GenICam and 3D in general
       - GenApi v3.0
• Miscellaneous
  ▪ Update Trac/SVN version at genicam.mvtec.com

• Roadmap
  ▪ Release GenICam v3.0 until e/o 2014
  ▪ GenICam 3.0 might include
    ➢ GenApi v3.0
    ➢ SFNC v2.2 (including 3D)
    ➢ GenTL v1.5 (incl. Multi-part proposal)
    ➢ GenTL SFNC v1.1 (incl. 3D contribution)
    ➢ GenCP v1.1
    ➢ CLProtocol v1.1

• Update GenICam license text
  ▪ Update old license document v1.1 to current status quo
  ▪ Draft version v1.5 already available
    ➢ Renamed to “GenICam License, Rules, and Application Form”
    ➢ No fundamental change, i.e., no re-signing will be necessary
  ▪ Important: The updated license v1.5 is still not a “lawyer-proofed” license!
  ▪ ToDo: Send draft version to mailing list for further review, then start ballot

10. SFNC (Stephane Maurice, Matrox Imaging)
• SFNC v2.1 has been released in January 2014
• PFNC
  ▪ PFNC now included as a member of the SFNC module and already available at www.genicam.org
  ▪ New Pixel Format request form could be available on EMVA web site
  ▪ Separate appendix C from PFNC
• Encoder proposal (Mattias Johannesson, SICK)
  ▪ New features with EncoderSelector in CounterAndTimerControl category
  ▪ Scheduled to be included in next SFNC release
• Binning/Decimation/Scaling proposal (Damian Nesbitt, Point Grey)
  ▪ Ready to be included in next SFNC release
• Shutter mode proposal (Damian Nesbitt, Point Grey)
  ▪ New SensorShutterMode feature with values “Global”, “Rolling”, “GlobalReset”
  ▪ Scheduled to be included in next SFNC release
• U3V TL specific features
  ▪ New TestControl category (invisible)
  ▪ New TestEventGenerate feature
• Color exposure time proposal (Eric Bourbonnais, Teledyne DALSA)
  ▪ New features ExposureTimeMode, ExposureTimeSelector
  ▪ Follow-up ticket for multi-slope exposure
• Trigger over the link proposal (Stephane Maurice, Matrox Imaging)
  ▪ Ready to be included in next SFNC release
• New tap geometries (Stefan Battmer, MATRIX VISION)
  ▪ Scheduled to be included in next SFNC release
• To be reviewed by Euresys
• Clarification for naming scheme for individual sequencer features with selector
• PFNC proposal for bi-color pixels (Eric Bourbonnais, Teledyne DALSA)
• Roadmap
  • Next release will be SFNC v2.2 including 3D features, Encoder features, new tap geometries, Test category, TriggerLink features, new ShutterMode feature, new Binning/Decimation features
  • FirmwareUpdate proposal deferred to future release
  • Target date before next meeting

11. Homework session
• Homework list/items
• Next meeting: September/October 2014, hosted by JIIA in Tokyo