Disagreements in Technical Work

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Disagreement – What is it?

Differing technical decision at :
- Analysis, [Comparison], or Evaluation or Digital Image Rejection
- Internal to the Unit

Technical disagreement in casework following:
- Quality check (verification)
- Review (Technical, Supervisor or digital image(s))

Does not apply to consultations
- A consultation is a significant interaction between examiners regarding one or more prints in question.
- An interaction is considered significant when the consultant examiner conducts an analysis or comparison of the print(s). It includes, at a minimum, an analysis of the print(s), and may also include a comparison and evaluation.

FBI Laboratory Conflict Resolution Policy

Conflict elevates through the management chain
◦ Scientific Review Board.

The process stops when either both examiners agree or Laboratory Director decides on a final decision.

Participants are prohibited from discussing the disagreement with anyone else outside the process

Policy has proceeded to the Laboratory Director twice.
◦ Both instances by the Latent Print Units
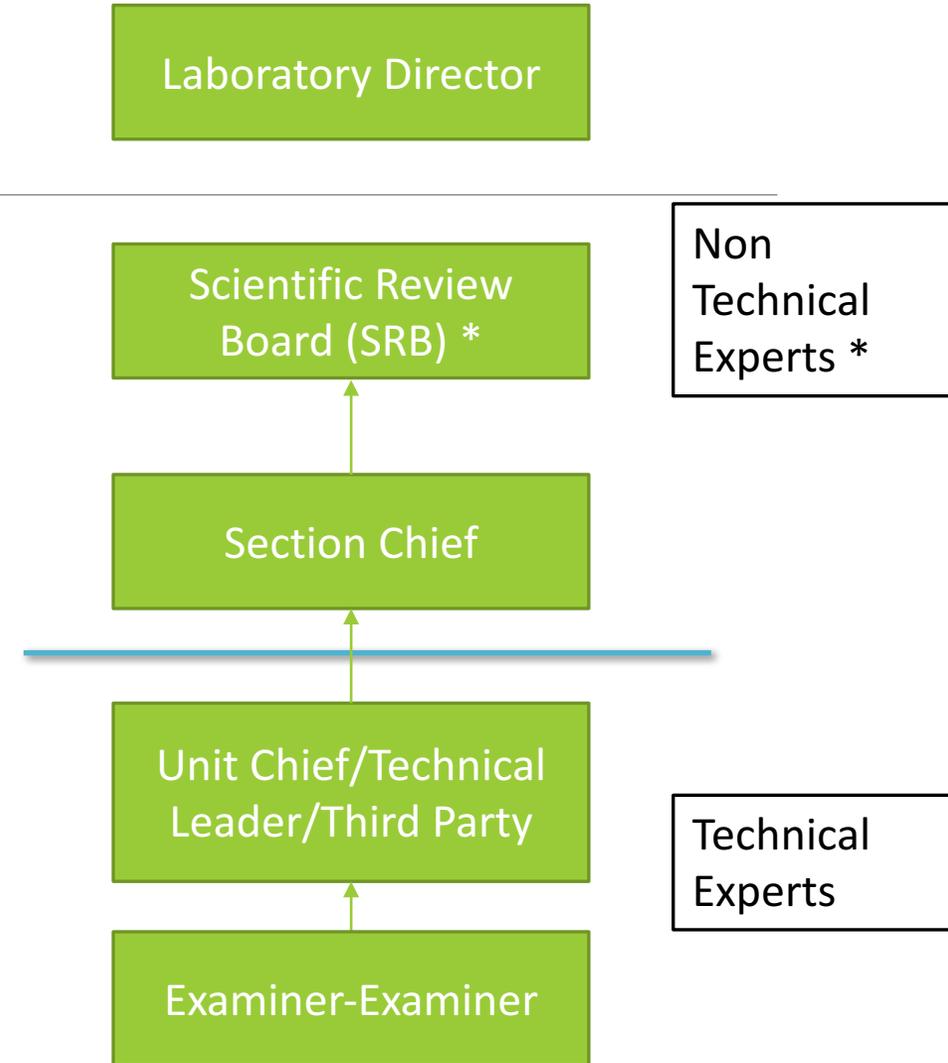
Laboratory Director

Scientific Review Board (SRB) *

Non Technical Experts *

Section Chief

Unit Chief/Technical Leader/Third Party

Technical Experts

Examiner-Examiner

Why was the policy not effective?

The process was adversarial, pitting two examiner's opinions against each other, when the core research (and lack of ground truth) cannot support the selection of one opinion over the other.

- Black Box/White Box studies demonstrated that latent print examiners will not always agree in their conclusion
- Many conflicts occur when conclusions are less definitive, such as *of value* and *inconclusive,* as well as with "borderline" prints
- Possible commitment bias
- No technical or discussion assistance at early stages with limited options at later stages

Developing a better system

Researching options
- Working group
- Discussion with United Kingdom Metropolitan Police [2010] agency concerning consensus process
- 2015 NIST International Symposium on Forensic Science Error Management
  - Wong, et al. The Potential of Blind Collaborative Justice, 2015
   - Expert consensus feedback lead to performance improvement

Different options
- One-on-one [Shown to not be effective in all situations]
- Decision made by senior personnel (supervisor) [Reduced to a single person's conclusion]
- Default conclusions (revert to most conservative) [Hides errors, trends to the conservative over time]
- Multiple conclusions reported [Confusing to contributor, makes legal nervous]
- Consensus Decision [resource intensive, bias effects in groups]

Disagreement Workflow
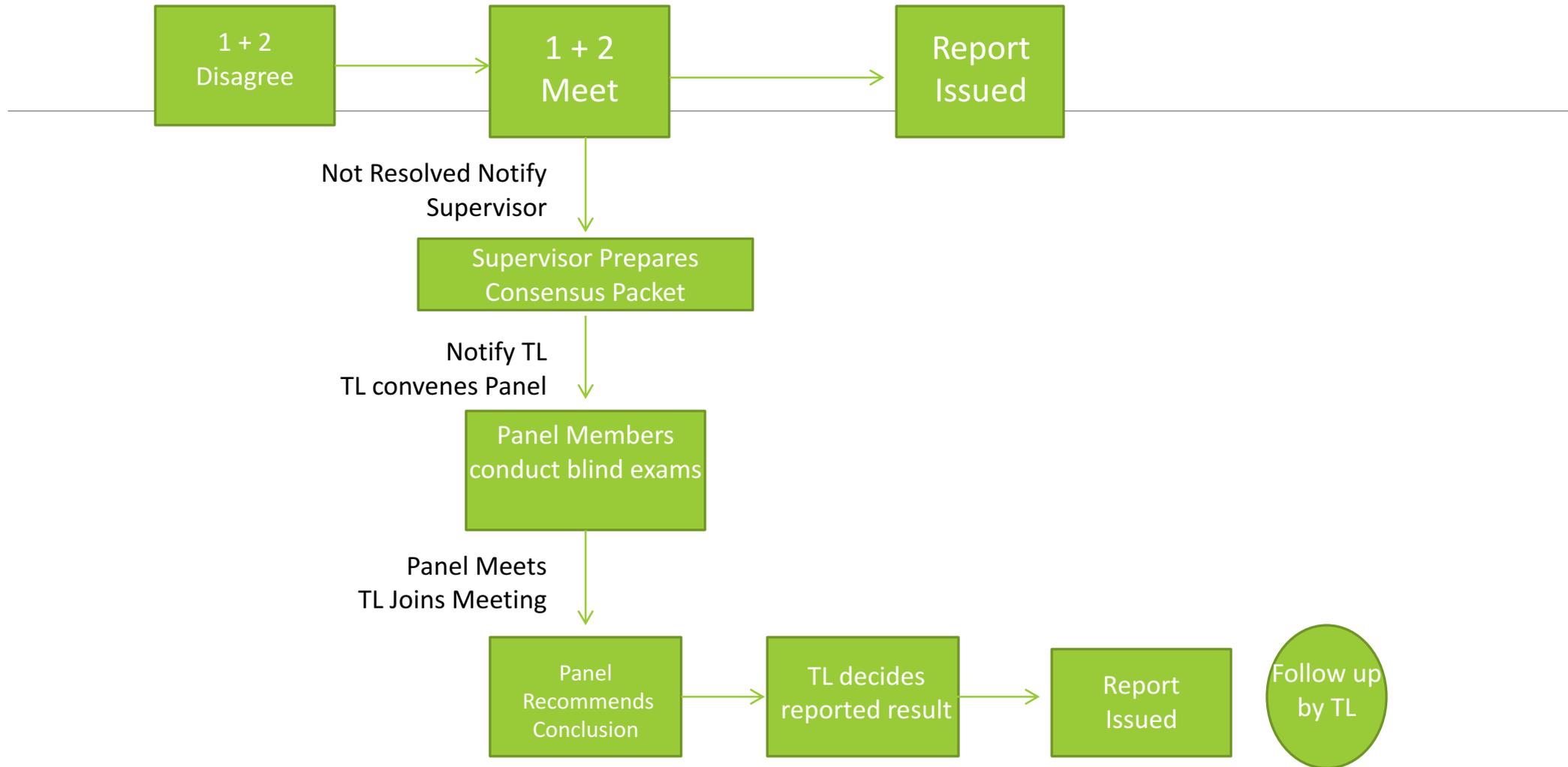
Disagreement Workflow
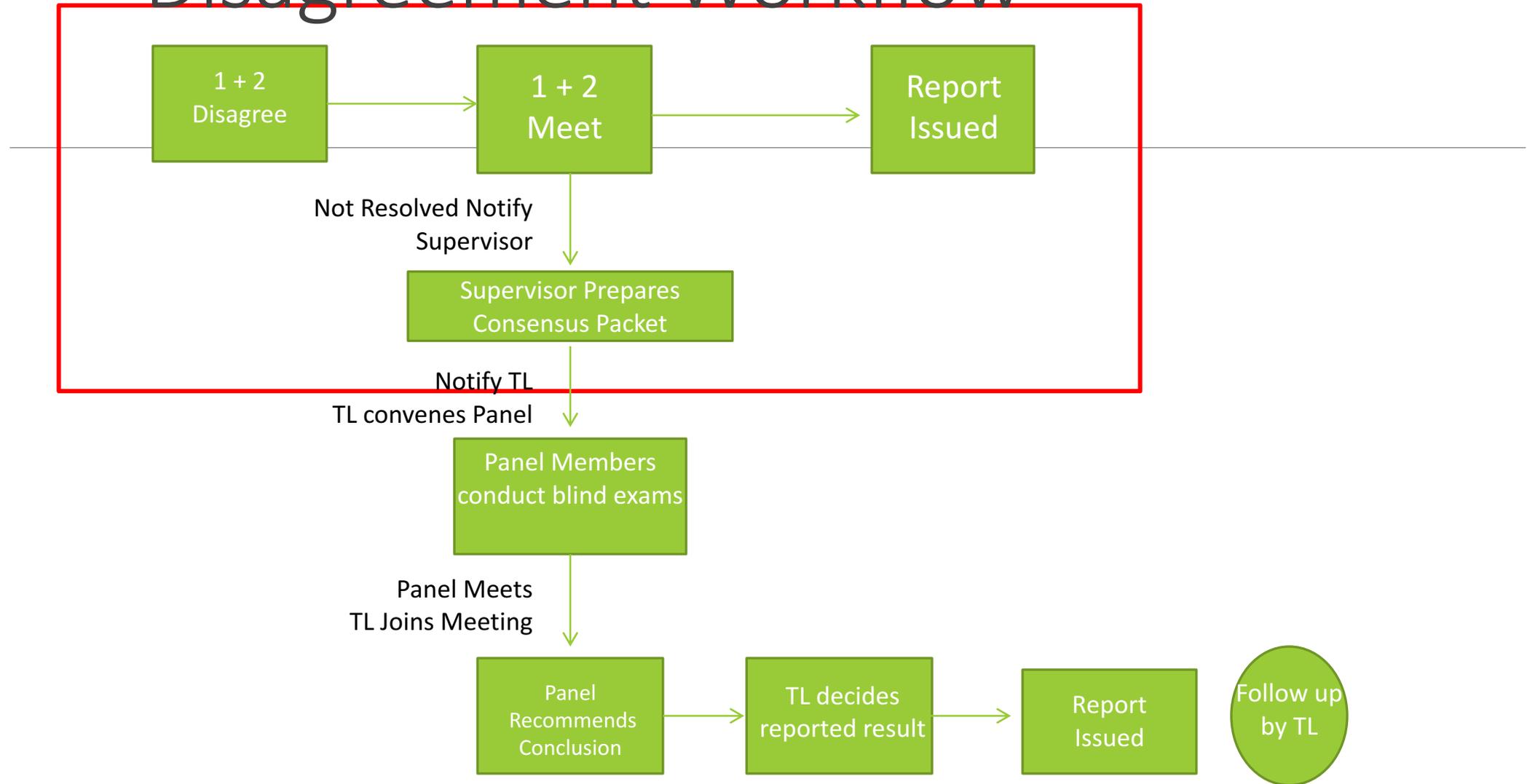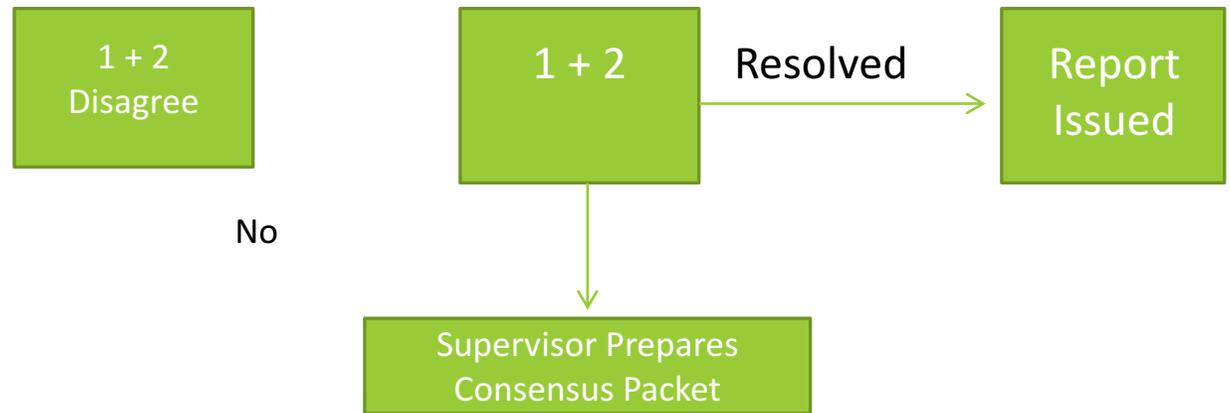
Examiner/Examiner

Examiners meet to reach a conclusion
- Keep all records
- Keep contained to individuals

Facilitator

Consensus Packet
- Consensus Panel Report
- Images of Latent prints/Known prints

1 + 2
Disagree

No

1 + 2 → Resolved → Report Issued

Supervisor Prepares Consensus Packet

Consensus Panel Report - Initiation

Latent Print Units
Consensus Panel Report

**Section A (Completed by Supervisor or Program Manager/Coordinator Requesting Consensus Panel)**

Date Supervisor / Program Manager / Coordinator notified of disagreement	5/3/2017
Supervisor Name	J. Smith
Lab Number/Case Record Number	2015-0005-123

Role	Name	Conclusion (if applicable)
First Party	T. Parse	Identification
Second Party	B. Jones	Exclusion
Additional Parties Involved in Conclusion/Discussion (i.e., Verifiers, Facilitators, Consulters)		
Consultation	H. West	Value

Item Number(s)	Item 6
Evidence/Surface Type	Paper
Process Type	Ninhydrin

Additional Case/Print Factors (e.g., Automated Search, Type of Case, Relevant Comparison Results in Case, Quality Checks, Consultations)

Disagreement Workflow
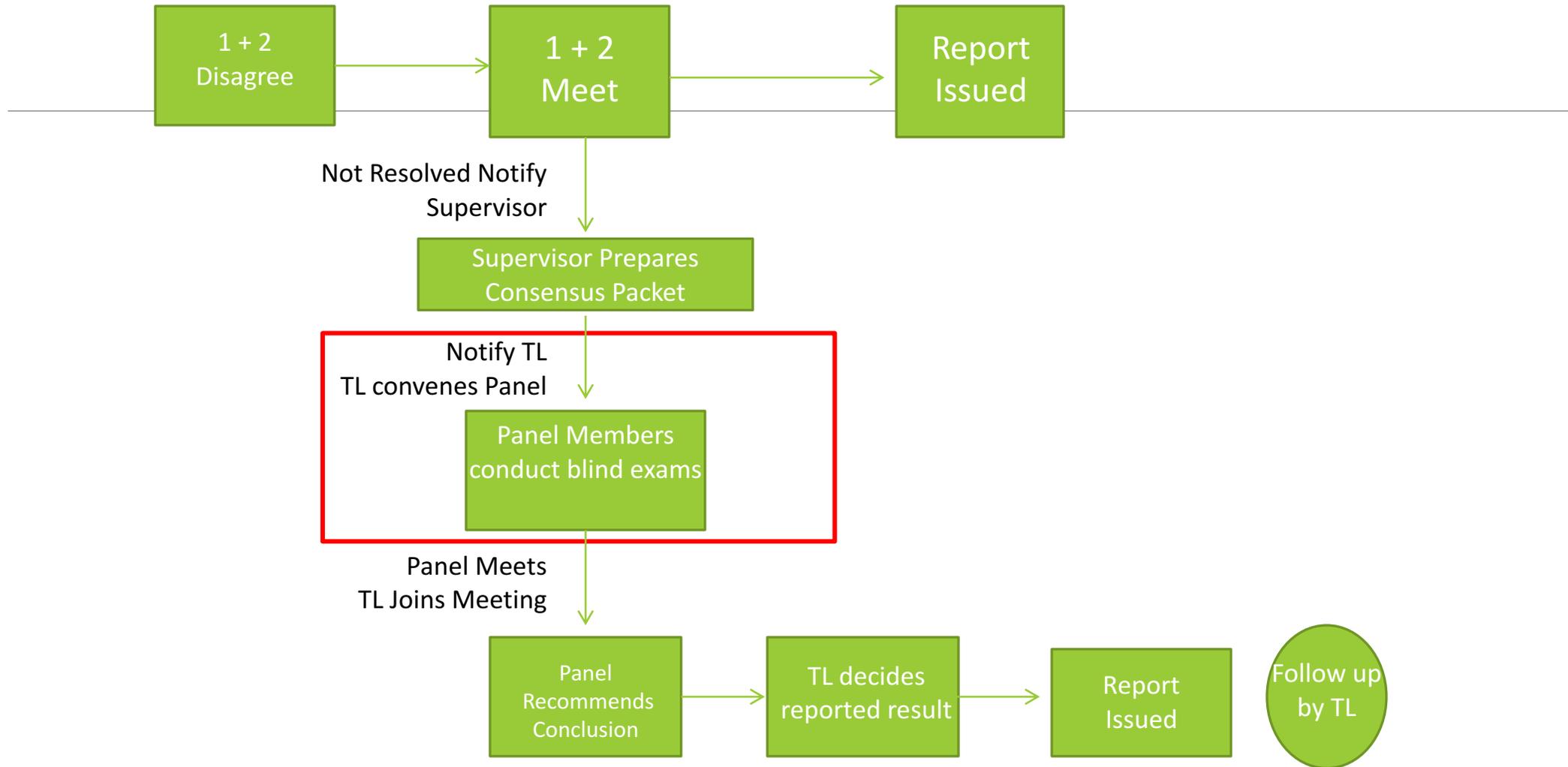
Consensus Panel – Selection and Preparation
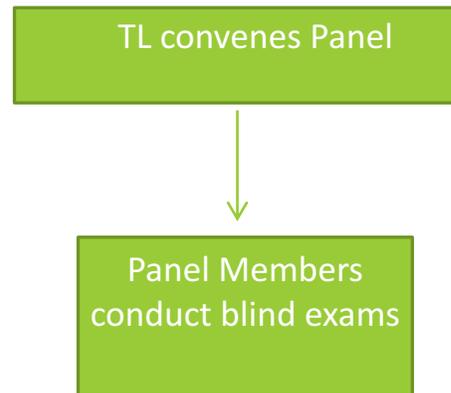
Technical Leader
- Oversees process
- Never officially compares questioned examinations

Panel Member Selection
- Three internal qualified examiners

Blind Analysis and Comparison
- Mark image of prints

Consensus Panel members directed to avoid Evaluation opinion

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TL convenes Panel
        |
        v
Panel Members
conduct blind exams
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Consensus Panel Report - Panel

(DRAFT)

Section B (Completed by Technical Leader)

Date of Request of Consensus Panel	5/8/2017
Technical Leader Name	J. Peer
Lab Number/Case Record Number	2015-0005-123

Consensus Panel Members Name	DATE	
	Receive Latent and Known	Notified of Meeting
H. Apple	5/10/2017	5/10/2017
F. Kellen	5/10/2017	5/10/2017
D. Jacobs	5/10/2017	5/10/2017

Date of Consensus Panel Meeting	5/12/2017
Time of Consensus Panel Meeting	9:30 am
Location of Consensus Panel Meeting	Room 7663

Information Provided to the Consensus Panel (as applicable)
Directed to look at finger number two – however known card with recordings of all fingers provided.

Disagreement Workflow

1 + 2 Disagree → 1 + 2 Meet → Report Issued

Not Resolved Notify Supervisor

Supervisor Prepares Consensus Packet

Notify TL
TL convenes Panel

Panel Members conduct blind exams

Panel Meets
TL Joins Meeting

Panel Recommends Conclusion → TL decides reported result → Report Issued → Follow up by TL

Consensus Panel - Meeting

Panel Members meet

TL Joins Meeting

Panel Recommends Conclusion
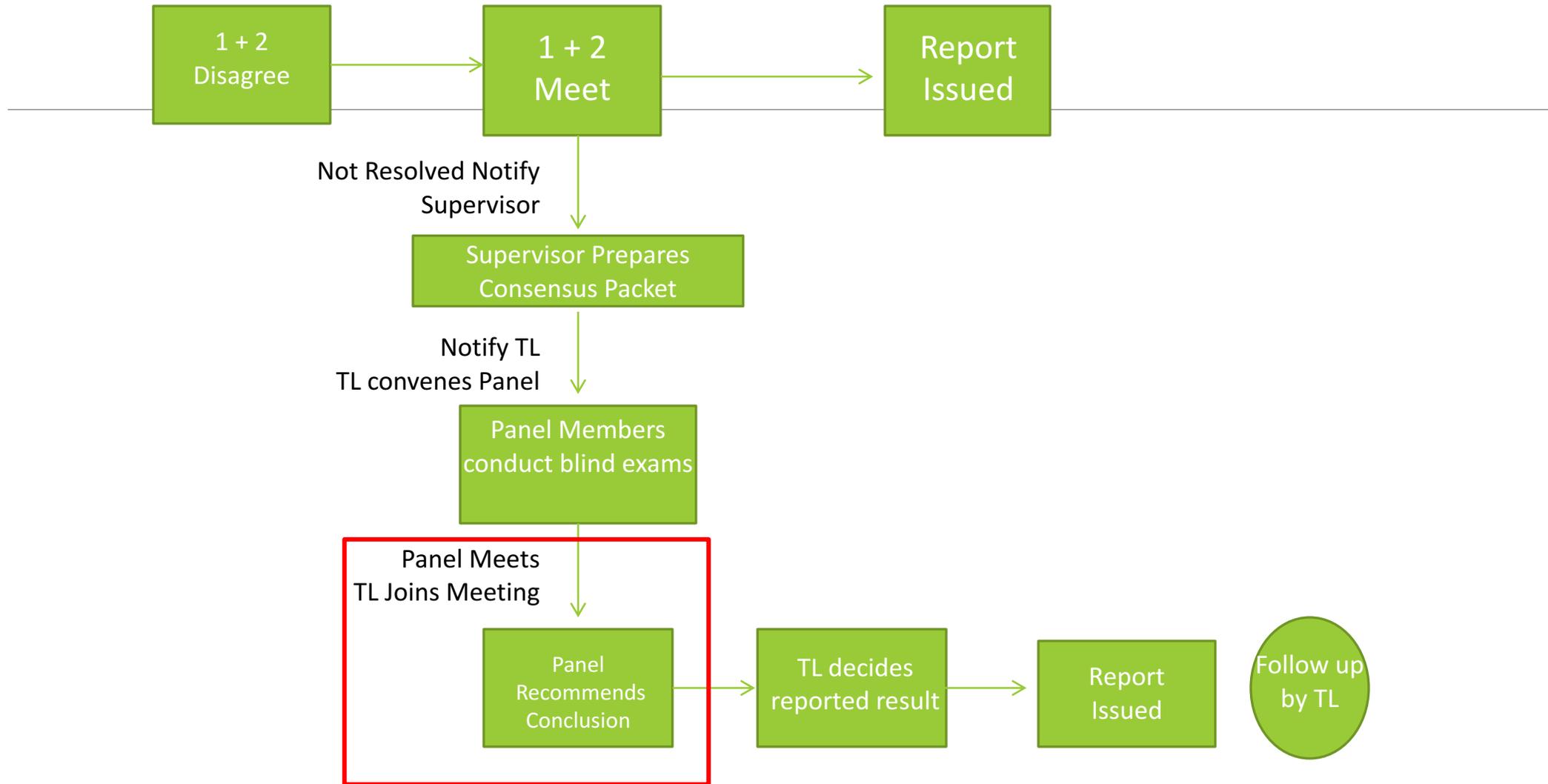
Meeting of Panel Members
- Use records from Blind Analysis/Comparison
- Record panel observations and conclusions
  - Must use Consensus Panel Report
  - Visual recordings allowed to supplement written record

Panel develops a recommendation(s)
- Unanimous not required
- More than one is permitted

Technical Leader joins meeting

Discussion with Technical Leader
- Panel outlines recommendations and support for all opinions
- Sequential unmasking by Technical Leader
- Final recommendation of panel recorded and signed

Consensus Panel Report – Meeting

PART 1 : ANALYSIS [Complete during discussion]

Latent print(s) [Comment where the panel members agree and where they disagree]

Describe the pattern type and/or ridge flow of the latent print(s). Include suspected orientation of the latent print(s).

All members agree the print is a fingerpri[nt] portion of the hand or foot. Pattern type i[s a] right slant loop (F.K. and D.J.). Core and the left had side and lower portion of fing[er] mark up for orientation of the fingerprint.

Describe any distortion appearing in the la[tent]

Signs of excess pressure are seen in the up[per] the core to the tip. Probable reverse color area of concern.

Describe any additional areas of concern i[n]

A small area above the tip appears to be a fingerprint. Towards the bottom right of appears sparse or there was limited develo[pment] with reduced contrast between ridges and

Does the Latent print(s) have sufficient de[tail]

Known Exemplar [Comment where the

Does the Known Exemplar have distortio[n] If YES, please describe below.

For fingers nine and ten of the provided e[xemplar] or clearly captured. Neither the plain nor the tip area.

PART 2 : COMPARISON [Complete during discussion]

Summarize features in agreement between the latent print(s) and the known exemplars.

Level 1 (pattern and ridge flow) features are in agreement between the latent fingerprint and the right index (#2) of the known exemplar. Six Level area were found in agreement between the latent an[d] characteristics of medium quality and one Level 2 c[haracteristic] the core were found in agreement between the laten[t] marked image]

Summarize any differences observed between th[e]

(1) A Level 2 feature in the area above the core (one ridge) to surrounding features in the lat[ent]
(2) A Level 2 feature seen in the known exempl[ar] seen in the latent.

In addition to the agreement above, each consensus in agreement between the latent and the known that the panel.

Provide a detailed explanation for the difference

(1) The feature was located in an area of reverse analysis) and, once the distortion effect was be supported. The difference was of only on[e]
(2) The questioned feature may not have had su[fficient] order to clearly develop on the item. There the ridges are "spotty" and difficult to follo[w]

After discussion of the different Level 2 characteris[tics]

PART 3 : EVALUATION

What conclusion(s) does the Consensus Pane[l]

Identification between the submitted latent and

What information supports the conclusion(s) agreement or any discrepancies that affected

The agreement of Level 1 and Level 2 features discrepancies noted in the comparison were exp[lained] matrix/development. The additional informatio[n] members, was not refuted.

Section C (Completed by Consensus Panel) cont.

Date of Consensus Panel Meeting	**5/12/2017**
Lab Number/Case Record Number (complet[ed] by Technical Leader after Panel concludes)	

Time Technical Leader Joined Meeting	**10:15 am**

Additional Case/Print Factors Provided to the Consensus Panel

Identification a result of an automated search

Does the additional information affect the Consensus Panel recommendation(s)? YES NO N/A

Given the additional information, what does the Consensus Panel recommend? Explain how the new information caused the Consensus Panel to modify the recommendation(s).

No effect on recommendation

I confirm that : I have undertaken the review as detailed above in an objective manner, I support the information contained within, and I have signed this report to demonstrate that the conclusions stated in Section C, Part 1 through Part 3 reflect my opinion.

Consensus Panel Member Name	Signature	Date
H. Apple	H. Apple	5/12/2017
F. Kellen	F. Kellen	5/12/2017
D. Jacobs	D. Jacobs	5/12/2017

Disagreement Workflow

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┌──────────┐         ┌──────────┐                    ┌──────────┐
│   1 + 2  │────────▶│   1 + 2  │───────────────────▶│  Report  │
│  Disagree│         │   Meet   │                    │  Issued  │
└──────────┘         └────┬─────┘                    └──────────┘
                          │
           Not Resolved Notify
           Supervisor     │
                          ▼
                 ┌──────────────────┐
                 │ Supervisor Prepares│
                 │ Consensus Packet  │
                 └────────┬──────────┘
                          │
           Notify TL      │
           TL convenes Panel
                          ▼
                 ┌──────────────────┐
                 │  Panel Members   │
                 │ conduct blind exams│
                 └────────┬──────────┘
                          │
           Panel Meets    │
           TL Joins Meeting
                          ▼
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| Panel Recommends Conclusion | TL decides reported result | Report Issued | Follow up by TL |
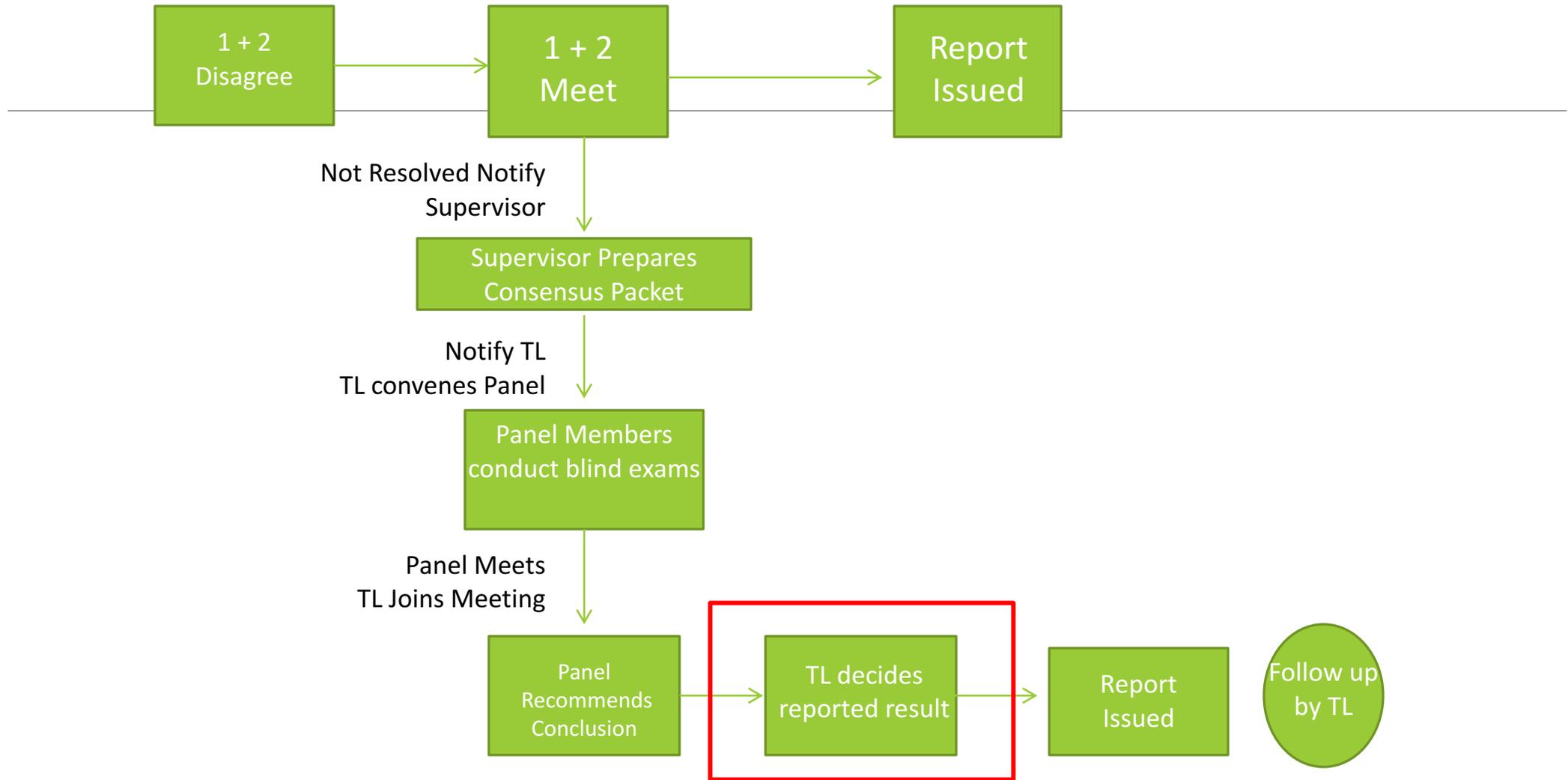
Technical Leader - Decision

TL decides reported result

Technical Leader considers:

◦ Consensus Panel recommendation(s)

◦ Case information

◦ Risk assessment of conclusions

Technical Leader determines the final result to be issued

Consensus Panel Report will record decision and reasoning behind it

Consensus Panel Report - Decision

PART 4 : RESOLUTION

Conclusion of the Consensus Panel Process
What is the final decision of the Consensus Panel process?
Identification
Include the rational for the decision reached
The technical conclusion of the consensus panel was identification and is supported with strong information in common between the known and the latent prints. Discrepancies are explained. Panel did not see any undue influence from the fact the identification was made through an automated search. The risk in issuing the opinion is low.

I confirm that : I have reviewed the information generated by the Consensus Panel listed in Section C, Part 1 through Part 3, and acknowledge the information could be used to support the decision and rationale contained in part 4. I have signed this report to demonstrate that the resolution stated reflects the results to be issued by the Latent Print Units.

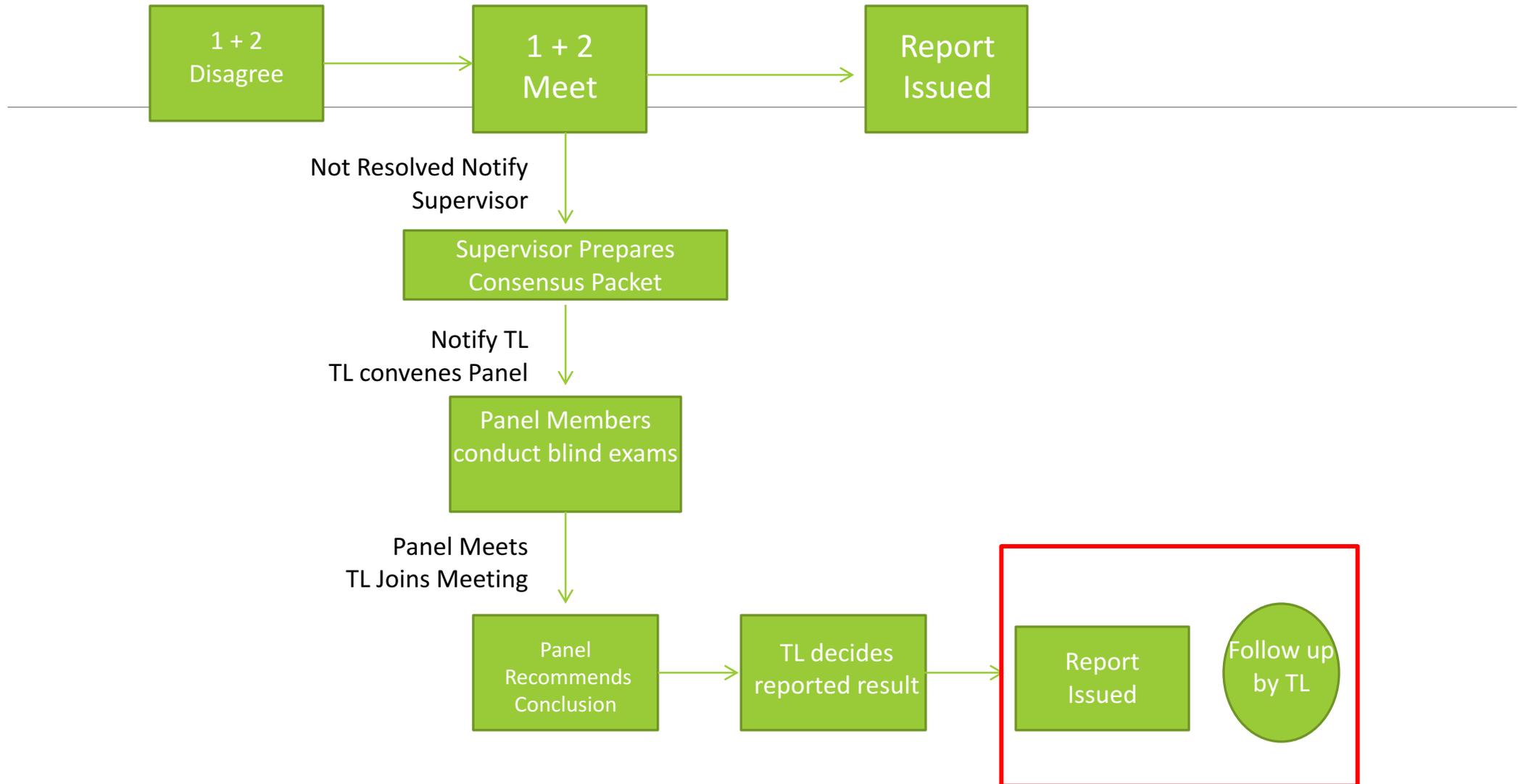| Technical Leader	Signature	Date
J. Peer	*J. Peer*	5/15/2017

Marked Images or written explanation from each Consensus Panel member received?	
YES NO	
Date Final Consensus Packet Provided to First Party	5/17/2017

Disagreement Workflow

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┌──────────┐        ┌──────────┐                    ┌──────────┐
│  1 + 2   │───────▶│  1 + 2   │───────────────────▶│  Report  │
│ Disagree │        │   Meet   │                    │  Issued  │
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                  ┌────────────────────┐
                  │ Supervisor Prepares│
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                       Notify TL
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                        Panel Meets
                      TL Joins Meeting
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         ┌──────────┐     ┌──────────┐    ┌──────────┐  ┌──────────┐
         │  Panel   │────▶│TL decides│───▶│  Report  │  │ Follow up│
         │Recommends│     │ reported │    │  Issued  │  │  by TL   │
         │Conclusion│     │  result  │    └──────────┘  └──────────┘
         └──────────┘     └──────────┘
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Issuing Conclusion - Report

Report is issued by individual who agrees with final conclusion
◦ Can be issued by Technical Leader

Report wording - Examples
◦ The identification with [NAME] on Item [NUMBER] was effected as a result of the Consensus Panel process. A panel of FBI latent print examiners independently reviewed the prints and then formulated a consensus of opinion to resolve technical disagreements between two [other] examiners initially involved in the examination.

◦ An inconclusive decision on Item [NUMBER] was effected as the result of the Consensus Panel process. A panel of FBI latent print examiners independently reviewed the prints and then formulated a consensus of opinion to resolve technical disagreements between two [other] examiners initially involved in the examination.

◦ The acceptance/rejection of image(s) [image name(s)] was determined as the result of the Consensus Panel process. A panel of FBI latent print examiners independently reviewed the image and then formulated a consensus of opinion to resolve technical disagreements between two [other] examiners initially involved in the examination.

Technical Leader will follow up with input from panel to determine if further steps are needed such as retraining

Report Issued

Follow up by TL

Consensus Panel Process - Application

Policy is currently used under a Laboratory Initiative
- ◦ Approval from Executive Management, Legal, and Quality Assurance

Over course of a year, policy was used in three instances
- ◦ Modification of definitions may have led to reduced opportunities
- ◦ Currently no response from contributors
- ◦ None of the instances have gone to trial
- ◦ Positive feedback from the participants

Future Course

Moving from Initiative to Standard Procedure
- ◦ Interest from other disciplines within the Laboratory

Hope and Dream
- ◦ Option for use outside disagreement for complex or difficult prints
- ◦ Interagency consensus panels