CRYOGENICS OPERATIONS 2008

Operation for Accelerators

Instrumentation & Controls

CRYOGENICS OPERATIONS 2008

Organized by CERN

WEB-BASED TOOL FOR REPORTING OF OPERATIONAL NON-CONFORMITIES AND TRACKING ASSOCIATED CORRECTIVE ACTIONS

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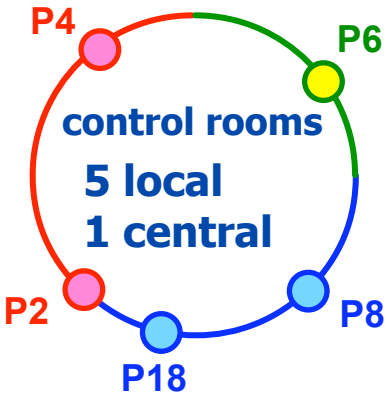
Content

Task **Conditions** **Development** **Demo** **Results** **Conclusions**

LHC Accelerator Cryogenics



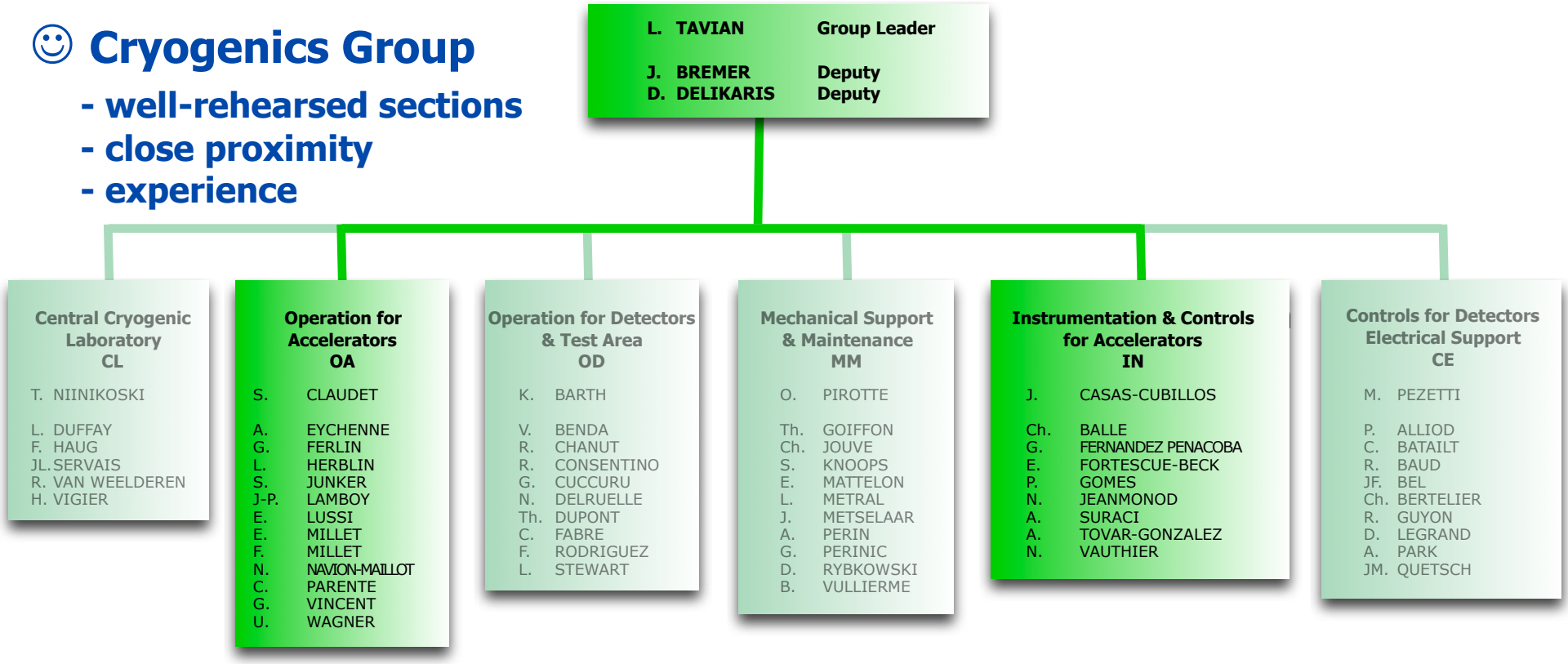
- 20800 instrumentation ch.
- 7700 electronic cards
- 3680 control loops
- 3 databases

Fine Tuning and Beam Operation

- "bidirectional Logbook"
- simple of use
- visible and editable from everywhere -> Web-Application

☺ Cryogenics Group

- well-rehearsed sections
- close proximity
- experience



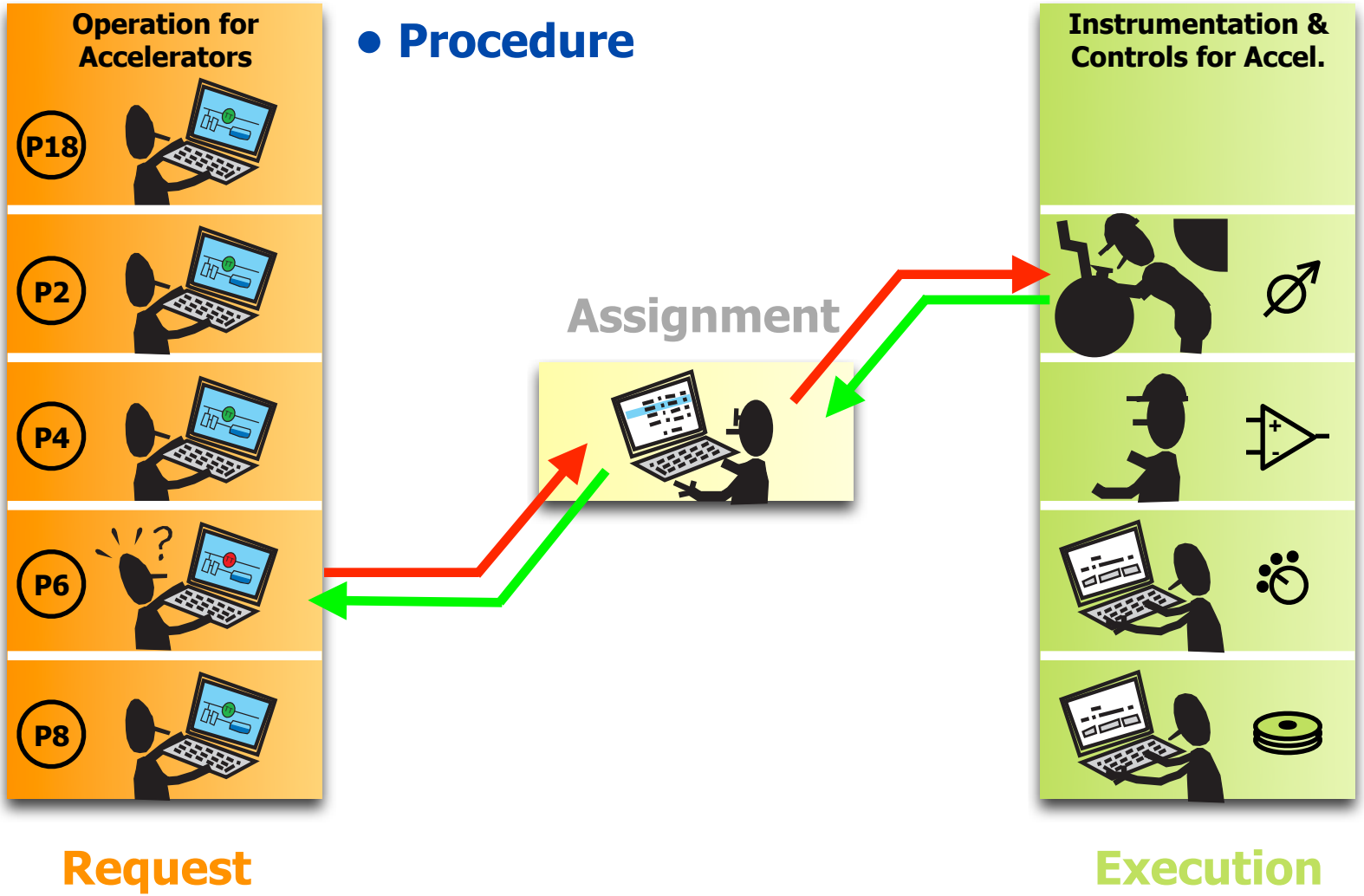
☺ IT Service

- hard- & software support

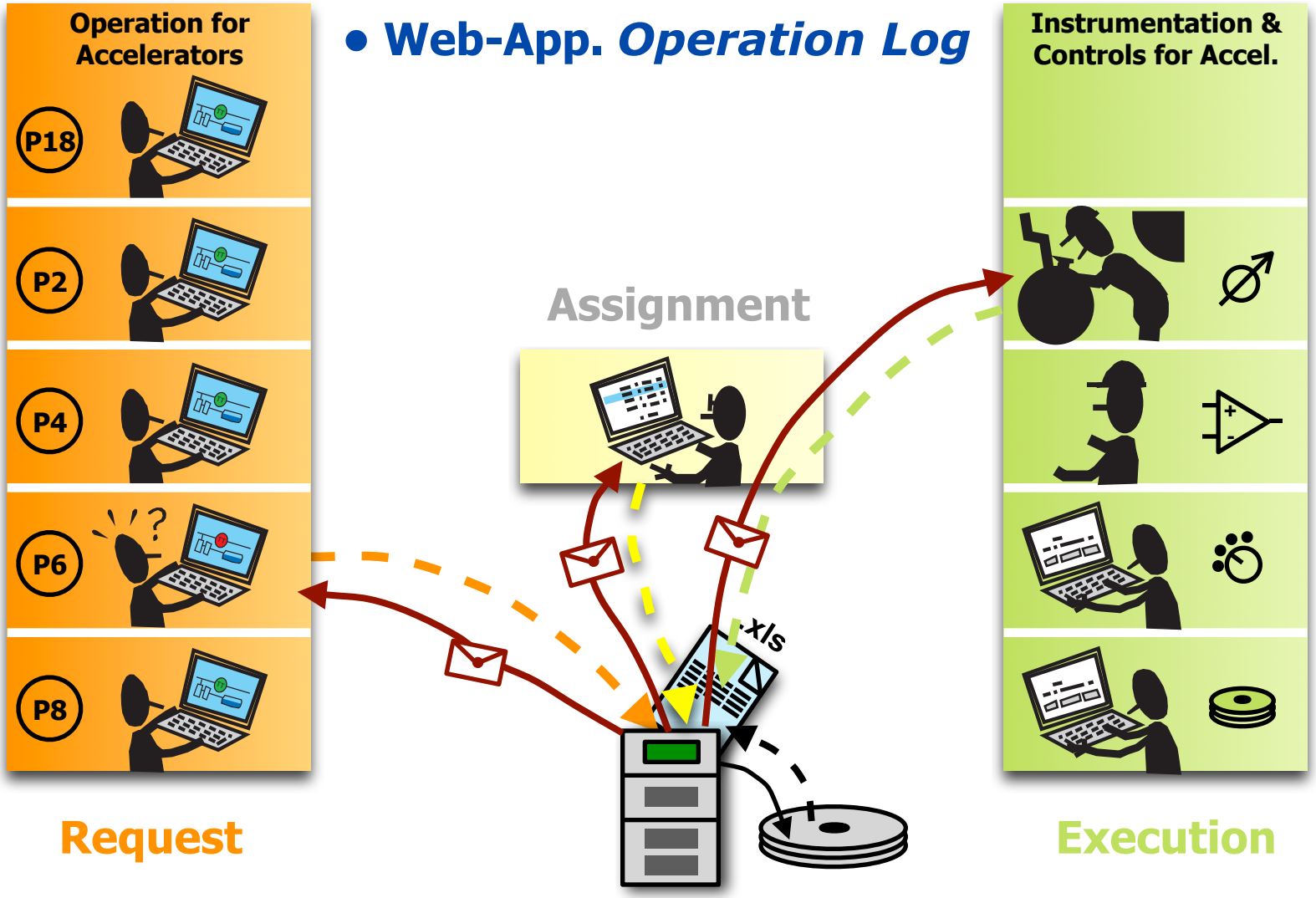
☹ Time

- development end of March 2008, delivery requested for May

- **Procedure**


Operation for Accelerators
P18
P2
P4
P6
P8
Assignment
Instrumentation & Controls for Accel.
Request
Execution

- **Web-App. *Operation Log***



http://at-crg-in.web.cern.ch

- **Since end of May: > 400 records**
- **So far: No crash, no data lost**
- **Simple of use: no training, no "help-me" calls, no complains**
- **Documentation: user manual, expert manual**
- ***Operation Log*-file is the reference: one single list**
- **Some user: write macro to customize *Operation Log*-file**
- **Cryo HW commissioning meetings with *Operation Log***
- **Since a few weeks: Mechanics team is using *Operation Log***
- **Request: Can also come from instr. & control expert**
- **Browser: Internet Explorer®, Firefox®**
- **Link to *LHC Layout* and *MTF* Database adds information**

Conclusions

- **Successful development and deployment of Web-App.**
- **The best application does not replace meetings and face-to-face contact**
- **In-the-field interventions can be much better planned by priority, location and complexity of the work**
- **Web-application running well on all browser- and system-environments is time-consuming in development and maintenance**
- **Next: Update *Operation Log* file from .xls to .xml**
- **Thanks to all who returned comments, proposals and encouragements**