### IRWG – Status and First Follow-up

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#### Status

- □ Reviewed start-up after LS1 of (almost) all machines
  - Still missing PSB and ISOLDE
- □ All in all it worked. For some systems it even worked very well.
- □ Partly common issues
  - Experts' Priorities
  - Control system readiness
  - Assumption that GUIs that used work still work the same way
  - ...
- □ Next step: come up with strategy of how to improve this
  - Main focus needs to be on improvements WE can implement
  - (Improvements on services and equipment system preparation might not be easily obtained)

## **CONCLUSIONS SO FAR –** OPEN FOR DISCUSSION AND PROBABLY NOT COMPLETE

#### Bettina and Verena's Résumé from Meetings so far

We will need to address two areas

□ Organization and Responsibilities

□ Tests, time requirements,...

#### **Organization: How to deal with modifications?**

- In case of introduction of "major" machine modifications during long stops
  - Involve machine responsible (OP/ABP) during specification phase
  - If possible, staged deployment of different features followed by dry runs
    "long before end of stop
  - Example: deployment of FGCs in the SPS
- □ Introduce test mode in equipment for realistic testing without beam
  - Where necessary
  - Example: FGC simulation mode
  - Caution: need protect against accidently leave equipment in simulation during beam operation

#### Organization: Re-definition of Phases and Responsibilities

- Phases up to now: Hardware tests machine check-out beam commissioning
- □ What we need:
  - "Machine Preparation for Beam": 2 activities in parallel: hardware testing by equipment experts followed straight away by dry runs with operational software from control room. Preparation of applications, settings, cycles, optics, test drive, triggering, timings,...
    - Long parallel testing phase
    - Final running everything together without beam: no more access
    - a lot more collaboration with equipment teams and technical stop coordination
    - A period of "several" months
  - Beam commissioning

#### **Organization: How to do that?**

- □ Need early coordination meetings.
  - Together with or after technical stop coordination meetings
  - Our test plan must be communicated and negotiated with the equipment teams
  - One responsible from OP/ABP per machine
  - Progress tracking
- □ What about global coordination meetings?
  - Machine priorities for equipment expert interventions
  - Testing machine interfaces: e.g. BHZ between PS and SPS

To discuss this further: we need to agree upon ourselves and then invite EN/MEF/OSS

# WHAT DO WE HAVE TO DO NEXT?

#### Skeleton list of tests per machine

- □ To be prepared by the machine representatives
  - What to test for each machine: how, what is needed
    - This should be a guide line
  - Is there a special order of tests?
  - Goal also: prioritized list of control services readiness (Timing, INCA applications,...)
  - Enforce certain additional hardware tests based on experience in the past
    - polarity check of all circuits.
      - Prepare list of conventions from/with control system, optics and hardware systems. Help from SPS
      - Will organize a talk by Stephane on conventions in the SPS (MAD, LSA, hardware) and how tests are carried out.
- Important: test skeleton has to stay alive and be updated if new systems arrive or things had been forgotten
- General skeleton example to be prepared by Bettina, Bertrand, Verena

#### Timeline

- □ Next meeting: PSB, ISOLDE
- □ Meeting:
  - Common skeleton test program
  - Round table discussion:
    - Each machine reaction to new approach: is there anything missing?,...
    - Applicability to EYETS