

**GERDA**  
**Technical Proposal**  
**Safety Report**  
**[TC Report]**

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GERDA Collaboration Meeting at Dubna  
27-29 June 2005

# Outline

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- General remarks
- Safety Report
- Update of Technical Proposal
- Conclusion and Suggested Actions
- Recommendation of Technical Board

# General Remarks of TC

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The TC emphasizes the need of

- getting an optimized layout for the **plastic muon veto system** by September
  - ▶ Monte Carlo including mechanical constraints
- optimizing the GERDA **time schedule** such that operation can start in 2006
  - ▶ **joint tendering** for water tank and superstructure highly desirable!
- an experienced full-time **project engineer** with supervision and design competence
- a fully functional '**Technical Board**'
  - ▶ regular consultations, meeting during GERDA collaboration week
- improving **communication within collaboration**
  - ▶ e.g. publish your results in GERDA webpage and give notice to collaboration!
- updating the GERDA **financial situation**
  - ▶ some component not yet financed (e.g. lab building equipment, air conditioning of electronics room,...)

# General Remarks of TC

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The TC suggests to agree on the following policy:

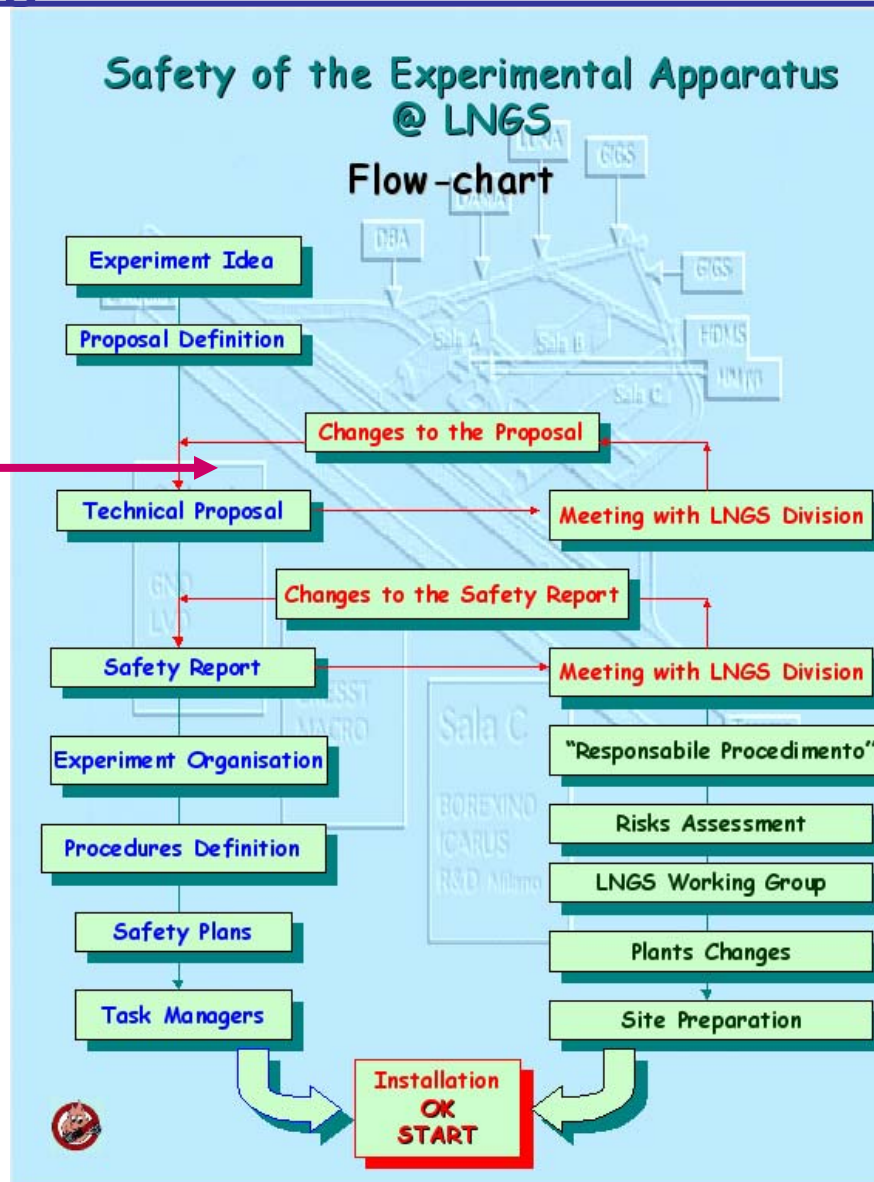
- Each **subcomponent to be installed needs to be described in a written document** which includes all relevant drawings and a discussion how this subcomponent affects / interacts with the rest of GERDA.

This document is addressed to the Technical Coordinator who will make it accessible via the Web to all members of the GERDA collaboration, and who will include it (or part of it) into the Technical Proposal as soon as a new version is released.

# How to get the OK for GERDA installation?

we are in this loop ..

...and need a new iteration !!!



**Next steps:**  
write  
Safety Report,  
update  
Technical Proposal.

# Safety Report

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## What is needed?

FMECA, HAZOP & PID for cryostat – available by July 1  
dto. for water vessel system  
dto. for additional infrastructure  
evaluation of cryostat & platform w.r.t. earth quake  
.....

## Schedule:

Start with cryostat part

Jul 05 : meeting at LNGS of Air Liquide, LNGS, GERDA:

**arrive at agreement on safety concept**

Aug : write part for cryostat ( at LNGS !?)

Sep : safety review by LNGS experts / consultants

asap : start analysis for other components !

C: not needed – will be done by LNGS!

# Update of Technical Proposal

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## Contents of Version 0.1:

- Preface to Version 0.1
- The Sites of the GERDA Experiment in LNGS
- Water Tank
- Cryostat
- Penthouse
- Safety Aspects
- GERDA Assembly at LNGS
- The LArGe-facility

▶ All these chapters need to be updated !

▶ Moreover, it is now time to include:

- Muon Veto System, water & plastic
- Electronic Readout
- Data Acquisition & Slow Control
- Procedures
- .....

## Editors

Matthias  
Alessandro / Carla  
Tasso  
Iris  
all TG leaders  
dto.  
Stefan

.....  
Carla  
Bernhard, +  
resp. TG leaders

# Conclusions & Suggested Actions

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- Let's agree to have a new version of the Technical Proposal ready for the PRC in Oct 05!
  - ▶ TG coordinators will identify editor(s) for respective chapters
  - ▶ TG coordinators will communicate outline and schedule to TC **asap**
    - ▶ TC will collect and edit all contributions.
    - ▶ **First complete draft should be available by Sep 15**
- Safety report for cryostat is aimed to be ready by the end of August
- A safety report for the complete GERDA experiment is needed
  - ▶ Check what is needed, who will do what?
- ▶ Remember: Technical Proposal ↔ Safety Report = Iterative effort !



# Recommendation of Technical Board

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The Technical Board recommends the use of a common FADC system for phase 1 and 2 of the GERDA experiment.

The Padua group is encouraged to contribute with their expertise to the development of this system. In addition, the board expresses the hope that the Padua group will also contribute to the read-out system and the collaboration in general.

# Final Conclusion & Suggested Action

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**▶ OUR BIGGEST THANKS TO OUR PERFECT HOSTS ◀**