

# WG2: RD51 Common Projects 2012

**2012: 4 Projects has been submitted for evaluation  
Management Board Met in December 2012 →  
ALL PROPOSALS ARE VERY INTERESTING**

➤ R&D on large area GEMs for the ALICE TPC upgrade (*GSI/ Tokyo / UNAM*)

→ APPROVED

➤ 2D-MHSP and 2D-THMHSP for medical applications (*Aveiro/Coimbra*)

→ NOT APPROVED (only 2 institutes and allowed the maximum budget is already requested in another Common Proj.)

➤ High resolution UV scanner for MPGD applications (*Wigner FCP/INFN Trieste/ INFN Bari*)

→ APPROVED

➤ Large-area THGEM detector evaluation with SRS electronics (*Weizmann/Coimbra/Aveiro*)

→ APPROVED

**IF no CB comments → we'll inform groups about the RD51 decision**

# WG5 – Electronics & Scalable Readout Systems

**Legal documents required for SRS distribution to the RD51 institutes are finalized**

**Caveat:** situation only resolved for countries, which does not require license, based on “Commerce Control List” (cat. NS2) – mostly Europe, Switzerland & few others

Institute Name  
[Street Address] • [City], [Postal Code]  
Phone: [Your Phone] • Fax: [Your Fax] • E-Mail: [Your E-Mail]  
Web: [Web Address]

Date: [Insert Date]

CERN  
The European Organization for Nuclear Research  
Attention: Philippe Fathouat  
Cc: Alessandro Marchioro  
PH-ESE  
CH 1211 Geneva 23  
Switzerland

SUBJECT: Letter of Compliance Concerning Deep-Submicron Technology Circuits

Dear Sirs,

As an authorized representative of [Institute Name], I herewith confirm that [Institute Name] understands and agrees to comply with the provisions listed hereunder governing any and all integrated circuits manufactured in Deep-Submicron technology and made available to us by or on behalf of CERN (“the circuits”):

(1) Notwithstanding any other agreement or understanding entered into by [Institute Name], The [Institute Name] assumes responsibility in full for any loss, damage, fine or penalty incurred as a result of its failure to comply with these provisions;

(2) The [Institute Name] shall use the circuits exclusively for scientific research purposes and shall not transfer or (re)sell them for any other purpose;

(3) The [Institute Name] shall not cause the circuits to meet or exceed all (that is, cumulative) five of the following characteristics:

(a) a total dose of  $5 \times 10^3$  Rads (Si);

(b) a dose rate upset threshold of  $5 \times 10^3$  Rads (Si)/sec;

(c) a neutron dose of  $1 \times 10^{16}$  n/cm<sup>2</sup> (1 MeV equivalent);

(d) a single event upset rate of  $1 \times 10^{-10}$  errors/bit-day or less, for the CREME96 geosynchronous orbit, Solar Minimum Environment;

(e) single event latch-up free and having a dose rate latch-up threshold of  $5 \times 10^3$  Rads (Si).

## SRS Distribution Procedure;

- Every institute has to sign “Letter of Compliance” with RD51 spokes
- Order your SRS systems/hybrids from CERN Store
- Pick-up hybrids from A. Marchioro office ([PH-ESE-ME, 77319](#))

## RD51 Future (beyond 2013):

- The initial validity of the **present RD51 MoU** covers the period until the **31st of December 2013**
- If RD51 would like to **continue beyond 2013** → need to ask for **extension LHCC and CERN Research Board (RB)**;
- Preliminary discussions with LHCC → will not need to write new RD51 proposal → prepare **executive summary (10-15 pages)** to describe **future RD51 program**
- Received a lot of contributions from **individual groups** and **RD51 WG conveners** – **THANK YOU FOR ALL YOUR INPUTS !**
- Document to be **submitted** to the **LHCC in the March of 2013** → extension discussed/(approved) by LHCC/RB in March/June 2013

# Future RD51 Collaboration Activities (beyond 2012)

- Generic R&D (new structures, ideas, detector physics) projects (WG2)
- Applications – new proposal: organization of workshops disseminating MPGD applications beyond fundamental physics users and industry (e.g. dosimetry, neutron detectors, ...), potential RD51, potential physics, ...) (WG3)
- Development and Maintenance of software tools and simulation tools; basic studies & software support for the RD51 (WG4)
- Development and Maintenance of Electronics (WG5)
- MPGD Industrialization (Thin GEM, Thick GEM) (WG6)
- Maintenance of Beam Infrastructure (WG7)
- MPGD Education – new proposal: organization of schools for students and academic training outside CERN, covering specific areas of the detector activities

**Discussed with LHCC Chair → they expect our report rather in 2013**

**Now preparing for the March LHCC Meeting**