# DRD1-WG6: Detector Production and Industrialisation

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## Mandate and objectives

- Mandate
  - Production aspects of gaseous detectors covering all essential construction elements
  - Development of production techniques and innovative solutions
  - Transfer to industry
- **Objectives** 
  - I: Development and maintenance of common production facilities and equipment
  - 2: Quality control and large volume productions
  - 3: Collaboration with industrial partners
  - 4: Establish and support a forum for sharing experiences, knowledge, and best practices



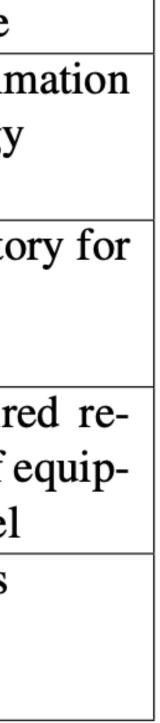
## Task 1

### Production facilities and equipment

•	Propagate the RD51 model to	
	other technologies	Refe
		Task
•	Need for a large-RPC production facility	
		Task
	Electrode base material	
	Silkscreen printing	
	Gluing tooling	Task
	QC tests	
	Mechanical tools for assembling	Task
		1451
•	Wire Chambers $\rightarrow$ need to	

 Wire Chambers → need to maintain the equipment in working order

ference	Description	Deliverable Nature
k 6.1.1	Production Needs: detector type	Report with estin
	and size, production volumes and quality	for each technology
k 6.1.2	Production Capabilities: detector type and size, production volumes and production quality	Report with invento each technology
k 6.1.3	Needs and Capability Matching (costs)	Report with require sources in terms of e ment and personnel
k 6.1.4	Identify Resource Pooling strate- gies for the creation or the upgrade of production facilities	Resource Requests



## **Task2** QC and production

Reference	Description	Deliverable Nature
Task 6.2.1	QA/QC protocols for each tech-	Report
	nology	
Task 6.2.2	Inventory of missing but required	Report
	instrumentation for QA/QC	

## Task3

## **Collaboration with industrial partners**

- Production volume exceeds the capacity of the facility
- Cost reductions
- Availability for potential commercial applications

Reference	Description	Deliverable Nature
Task 6.3.1	Technology transfer checklist	Report
Task 6.3.2	Technology transfer database	Database
	(project, industrial partner)	

- Important aspects for technology transfer:
  - Identification of the market (market surveys)
  - Matching of the production level with the capacity of the industrial
  - Interest of the industrial for new methods and to address niche markets
  - Clarification of intellectual property licensing

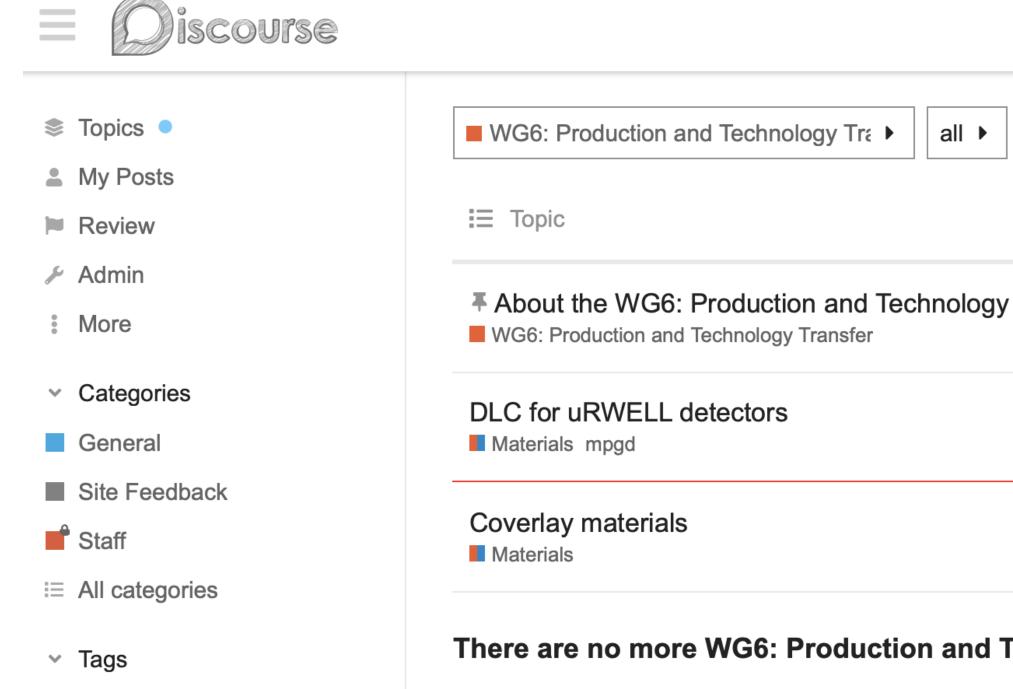
## Task4

### **Collaborative forum** (+ DATABASE of existing and available material)

Reference	Description	Deliverable Nature
Task 6.4.1	Establishment and support of a forum for	Online Forum
	sharing experiences, knowledge, and best	
	practices on gaseous detectors	

## Contact

- Web page: <u>https://drd1.web.cern.ch/activities-wg6</u>
- Contact email: DRD1-WG6-convenors@cern.ch
- Subscription to mailing list: <u>https://e-groups.cern.ch/e-groups/EgroupsSubscription.do?egroupName=drd1-wg6</u>

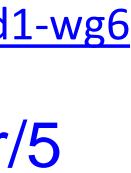


### • Forum: https://drd1-forum.web.cern.ch/c/wg6-production-and-technology-transfer/5



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There are no more WG6: Production and Technology Transfer topics. Ready to start a new conversation?



## Agenda

PRELIMINARY

- Industrial partner and technology transfer
- Working Group Objectives and plan

Conveners: Alain Delbart (Université Paris-Saclay (FR)), Fabien Jeanneau (Université Paris-Saclay (FR)), Gabriel Charles (Université Paris-Saclay (FR)), Giuseppe laselli (Universita e INFN, Bari (IT)), Laktineh Laktineh (Universite Claude Bernard-Lyon I (FR)), Rui De Oliveira (CERN)

09:00	<b>Presentation of the WG6</b> <b>Speaker</b> : Fabien Jeanneau
09:10	<b>CERN MPT Workshop</b> ¶ <b>Speakers</b> : Eraldo Oliveri (CB
09:25	Saclay's MPGD worksho Speaker: Brahim Alain Mor
09:45	T2K TPC production Speaker: Alain Delbart (Univ
10:05	Gap RPC production facility Speaker: Kyong Sei Lee (Kor DRD1_KODEL.pdf
10:20	<b>New collaboration for ne</b> <b>Speaker</b> : Gabriel Charles (U
10:40	<b>The ALERT project</b> <b>Speaker</b> : Gabriel Charles (U

### • 6/2-024 - BE Auditorium Meyrin

Existing and potential production facilities, capabilities and limits

6 "Detector production and industrialisation"	🕓 10m
J (Université Paris-Saclay (FR))	
ERN) <b>, Rui De Oliveira</b> (CERN)	🕓 15m
ERN), Rui De Onvena (CERN)	
p Topo (Université Daria Galay (ED))	🕓 20m
oreno (Université Paris-Saclay (FR))	
iversité Derie Ceoley (FD))	🕓 20m
iversité Paris-Saclay (FR))	
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(Université Paris-Saclay (FR))	

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