THE TRACKER CONSTITUTION

Endorsed by the TIB of June 6th 2000

1. The tracker Institution Board.

1.1. Role.

The Tracker Institution Board (TIB) is the highest decision-making body in the Tracker Project of CMS. However all major decisions have to be endorsed by the CMS Collaboration Board, following the procedure foreseen by the CMS constitution. In most cases a matter will be discussed first in the Tracker Steering Committee (TSC) (see 3.) which, after due deliberation, will submit a recommendation to the TIB. This recommendation may be either amended or even reversed by the TIB. Some issues may go directly to the TIB.

The Tracker Project is described in an Internal Memorandum of Understanding (MoU)(see 2). The main role of the TIB is to define this internal MoU, fix its period of validity and take all necessary decisions allowing its execution. In particular it assesses the costs of the project and the sources of funding and seeks the appropriate balance. It monitors the progress of the project and the performance of its management team. If shortcomings are found, the TIB may recommend to the CMS Spokesperson that a change should be made to the management structure. Votes on these matters proposing a change, require a two third majority (see 1.5).

The TIB also considers the membership of Institutions willing to participate to the Tracker Project. These institutions have received from the CMS CB either full membership to CMS or Associated status. It updates the list of TIB members at least once a year, following the rules given in 1.2. The TIB elects its Chairperson and endorses the nomination of its Secretary. It endorses the nomination of the Tracker Technical Coordinator, of the Tracker Resource Manager, of the members of the Tracker Steering Committee and of the various subproject coordinators foreseen in the internal MoU (see 2). The TIB is responsible for proposing speakers to present results from the Tracker community to conferences. These proposals are addressed to the CMS Conference Committee. The TIB decides the day and time of the normal TIB meetings (see 1.6).

1.2. Membership.

- The membership of the TIB comprises Institution Representatives.
- Every institution with at least five physicists and/or engineers participating to the Tracker Project has its own representative.
• Institutions from the same country or region, with too few participants to qualify for their own representative, share one or more common representatives.
• Two or three such institutions are allowed one representative, four or more institutions are allowed two representatives.
• Each country participating to the Tracker Project has the right to at least one representative.
• Responsibility for selecting a representative lies with the institutions concerned.
• A representative who is unable to be present at a meeting may designate a deputy to attend. The deputy may be from a different institution from that one of the official representative, but has to be a member of the Tracker Project.
• All the members of the Tracker Steering Committee and the TIB Secretary are ex-officio members of the TIB. However, only those who also fulfil the role of an Institution Representative have the right to vote in the TIB.
• The CMS Spokesperson, the CMS Deputy Spokesperson, the Collaboration Board chairperson, the CMS Technical Coordinator, the CMS Deputy Technical Coordinator, the CMS Resources Manager, the CMS Budget Coordinator, the CMS Physics Coordinator and the CMS Electronics Coordinator receive standing invitations to the TIB meetings together with the minutes. In case they attend a meeting, only those who also fulfil the role of an Institution Representative have the right to vote in the TIB.

1.3. Chairperson.

The Chairperson of the TIB is elected by the members. The candidates for the election of the Chairperson are selected among the persons nominated by the Institutions Representatives following a procedure similar to the one used for the CB Chairperson (Annexe 8 of CMS constitution).

The Chairperson has the responsibility of nominating a Secretary, the nomination being subject to endorsement by the TIB.

The term of office of the Chairperson and the Secretary is two years; re-election for further terms is allowed.

The role of the Chairperson is to call the meetings of the TIB and prepare the agendas. He does it in close collaboration with the Project Manager in order to bring relevant issues to the members in a timely fashion. Every member of the TIB, including the ex-officio members, can ask for a point to be put on the agenda but it remains to the Chairperson to settle the priorities and postpone items to a next TIB if necessary. The agenda of the meeting is sent to the TIB members at least one week in advance. The Chairperson chairs the meetings of the TIB. In case the Chairperson can not attend a meeting of the TIB, he/she will designate another Institution Representative to replace him/her for the time of the meeting. If the Chairperson was unable to do so, his/her substitute is designated by the TIB members at the beginning of the meeting.

The role of the Secretary is to write the minutes of the meetings and make them available to the members not later than 10 working days after the meeting.

1.4. Communication and Interaction with other Tracker and CMS Boards.

Interaction with the other Boards of CMS is through the CMS Steering Committee. The Tracker Project Manager and another member of the Tracker Steering Committee,
chosen by the Project Manager, represent the Tracker Project at the CMS Steering Committee.

Interaction with the other Boards of the Tracker Project is through the TSC. The Chairperson of the TIB is member of the TSC and represents the Institution Representatives at the TSC meetings.

The TIB Chairperson decides, in consultation with the other members of the TSC which TSC decisions are of sufficient weight as to require submission to the TIB for ratification.

The members of the TSC report regularly to the TIB on matters from their respective areas of responsibility which are of interest to the TIB as a whole.

### 1.5. Decisions.

Decisions are to be agreed by consensus\(^1\) wherever possible and it should be the task of the Project Manager and of the TIB Chairperson to build such a consensus. However, in the absence of a consensus, the issue will be decided by a vote.

The votes are public except if one or more TIB members ask for a secret vote or when persons are concerned by name. These persons leave the meeting room during the discussion preceding the vote and during the vote.

Only Institution Representatives or their accredited deputies, present at the TIB meeting, are allowed to participate in a vote. An Institute Representative must notify the TIB Chairperson in writing, by letter or electronic mail, if he/she nominates a deputy. Institution Representatives participating in a TIB meeting via video conferencing also have the right to cast a vote. In the case of a secret ballot, the vote will be cast by sending an electronic mail to a designated member of the CMS secretariat.

For most issues, the vote can be decided during a TIB meeting, provided the discussion on the relevant matter was clearly announced at the agenda. A simple majority of those present who are eligible to vote and expressed an unambiguous vote will then decide the issue.

Important issues listed below require a two third majority vote of those present who are eligible to vote. The place and time of such a vote is announced at least two weeks in advance and all documents with the information needed to take a decision are made available to the TIB members at least one week in advance. The issues that require this special procedure are the following:

- modification of the Tracker Constitution,
- modification of the agreed internal MoU before its term of validity,
- recommendation to the CMS Spokesman for a change to the Tracker management structure,
- replacement of a subproject coordinator (see 2) before the end of his/her term.

\(^1\) “consensus” means that without formal vote, it is clear that the majority agrees with the proposal, the minority accepts it and nobody asks for a vote.
An item can be added to the agenda, during a TIB meeting, if the matter is of urgency and it is approved by the majority of the members present. The decision regarding what constitutes sufficient "urgency" will be made by the Chairperson and the Project Manager, together. This procedure cannot be applied for the "important" issues listed above.

1.6. Meetings.

Meetings of the TIB will be held normally during each Tracker and CMS Weeks. A Tracker Week should normally follow a standard format. That format and the dates of the Tracker Weeks are normally announced by the Project Manager at the end of the preceding year. Changes in either day or time should be avoided as much as possible, to allow a maximum attendance of the Institution Representatives. If such changes are felt necessary, they are announced at least two weeks in advance. The latest time for a decision is also fixed in advance and chosen to allow Institution Representatives from abroad to leave at a reasonable time.

Extraordinary sessions can be convened by the Chairperson at the request of the Project Manager, or at the request of any Institution Representative. At least two weeks notice is given of extraordinary sessions. However, the decision on the appropriateness of a meeting rests with the Chairperson, after discussion with the Project Manager.

The TIB meetings are restricted to its members. However the Chairperson may decide to invite experts.

One of the important meetings held during a Tracker Week is the Tracker General Meeting which is open to all members of the Tracker Project. The purpose of this meeting is to disseminate information on the status of the project and to inform of all major developments and decisions concerning scientific, technical, financial and organisational matters. It is also the place to have an open discussion before an important decision of the TIB.

2. The Tracker internal Memorandum of Understanding.

The internal Memorandum of Understanding (MoU) describes the Tracker Project. It is prepared and agreed by the TIB and is valid for a definite period.

The internal MoU defines the objectives of the Tracker Project for that period, makes a list of the tasks to be fulfilled, with deadlines and with the share of responsibilities among the various institutions participating to the Tracker Project.

It has to explain the management structure of the Tracker Project identifying clear subprojects with specific aims and responsibilities. It lists the institutions participating in each subproject. Each of the subprojects has a coordinator proposed by the Institution Representatives participating in the subproject, in consultation with the Tracker Technical Coordinator. The choice of this coordinator must be endorsed by the TIB.

The role of the coordinator of a subproject is to organize the work to be done for the subproject, in collaboration with the Institution Representatives participating in the
subproject and in agreement with the internal MoU. When necessary, he/she calls working meetings with people concerned with the issues to be discussed. The coordinator checks the quality of the work done in the various institutions and compares progress with the schedule. He/she reports regularly to the Tracker Project Office (TPO) and to the TIB. He/she is a member of the TPO.

The term of office of the coordinators is two years, renewable.

The modification of the agreed internal MoU before its term of validity, the removal of a responsibility from an Institution, the replacement of a subproject coordinator before the end of his/her term may be felt necessary. These major changes should first be submitted to the TSC to formulate a recommendation. The final decision is to be taken by the TIB following the special procedure described in 1.5 for the important issues.

The Tracker internal MoU is signed by the Tracker Project Manager, the Tracker Technical Coordinator and the TIB Institution Representatives participating in the Tracker Project.

In case of conflict between the Tracker internal MoU and the CMS MoU signed with funding agencies, the CMS MoU prevails.

3. The Tracker Steering Committee.

3.1. Role.

The Tracker Steering Committee (TSC) supervises and reviews the progress and planning of the Tracker Project. The TSC receives regular reports from its members on progress in their field of responsibility, covering technical progress, planning and resources.

The TSC prepares the work of the TIB by making recommendations to be discussed and endorsed by the TIB.

The meetings of the TSC are called by the Tracker Project Manager who chairs the meetings.

3.2. Members.

The Tracker Project Manager, the Tracker Institution Board Chairperson, the Tracker Technical Coordinator and the Tracker Resource Manager are members of the TSC. The Tracker Technical Coordinator and the Tracker Resource Manager are proposed by the Project Manager and their nomination is endorsed by the TIB. The other members of the TSC are chosen by the Project Manager. Although the first criterion in choosing a TSC member is competence, the Project Manager should take care to maintain a reasonable balance between the various components of the Tracker community. In order to keep the TSC efficient, the total number of its members should be kept small. The composition of the TSC is approved by the TIB by a two third majority vote of those present that are eligible to vote.
3.3. Decisions.

All actions for the good conduct of the Tracker Project will normally be agreed by consensus. Important issues of any nature, or issues which cannot be resolved by consensus within the TSC, will be passed to the TIB for decision.

An Executive Summary of the operational decisions taken by the TSC will be written and distributed to the TIB members. To ensure effective distribution of the information, they should also be made available to other members of the Tracker Project whose name has been communicated to the Project Manager by their Institute Representative.

4. The Tracker Project Office.

4.1. Role.

The Tracker Project Office (TPO) is the place where all the technical issues concerning the integration of the various Tracker subprojects are discussed, during the construction period. In particular, it checks that the safety rules are fulfilled, it establishes a detailed planning of the construction and monitors its progress. It takes care that the engineering data and drawings are updated steadily. The TPO receives regular reports from the Tracker subproject coordinators.

TPO decisions affecting the detector performance or producing important delays in the construction require submission to the TIB for ratification through the TSC (see 4.3).

The meetings of the TPO are called by the Tracker Technical Coordinator who chairs the meetings.

4.2. Members.

The members of the TPO are: the Tracker Technical Coordinator, the Tracker Project Manager, the planning officer, the safety officer, the coordinator of the CERN Drawing Directory (CDD) and of the Engineering Data Management System (EDMS) and the Tracker Subproject Coordinators.

4.3. Decisions.

All actions for the good conduct of the Tracker Project will normally be agreed by consensus. Important issues of any nature, or issues which cannot be resolved by consensus within the TPO, will be passed to the TSC to formulate a recommendation to the TIB. This should be the case namely for issues that may either affect the physics performances of the detector or produce delays in the detector construction.

An Executive Summary of the operational decisions taken by the TPO will be written and distributed to the TIB members. To ensure effective distribution of the information, they should also be made available to other members of the Tracker Project whose name has been communicated to the Project Manager by their Institute Representative.
5. The Tracker Finance Board.

5.1. Role.

The role of the Tracker Finance Board (TFB) is to prepare the budget of the Tracker, to supervise the core money expenditures, the market surveys and the tenders relevant to the project. The TFB reports regularly to the TIB.

The meetings of the TFB are called by the Tracker Resource Manager who chairs the meetings.

5.2. Members.

The TFB is composed of one member per funding agency contributing to the Tracker Project. The Representative of a funding agency is nominated by the people who are responsible of the project in front of that particular funding agency.

In case of conflict between the present Tracker Constitution and the CMS constitution, the CMS Constitution prevails.