

# Geant4 Objectives for Year 2001

Draft 1.0, 11<sup>th</sup> May 2001

## 1. The development of new functionality and physics models

There are such objectives in each area of Geant4, corresponding to the working groups.

Each working group has identified a set of objectives. These have been collated in a single document

## 2. Publications

In addition to a first reference publication on Geant4 this is to include two other papers that span the activities of all working groups, with a target date of January 2002:

- A. On the architecture of Geant4.
- B. On the Geant4 software process.

## 3. Evolution of Documentation and training kit

The evolution of these aspects shall be monitored as a ``support" milestone.

Specific subjects agreed for this objective are:

- Improved tools to help authors in creating and maintaining diverse documents: user documentation, training kit, exercises. [This item is subject to the discovery of expertise and resources.]
- An enhanced training kit including speakers notes for slides that require additional explanations.
- Enhanced documentation with links between user documentation, training kit.

## 4. Applications of Geant4 and Comparisons with Data

The raison d'etre of Geant4 is its use in applications. By focusing on particular applications that compare with data and/or extend its use in new areas we wish to enable its wider use.

The objective is to develop:

- New comparisons with data: New joint projects to extend and accelerate the comparison of Geant4 with experimental data in important areas that complement the comparisons already done.
- New domains of utilisation: to cover projects extending the scope of the use of Geant4 in specific domains, eg underground experiments, protection of electronics from harsh environment in space, ...
- Provision of regular progress reports on the results of these projects in an online area.

## 5. Regression Suite

The creation of a verification and regression suite was identified as an important multi-year objective. A practical project to assist in defining requirements and to develop and test a prototype regression suite was identified as the goal of the current year.