

Concepts and definitions for identifying R&D (Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development)

This chapter provides the definition of research and experimental development (R&D) and of its components, basic research, applied research and experimental development. These definitions are essentially unchanged from those in previous editions of the manual. Where there are differences, they reflect changes in culture and the use of language. To provide guidance on what is and what is not an R&D activity, five criteria are provided which require the activity to be novel, creative, uncertain in its outcome, systematic and transferable and/or reproducible. Since the last edition, the treatment of R&D expenditure in the System of National Accounts (SNA) has changed from an expense to a capital investment. As a result, the language of this manual, and of the SNA, is closer and there are additional requirements for measurements of financial flows. While the manual has always applied to all scientific disciplines, there is more emphasis on the social sciences, humanities and the arts, in addition to the natural sciences and engineering. Measuring R&D activities through surveys, administrative data, or interviews raises questions about boundaries and what is and what is not included and this chapter provides examples to help answer those questions. The manual is used to interpret R&D data as part of policy development and evaluation, but the focus of this chapter is on definitions for measurement purposes.

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Knowledge Type: [Thematic report](#) [1]

Other Tag: [uncertainty](#) [2]

[creativity](#) [3]

[engineering](#) [4]

[applied research](#) [5]

[experimental development](#) [6]

[arts](#) [7]

[Frascati Manual](#) [8]

[health care](#) [9]

[higher education institutes](#) [10]

[basic research](#) [11]

[big data](#) [12]

[innovation performance](#) [13]

[non-tariff barriers](#) [14]

[product design](#) [15]

[proprietary technology](#) [16]

[research council](#) [17]

[research programmes](#) [18]

[science skills](#) [19]

[scientific careers](#) [20]

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 - [12] <https://www.innovationpolicyplatform.org/topic/big-data>
 - [13] <https://www.innovationpolicyplatform.org/topic/innovation-performance>
 - [14] <https://www.innovationpolicyplatform.org/topic/non-tariff-barriers>
 - [15] <https://www.innovationpolicyplatform.org/topic/product-design>
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