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Nota di contenuto	Cover; Contents; Acknowledgements; Introduction; 1. The origins of the Metre Convention, 1851 to 1869; Why?; The need for international agreement on measurement standards; The Great Exhibition of 1851 in London; The 1855 Paris Universal Exhibition and Statistical Congress; The 1867 Paris Universal Exhibition: A time of political tension in Europe; The unit of length for geodesy and the original definition of the metre; The International Conferences on Geodesy, Berlin, 1864 and 1867; Reactions from France: The Bureau des Longitudes; Academy of Science of Saint Petersburg Reaction from the Academie des sciences2. The creation of the International Metre Commission, 1869; Creation of the Metre Commission; The members of the French Section of the Metre Commission; The first meetings of the French Section; Once again: What should the origin of the new international metre be?; The first meeting of the Metre Commission, August 1870; 3. The International Metre Commission: meetings of 1872 and 1873; The order of things from 1869 to 1875; The Committee for Preparatory Research, April 1872; The International Metre Commission, September-October 1872 4. The casting of 1874 and the first of the new metre barsGreat Britain decides not to join; The problem of melting and casting platinum; Preparations for the Conservatoire casting; The casting of 250 kilograms of platinum-iridium on 13 May, 1874; Approval of the Permanent Committee; First indications that the alloy of the

Conservatoire was contaminated; To proceed regardless; 5. The Diplomatic Conference of the Metre, 1875; The first sessions of the Conference; The Special Commission; First drafts of the Convention; Attempts at a compromise proposal; The opinion of the French Government

The first vote on the proposalsThe 12 and 15 April sessions of the Diplomatic Conference; The signing of the Metre Convention on 20 May, 1875; 6. The creation of the BIPM and the new metric prototypes take shape; The first meeting of the International Committee for Weights and Measures; The founding members of the International Committee; Choosing the site for the International Bureau: The Pavillon de Breteuil; Decisions on the main instruments for the new institute; Progress between April 1875 and April 1876: Design for laboratory building

Difficult relations between the International Committee and the French SectionThe International Committee refuses the 1874 alloy; A new railway line and improved relations with the French Section; 7. The first decade of scientific work at the BIPM, 1879 to 1889; Progress with metres and instruments; Publications, official and scientific, and the library; Elections to the International Committee; Construction of the new prototypes, the metres; Construction of the new prototypes, the kilograms; More on the metres; Good relations with the French Section The measurement of temperature, the 1887 hydrogen scale

Sommario/riassunto

The International Bureau of Weights and Measures (BIPM) is currently implementing the greatest change ever in the world's system of weights and measures -- it is redefining the kilogram, the final artefact standard, and reorganizing the system of international units. This book tells the inside story of what led to these changes, from the events surrounding the founding of the BIPM in 1875 -- a landmark in the history of international cooperation -- to the present. It traces not only the evolution of the science, but also the story of the key individuals and events. The BIPM was the first inter
