

# Designation of the National Prototype of the Kilogram of Japan as an Important Cultural Property

## - A great contribution to the modernization and industrial development of Japan as the national mass standard -

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On 15th October 2021, the Council for Cultural Affairs submitted a report to the Minister of Education, Culture, Sports, Science and Technology proposing that the National Prototype of the Kilogram of Japan and related prototypes kept by the NMIJ/AIST be given the status of Important Cultural Properties on the basis of the deliberations and decisions of the Subdivision on Cultural Properties of the Council for Cultural Affairs held on the same day.

For about 130 years from 1889 to 2019, the kilogram, the unit of mass, was defined as the mass of the International Prototype of the Kilogram. The National Prototype of the Kilogram of Japan kept by the NMIJ/AIST is one of the copies of the International Prototype of the Kilogram. In 1891, the National Prototype of the Kilogram of Japan was set as the national mass standard, and a unit system in conformity with the international metric system was established on the basis of the conventional unit system, where the unit "shaku" (one shaku is approximately 30.3 cm) and the unit "kan" (one kan is approximately 3.75 kg) had been used.

Furthermore, in order to monitor the mass fluctuation of the National Prototype of the Kilogram, Japan received additional copies of the International Prototype of the Kilogram from the Bureau international des poids et mesures (BIPM) and used them as the secondary prototypes. Japan also received the Prototypes of the Kan to use them as the practical standards for the kan. The internationalized unit system played an important role as an intellectual infrastructure to introduce Western knowledge and technology when Japan was moving toward modernization. The National Prototype of the Kilogram of Japan continued to play a role as a national mass standard for about 130 years until 2019 and greatly contributed to the modernization and industrial development of Japan.

On the other hand, the National Prototype of the Meter of Japan was the national length standard for about 70 years until 1960, and it has already been designated as an Important Cultural Property. The definition of the kilogram was revised in 2019 and is now based on the Planck constant. In response to this redefinition, the historical and academic values of the National Prototype of the Kilogram of Japan, the Secondary Prototype of the Kilogram, the Prototypes of the Kan and the certificate of the National Prototype of the Kilogram issued by the BIPM in 1889 were evaluated, and they are to be additionally designated as Important Cultural Properties.



National Prototype of the Kilogram of Japan which was used as the national mass standard for about 130 years.



Upper center: National Prototype of the Kilogram of Japan  
Upper left: Secondary Prototype of the Kilogram  
Lower left and right: Prototypes of the Kan

### NOTE by the editorial office:

On 22nd March 2022, the National Prototype of the Kilogram of Japan and related prototypes were formally given the status of Important Cultural Properties