# Nomination Form International Memory of the World Register

The Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways

ID Code [2016-25]

23.05.2016

# 1.0 Summary (max 200 words)

The nomination is for *the Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways* held at the Technisches Museum Wien. This inventory, one of the world's oldest and most precious inventories on the history of the railways, comprises 164 original documents dating from between 1844 and 1910. The archival material also bears an important testimony to the importance attached to technical innovations in the 19<sup>th</sup> century as well as the growing awareness that technical projects require meticulous documentation. In this instance the nomination relates to the documentation of a pioneering achievement that was already reviewed at the international level at the time of its execution and regarded as trend-setting for comparable railway construction projects in the future.

Given its route and its length the Semmering Railway is regarded as the world's first mountain railways and, in 1998, it became the world's first railway line to be listed as a UNESCO World Heritage Site. Engineers' notebooks, sketches, drawings, watercolours, lithographs and steel engravings all bear witness to the way in which this major construction site evolved in the mountain wilderness and how the railway line's stunning viaducts and tunnels were built using the engineering resources available at the time. Design drawings for the locomotive competition (1851) and for the first series-built mountain locomotives are a tribute to the engineers' pioneering achievements, particularly since the use of railways on steep gradients was a matter of highly controversial debate among international experts at the time. Panoramic vistas and photographic views highlight the challenging route and illustrate the fascination which the mountain railway clearly exerted on its first passengers as it wound its way through the ruggedly romantic landscape of the Semmering. Documents published on the occasion of the first major anniversaries (1879 and 1904) show that the Semmering Railway was perceived as a milestone in railway engineering early on.

#### 2.1 Name of nominator (person or organization)

Technisches Museum Wien (Vienna Technical Museum)

## 2.2 Relationship to the nominated documentary heritage

Owner of the documentary heritage

# 2.3 Contact person(s) (to provide information on nomination)

Carla Camilleri, Bettina Jernej

# 2.4 Contact details

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#### 3.0 Identity and description of the documentary heritage

## 3.1 Name and identification details of the items being nominated

If inscribed, the exact title and institution(s) to appear on the certificate should be given 'The Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways'

are held at the Technisches Museum Wien.

The nominated archival material is listed and described in the *Beschreibender Katalog des k. k. Historischen Museums der österreichischen Eisenbahnen, Verlag des k. k. Histor. Museums der österr. Eisenbahnen. Vienna 1902* [descriptive catalogue published by the Imperial and Royal Historical Museum of Austrian Railways] (and the 1906 and 1910 addenda).

#### 3.4 History/provenance

The Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways are one of the world's oldest inventories on the history of the railways.

The archival material is comprised of donations by engineers involved in the railway's construction, Austrian railway administrations, highly decorated figures in the railway sector (incl. Wilhelm Eichler Freiherr von Eichkron, Karl Ritter von Hornbostel, Erwin Lihotzky, August Ritter von Löhr), and testimonials from the first anniversary celebrations.

The documents were actively collected and continually expanded by the museum management of the Imperial & Royal Historical Museum of Austrian Railways founded in 1885 to illustrate the history of the railways with an 'ever more faithful and complete picture of their origins and continual development' (see descriptive catalogue of the Imperial & Royal Historical Museum of Austrian Railways, Vienna 1902, p. X).

The Railway Museum was initially housed on premises owned by the State Railways near Vienna's *Westbahnhof*. In 1914 the Museum was transferred to the Technisches Museum's new premises while retaining its administrative autonomy. It was only in 1980 that the archival material and the collections of the Austrian Railway Museum were incorporated into the Technisches Museum Wien.

#### 4.0 Legal information

#### 4.1 Owner of the documentary heritage (name and contact details)

Technisches Museum Wien mit Österreichischer Mediathek Mariahilferstrasse 212

A-1140 Vienna, Austria

#### 4.2 Custodian of the documentary heritage (name and contact details if different from the owner)

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#### 4.3. Legal Status

As a part of the collections of the Technisches Museum Wien, the Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian Railways are owned by the Republic of Austria.

#### 4.4 Accessibility

The Documents on the Semmering Railway from the Imperial & Royal Historical Museum of Austrian

Railways are listed in meticulous detail in the Museum database, scientific documented, fully digitised, and accessible online on the Museum's website.

The complete archival material on the subject of the Semmering Railway from the archives of the Technisches Museum Wien is available online at:

http://www.technischesmuseum.at/online-

sammlung/site/default.aspx#/includes/viewDetail.htm?mode=search&facets=exhibition\_lref:14202&hasl mage=false&isDisplayed=false

#### 4.5 Copyright status

Public domain

# 5.0 Assessment against the selection criteria

# 5.1 Authenticity

The stock is comprised of original documents: watercolours, sketches, drawings, steel engravings, lithographs, photographs, caricatures, notebooks, correspondence, technical reports, design drawings, and plans.

## 5.2 World significance

The diverse collection of source material at the Technisches Museum Wien is a unique documentation of a pioneering achievement recognised worldwide. The laying of a railway line over the Semmering Pass represents a stage in the development of civil engineering much noted by international experts, namely the construction of the world's first ever mountain railway. This inventory of documents also highlights the growing self-assurance of the engineering profession as a whole, with this project a tribute to its achievements.

#### 5.3 Comparative criteria:

#### 1-3 Time, Place, People

#### Time and People:

The events of 1848 were instrumental in the project's execution. In the wake of the March Revolution of 1848 Ghega's plans were approved by the Ministry for Public Works in a bid to alleviate unemployment and, by the same token, maintain a degree of control over any potential revolutionary aspirations of Vienna's labour force; the commencement of construction work was subsequently scheduled. Between 1848 and 1854 more than 18,000 workers from many countries throughout the Austrian monarchy were employed on the construction site. As Melchior von Schickh relates in his guide to travelling the Semmering railway line in 1851: 'Everything here is impressive in character, the region, the structures, and the sheer industry of these 18,000 workers concentrated on a small spot. All the nationalities from across the monarchy's vast realm are represented here: Italian, Bohemians, Croatians and Tyroleans' (see EA-000720).

The Milanese firm of building contractors Ferdinand Tallachini commissioned artist Imre Benkert to record the large-scale building site as it evolved in the mountain wilderness, and Benkert proceeded to do so with a high level of artistry and technical detail (see EA-001452). Similarly, the project engineers documented the progress of the construction site in meticulous detail in their notebooks, drawings and watercolours (see EA-000694-01 to 03 and EA-000698-01 to 14).

During the 19<sup>th</sup> century the engineering profession gained more and more in social standing. Carl Ghega, the chief engineer on the railway project, was in fact knighted (*Ritter*) in 1851. In 1854, immediately after completing the Semmering Railway he compiled an extensive performance report entitled a *Picturesque Atlas of the Railway Line over the Semmering*; besides a comprehensive technical account, it also comprised topographical maps, views of the towns and villages along the route, and a 6.2 m fold-out panorama by Viennese artist Ludwig Czerny (see EA-000688). In 1869 the

Austrian Association of Engineers and Architects erected a monument in Ghega's honour on the Semmering (see EA-000818). Anniversary celebrations were held on a grand scale in 1879 and 1904 (see EA-000695 and EA-000741).

#### Place:

The Semmering Railway is around 42 km long and regarded as a topographically challenging section of what is known as the *Südbahn*, or southern railway line. Completion of the *Südbahn* meant that there was now a continuous railway link between Vienna, the imperial capital and residence, and Trieste, the Habsburg monarchy's most important seaport. A series of steel engravings by French artist Nicolas Chapuy dated 1856 illustrates the tourist highlights not just along the Semmering section, but also the entire *Südbahn* line. In these steel engravings the artist showcases the harmonious interplay of architecture, engineering and nature (see EA-001539).

It was now possible to travel in comfort by rail from Vienna and reach the eastern foothills of the Alps in only two hours. The *Panorama of the Semmering* by the artist Imre Benkert was a popular travel guide among the first passengers on the Semmering rail line; it was reprinted no fewer than nine times between 1855 and 1873 (see EA-002444). Thanks to the new rail link, Reichenau and Semmering became two of the most exclusive mountain spa resorts in the Austro-Hungarian monarchy (see EA-000828).

#### 4 Subject and theme

The world's first ever large-scale civil engineering project aimed at building a mountain railway line was meticulously documented not after the fact, but during its actual construction. The diversity and sheer detail of the early sources provided by the artists and engineers represent a technical and historical collection of international significance for the chronicling of the early days of the railways.

#### 5 Form and style

The abundance of document types is remarkable. Besides purely technical documents such as planning documents, notebooks and calculations, the collection also comprises artistic and photographic representations that illustrate in great detail the route taken by the railway line and the railway infrastructure that still shapes the Semmering landscape to this day.

#### 6.0 Contextual information

#### 6.1 Rarity

This special technical and historical collection was compiled mainly by the civil engineers who were involved in the project and by renowned personalities in the railway sector; by virtue of its composition, its significance, and the diversity of the archival material, it is unique.

#### 6.2 Integrity

The documents submitted are complete. The history of its inventory is extensively documented in the catalogue of the Imperial & Royal Historical Museum of Austrian Railways.