### Decision: 39 COM 8B.33

The World Heritage Committee,

1. Having examined Documents WHC-15/39.COM/8B and WHC-15/39.COM/INF.8B1,

2. Inscribes The Forth Bridge, United Kingdom, on the World Heritage List on the basis of criteria (i) and (iv);

3. Adopts the following Statement of Outstanding Universal Value:

# **Brief synthesis**

The Forth Bridge, which spans the estuary (Firth) of the River Forth in eastern Scotland to link Fife to Edinburgh by railway, was the world's earliest great multi-span cantilever bridge, and at 2,529 m remains one of the longest. It opened in 1890 and continues to operate as an important passenger and freight rail bridge. This enormous structure, with its distinctive industrial aesthetic and striking red colour, was conceived and built using advanced civil engineering design principles and construction methods. Innovative in design, materials, and scale, the Forth Bridge is an extraordinary and impressive milestone in bridge design and construction during the period when railways came to dominate long-distance land travel.

This large-scale engineering work's appearance is the result of a forthright, unadorned display of its structural elements. It is comprised of about 54,000 tons of mild steel plate rolled and riveted into 4m diameter tubes used in compression, and lighter steel spans used in tension. The use of mild steel, a relatively new material in the 1880s, on such a large-scale project was innovative, and helped to bolster its reputation. The superstructure of the bridge takes the form of three double-cantilever towers rising 110 m above their granite pier foundations, with cantilever arms to each side. The cantilever arms each project 207 m from the towers and are linked together by two suspended spans, each 107 m long. The resulting 521-m spans formed by the three towers were individually the longest in the world for 28 years, and remain collectively the longest in a multi-span cantilever bridge. The Forth Bridge is the culmination of its typology, scarcely repeated but widely admired as an engineering wonder of the world.

**Criterion (i):** The Forth Bridge is a masterpiece of creative genius because of its distinctive industrial aesthetic, which is the result of a forthright, unadorned display of its massive, functional structural elements.

**Criterion (iv):** The Forth Bridge is an extraordinary and impressive milestone in the evolution of bridge design and construction during the period when railways came to dominate long-distance land travel, innovative in its concept, its use of mild steel, and its enormous scale.

# Integrity

The property contains all the elements necessary to express the Outstanding Universal Value of The Forth Bridge, including granite piers and steel superstructure. The 7.5-ha property is of adequate size to ensure the complete representation of the features and processes that convey the property's significance, and it does not suffer from adverse effects of development or neglect.

# Authenticity

The Forth Bridge is fully authentic in form and design, which are virtually unaltered; materials and substance, which have undergone only minimal changes; and use and function, which have continued as originally intended. The links between the Outstanding Universal Value of the bridge and its attributes are therefore truthfully expressed, and the attributes fully convey the value of the property.

### **Protection and management requirements**

The Forth Bridge is listed at Category 'A' as a building of special architectural or historic interest, giving the property the highest level of statutory protection. Its immediate surroundings are also protected by means of a suite of cultural and natural heritage designations. Owned by Network Rail Limited, the property will be managed in accordance with a Property Management Plan by the bodies that have a statutory planning function. The Forth Bridges Forum partnership has been established to ensure that local stakeholders' interests remain at the core of the management of the Forth bridges.

Specific long-term expectations related to key issues include maintenance of strong community support, broadening understanding in the context of world bridges, attention to developments within key views, risk management, and inspiring others.

4. Recommends that the State Party give consideration to the following: a) Creating key indicators that are more specific and relate more directly to the attributes that convey potential Outstanding Universal Value;

b) Extending the Property Management Plan to include an interpretation and tourism plan;

c) Submitting plans for any proposed visitor centre at the earliest possibility to the World Heritage Centre for review, in accordance with paragraph 172 of the *Operational Guidelines*;

5. Requests the State Party to submit to the World Heritage Centre, by **1 December 2016**, a report on the selection of key viewsheds and views of the bridge for inclusion in the appropriate planning instruments and management plan, along with an analysis of their effectiveness in ensuring the protection of these key viewsheds and views, for examination by the World Heritage Committee at its 41st session in 2017.

Decisions adopted by the World Heritage Committee WHC-15/39.COM/19, page 212 at its 39th session (Bonn, 2015)