I. Main Documents

Recommendation a)

Developing as a priority a detailed conservation work programme for Hashima Island

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B, pp 98-99) noted the following points as the premise of the Recommendation a) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- ICOMOS considers that the plan for the Hashima Coal Mine needs to be more detailed. The state of conservation of this site is poor and requires urgent conservation work on a large scale.
- The conservation management plan provides general policies to prevent further deterioration of the attributes related to the Meiji era.
- There is currently not a prioritised program of works based on its overall state of conservation, nor a time frame for works to commence.
- Immediate action is required particularly for the revetment to retain not only the wall but also the whole island. It was confirmed to ICOMOS that ¥200M/year will be made available over the next five financial years to undertake works.

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation a).

The Nagasaki City drew up a "Conservation, Restoration, Presentation and Public Utilization Plan of Hashima Coal Mine" based on the standard form provided by the Cabinet Secretariat of the Government of Japan (**Appendix a)-1**). The Cabinet Secretariat compiled "Conservation Work Programme" (hereinafter referred to as a "Programme") in cooperation with Nagasaki City, by extracting the sections for conservation work included in the above Plan. Programme is attached to this State of Conservation Report as **Appendix a)-2**, which notes basic approaches, policies and methods for conservation, and an implementation schedule for detailed conservation measures for the Hashima Coal Mine.

3. Composition of the Programme

The Programme was established under the following composition in general.

1) List of the constituent elements of Hashima Coal Mine that contribute to the Outstanding Universal Value of the World Heritage property, and the basic approach to the conservation work.
2) Conservation policies for the Hashima Coal Mine based on the above basic approach.
3) Practical measures consisting of four points; i) survey and study, ii) conservation and restoration, iii) presentation of coal industrial system and iv) arrangement and improvement of surrounding landscape.
4) Phased implementation schedule based on the order of priorities.

4. Overview of the Programme

The Programme was drawn up with an emphasis on conservation of the constituent elements that contribute to the Outstanding Universal Value of the World Heritage property, based on the points noted in the World Heritage Committee Decision 39COM8B.14 and ICOMOS Evaluation Report WHC-15/39.COM/INF.8B.

The Programme is attached as **Appendix a)-2**, an overview of which is given below.

(1) Basic approach to conservation

Nagasaki City made a holistic decision on conservation work from the following three perspectives, setting an order of priorities for each element and selecting the following physical improvement methods.

(i) **Conservation maintenance of Hashima Island:** The functions of the seawall revetment and retaining walls will be properly maintained to protect the topography of the island, which provides the foundation for the preservation of structures and remains on the island.

(ii) **Stable maintenance of the remains:** Remains contributing to the Outstanding Universal Value as a World Heritage property and remains embodying essential value as a National Historical Site will be properly maintained.

(iii) **Maintenance of appearance:** Efforts will be made to maintain the distinctive battleship-like silhouette as seen from out at sea, as well as the ambience of ruins in the foreground where deterioration and damage has progressed.

Sub-points (i) to (iii) can be reformulated as follows from the perspective of maintaining and preserving constituent elements that contribute to the Outstanding Universal Value of the property:

1) Areas that have deteriorated or become unstable will be restored in order to maintain in a stable condition the constituent element contributing to the Outstanding Universal Value as the World Heritage component part (remains of revetment in the seawall and retaining wall, and production facility from the Meiji era).

2) Elements embodying the essential value of National Historic Site other than those constituent elements contributing to the Outstanding Universal Value as the World Heritage component part (concrete-built production facility remains) and the elements closely related to the essential value of National Historic Site (remains of accommodation facilities) will be restored in order to sustain evidence of the distinctive battleship-shaped silhouette of the island, the history of the advance and decline of the coal industry, and the actual state of the mining community.

3) A comprehensive assessment will be made, priorities set, and restoration undertaken in phases from the perspectives of the degree of deterioration of constituent elements, whether or not there are applicable preservation technologies, the degree of contribution to the Outstanding Universal Value as the World Heritage component part, the extent of the impact on other elements and visitor safety, and the necessary expenditure.

4) The reinforced concrete remains in the Hashima Coal Mine include some which would be difficult to maintain as structures given the extent of deterioration and damage. While the concentration of these will need to be gradually reduced over the long term, utmost efforts will be made to maintain the battleship-like silhouette as seen from the surrounding waters.

(2) Policies and methods

The policies and methods could be summarized in view of the following four items; i) survey and study, ii) conservation and restoration, iii) presentation of industrial system and iv) arrangement and improvement of surrounding landscape.

1) Survey and study

To reaffirm and further deepen the state of the Hashima Coal Mine in terms of the Outstanding Universal Value of the “Sites of Japan’s Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining” (hereinafter referred to as “Sites of Japan’s Meiji Industrial Revolution”), various surveys will be undertaken. These include surveys of the remains (including an excavation survey), a historical document survey to identify the industrial (coal mining) system, a landscape survey of the World Heritage component part and surrounds, and a survey to ascertain the visitor situation and visitor impact on the component part.

Particularly when restoring the constituent elements that are thought to have been part of production facilities during the Meiji period, such as the pithead and winding shaft, surveys of the underground archaeological remains will be undertaken to the possible extent.

Structures made of reinforced concrete, stone, and brick, etc., will be subjected to material analyses and strength tests to ascertain scientifically the extent of structural deterioration. Before restoring structures, measurement, structural, and ground surveys will be undertaken for facilities so that survey and restoration work can be undertaken safely, as well as identifying the safety performance of said structures.

Monitoring will be conducted once a year using monitoring charts to ascertain the state of the component part and the buffer zone. Nagasaki City will present monitoring results in an annual report for confirmation and agreement at the Nagasaki Conservation Council and reflect the Council’s evaluation in conservation, restoration, presentation and public utilization work.

2) Conservation and restoration of structures and remains

Physical improvement methods will be instituted for the elements of the Hashima Coal Mine—the remains of revetments in the seawall and retaining wall, production facilities, and accommodation facilities—in order of priority in three phases over 30 years.

The order of priority of work for each element will be determined holistically, with factors including the degree of deterioration, applicable preservation and restoration technologies, the degree of contribution to the Outstanding Universal Value as the World Heritage component part, the impact on other structures and on visitor safety, and the necessary expenditure.

Restoration work for revetments in the seawall will prioritize maintenance of the element as it contributes to the Outstanding Universal Value, beginning with those areas where large-scale deformation could occur that would impair seawall functions. The surrounding revetment will then be reinforced in order to maintain seawall functions.

However, in order to restore the revetment remains in a harsh environment, further consideration is required, from the technical point of view of the seawall strength aspect. Discussion will be continued in a working group composed of technical and specialized framework.

The retaining wall does not appear to have any particular areas of damage at present, so work will be addressed with a view to the state of conservation and restoration work across Hashima Island as a whole. The priority will be on maintaining the constituent elements contributing to the Outstanding Universal Value of the World Heritage component part, with major restoration work beginning with the most seriously deteriorated areas of the wall.

In restoring production facilities, the priority will be on maintaining the constituent elements contributing to the Outstanding Universal Value of the World Heritage component part, with restoration beginning with the most seriously deteriorated areas. The various structures illustrating the flow of the coal production system will be next on the restoration list.

As the old accommodation facilities contribute significantly to the unique appearance of Hashima Island, restoration will be approached with priority on those buildings for which building methods have been established and preservation is most feasible.

3) Presentation of the coal mining system

Facilities for presenting and illustrating the coal mining system will be established in three zones (see below): (a) the seawall revetment remains zone; (b) the production facility remains zone; and (c) the accommodation facility remains zone.

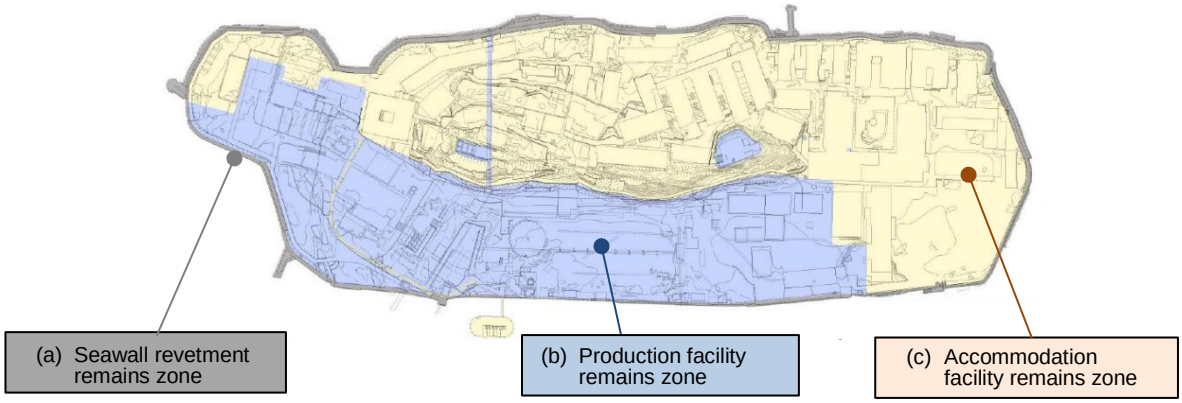


Figure. 1 Zoning of Hashima Coal Mine

(a) Seawall revetment remains zone

This is the zone comprising the seawall revetment remains around the island. Restoration will basically focus on preservation of the revetment remains, and no facilities will be set up for public utilization.

(b) Production facility remains zone

This is the zone comprising the remains of facilities related to coal production. Only viewing routes will be opened to the public, with the necessary facilities established for surveys, research, and public utilization.

- Install new viewing routes of the minimum possible scale
- Install a plaque commemorating World Heritage inscription in the viewing square and install small-scale ICT devices

(c) Accommodation facility remains zone

This is the zone comprising the remains of facilities related to the daily lives of employees and mine staff. The necessary facilities will be set up for the work for survey and research, conservation and restoration, and presentation of the component part.

- Install a management access route

4) Arrangement and improvement of landscape (external appearance)

The aim will be to depict the establishment and development of the coal industry which began from the Meiji period and preserve features unique to the island, namely (1) the current relict industrial

landscape in which production facilities remain, (2) the distinctive battleship-shaped silhouette created by the seawall revetment, production and accommodation facilities, and (3) the appearance of damaged and deteriorated ruins. As a rule, the vertical seawall which makes a substantial contribution to the long-distance view of the Hashima Coal Mine will be maintained.

At this point in time, there is no plan to establish new structures on the nearby coast that comprises the buffer zone of the component part. The buffer zone will continue to be protected pursuant to the Coast Act, the Port and Harbor Act, and the Nagasaki City Maritime Administration Ordinance.

(3) Implementation schedule

The city has set out a 30-year implementation schedule beginning in 2018.

This comprises three 10-year phases, and will be reviewed every 10 years based on the state of progress, financial state, and the results of research on conservation and restoration techniques, etc. The city envisages a budget of around ¥10.8 billion across the 30 years of the implementation schedule. Nagasaki City will make effective use of the Hashima (Gunkanjima) Provision Fund set up in 2015, etc. This includes the “¥200 million/year to be made available over the next five financial years [i.e., a total of one billion yen] to undertake works” noted in the ICOMOS Report WHC-15/39.COM/INF.8B.

5. Priority projects already underway at the Hashima Coal Mine

Since the Hashima Coal Mine closed in 1974, no conservation and restoration work has been undertaken for preservation purposes except for disaster reconstruction work along the seawall revetment and the construction of a viewing route for visitors landing on the island. As a result, the remains have continued to deteriorate. The following facilities in particular have a high risk of collapse, which would have a substantial impact in terms of the preservation of remains. To deal with this situation, emergency measures have been undertaken on a priority basis since 2014.

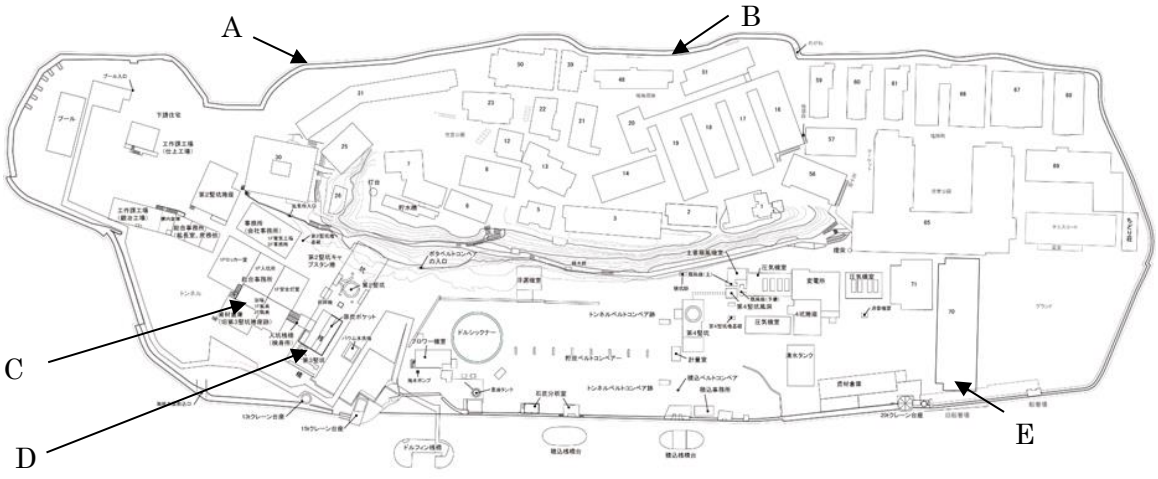


Figure. 2 Location of emergency measures A-E undertaken during the preparatory period
(See (1) to (3) on following page about the current state and measures taken on restoration areas)

(1) Seawall revetment remains

Restoration area	State	Measures taken
A:Seawall revetment on western side of Building No. 31	・The rear of the remains of seawall revetment had been scoured out and caved in substantially. ・Unaddressed, the caved-in area was highly likely to widen, destabilizing the structure of the seawall revetment, and causing collapse.	・The western sea opening was blocked with concrete in FY 2014 (completed in Nov. 2014). ・The sunken area was filled with concrete in FY 2015 (completed in Sept. 2015).
B:Seawall revetment on western side of Building No. 51	・The rear of the seawall revetment was scoured out by the July 2014 typhoon, caving in substantially. ・Unaddressed, the caved-in area was highly likely to widen, destabilizing the remains of seawall revetment and Building No. 51, and causing them to collapse.	・The western sea opening was blocked with concrete in FY 2014 (completed in Nov. 2014). ・The sunken area was filled with concrete in FY 2015 (completed in Sept. 2015).

(2) Production facility remains

Restoration area	State	Measures taken
C: Pit No. 3 winding machine room (Material storage warehouse)	・Only one wall remained standing, rendering the structure unstable. ・Cracks and missing bricks were apparent across the wall, with the collapse of the arch crown highly likely to lead to the collapse of bricks in the crown and the section above the crown.	・Bricks were added in FY 2015 to replace those missing in the arch crown (completed March 2016). ・Reinforcing was undertaken in FY 2016 (initial response; completed March 2017). ・Reinforcing will be undertaken from FY 2017, following an excavation survey, structural survey, basic and implementation projects, and discussion at the expert committees, etc. (secondary response, structural stabilization).
D: Mine entry landing (Physical inspection screening)	・The truss-style steel frame that supported the stair passage had corroded away, leaving only the concrete structure. ・The whole structure had bent, with the steel fulcrum showing marked deterioration. ・The whole structure was highly likely to collapse at once.	・Reinforcing was undertaken in FY 2016 (initial response; completed in March 2017). ・Reinforcing will be undertaken from FY 2017, following an excavation survey, structural survey, basic and implementation projects, and discussion at the expert committees, etc. (secondary response, structural stabilization).

(3) Accommodation facility remains

Restoration area	State	Measures taken
E:Lower part of Building No. 70 (Building of Hashima Elementary and Junior High Schools)	・When the 1991 typhoon caused the seawall revetment to break, scouring created a major cavity in the basement of the building nearby. ・The concrete pile foundations of the building were exposed, with several piles also lost. ・The building has lost support from the pile foundations and has become unstable. If the building collapses, this is highly likely to impact on the remains of seawall revetment nearby.	・In FY 2016, an implementation project was drawn up and discussion conducted at the expert committees, etc. ・Scoured areas will be filled over FY 2017 and FY 2018.

6. Reference materials

Appendix a)-1 Standard form for the "Conservation, Restoration, Presentation and Public Utilization Plan" which could be a source when creating a "Conservation Work Programme" pursuant to Recommendations a) and b)) for each component part

Appendix a)-2 "Conservation work programme for Hashima Coal Mine (Area 6 Nagasaki/ Component part 6-7)"

Recommendation b)

Develop a prioritised conservation work programme for the property and its component parts and an implementation programme.

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B pp 98-99) noted the following points as the premise of Recommendation b) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- The condition of some of the component parts may need to be reassessed, including Glover House and Office, Miyanohara Pit, Manda Pit and the Repair Shop.
- There is currently not a prioritised program of works based on its overall state of conservation, nor a time frame for works to commence.

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation b).

- The owners of the component parts or the relevant municipal authorities established the "Conservation, Restoration, Presentation and Public Utilization Plan" for each of the component parts, based on the standard form (**Appendix a)-1**) provided by the Cabinet Secretariat of the Government of Japan. The Cabinet Secretariat made efforts to ensure the coherence of each Plan in terms of the whole property's component parts. Moreover, the Cabinet Secretariat compiled the "Conservation Work Programme and Implementation Programme" of each of the component parts pursuant to Recommendation b) (hereinafter referred to as a "Programme"), in cooperation with the owners of the component parts or the relevant municipal authorities, by extracting the sections for conservation work included in the above Plan. Programmes for each of the component parts have been attached to this report as **Appendix b)-1** to **Appendix b)-16**.
- From the perspective of the whole property, rather than assigning an order of priorities to the conservation work to be undertaken for each component part, the Government of Japan, local governments, and other relevant institutions have sought to achieve balanced progress across all component parts with consideration also to budget measures for each fiscal year, etc.
- Programmes for each component part were created based on its status in terms of the Outstanding Universal Value, as well as their particular geographical location, characters, and current state, with the aim of resolving issues within and outside the component part and achieving the conservation and restoration of those constituent elements within the component part contributing to the Outstanding Universal Value as the main point.
- Each Programme lays out a prioritised implementation schedule.
- Those works for each component part which are already underway on a priority basis are attached as **Appendix b)-17**.

3. Composition of the Programmes

The Programmes were established under the following composition in general.

1) List of the constituent elements of each component part that contribute to the Outstanding Universal Value of the World Heritage property, and the basic approach to the conservation work.
2) Conservation policies for each component part based on the above basic approach.
3) Practical measures consisting of four points; i) survey and study, ii) conservation and restoration, iii) presentation of industrial system and iv) arrangement and improvement of surrounding landscape.
4) Phased implementation schedule based on the order of priorities.

4. Overview of the Programmes

The Programmes for each component part have been drawn up with an emphasis on conservation of the constituent elements that contribute to the Outstanding Universal Value of the World Heritage property, based on the items noted in the World Heritage Committee Decision 39COM8B.14 and ICOMOS Evaluation Report WHC-15/39.COM/INF.8B.

Property contains both working and non-working component parts. Particularly, four working component parts owned by Mitsubishi Heavy Industries exist in Area 6 Nagasaki. These working component parts, consisting of No.3 Dry Dock, Giant Cantilever Crane, Former Patten Shop and Senshokaku Guest House, have been in continuous operation by Mitsubishi since first built, and they remain in use, although one component part has changed in use – the Former Pattern Shop which is now a museum.

At present, above four component parts are in a good state of conservation, and no major conservation works are anticipated. Accordingly, the component parts will continue to be maintained by the company in accordance with the standard operational maintenance planning and implementation program which has been in existence for many years. This planning and implementation has achieved good results to date, and will continue to care for the component parts into the future.

The Programmes are attached as **Appendix b)-1** to **Appendix b)-16**, an overview of which is noted below.

(1) Hagi Reverberatory Furnace (Area 1 Hagi/Component Part 1-1)

The Hagi Reverberatory Furnace stands as a symbol of the early industrialization process of trial and error, when late Edo period Japan and the Hagi (Choshu) Clan were seeking to respond to the rapid pace of industrialization. It illustrates the challenge phase of trial and error in the field of iron and steel manufacturing.

Hagi City will not undertake any immediate large-scale restoration work with dismantling members on the upper brick section of the furnace, but rather engage in the minimum necessary intervention, primarily mounting replacement bricks in places that have deteriorated particularly badly and supplementing this with other methods where necessary. The city will also engage in long-term monitoring of the furnace through ongoing displacement surveys and fixed-point observations, as well as studying building methods and materials in order to accumulate new knowledge and skills for the next stage of restoration.

Hagi City will establish viewing points along observation routes within the component part that

enable visitors to see the furnace in its entirety, as well as ensuring lines of movement that enable them to approach the furnace and view its silhouette from multiple directions. Vegetation will be trimmed so that the furnace can also be seen from the surrounding area. The city will create a viewing point around the furnace so that visitors can look out over the Ebisugahana Shipyard, a neighboring component part.

(2) Ebisugahana Shipyard (Area 1 Hagi/Component Part 1-2)

The Ebisugahana Shipyard is the remains of a shipyard where Western-style wooden sailing-style warships were built by the Hagi (Choshu) Clan with Western shipbuilding technologies from two different countries in order to reinforce the military power of the Hagi Clan, which was concerned about maritime defense. The shipyard illustrates the challenge phase of trial and error in the fields of iron and steel manufacturing and ship-building.

The stone breakwater will be subjected to ongoing observation using monitoring charts to check for changes or deterioration in the stonework. Conservation and restoration work to date will be confirmed and additional repairs, conservation and restoration work will be undertaken where necessary.

Based on the results of excavation surveys, Hagi City will install planar markers showing the locations and scales of underground archeological remains on the ground surface immediately above protective earth layer, and will also provide information along the observation routes based on the mutual connections between the various remains to enable visitors to understand the shipbuilding system.

The appearance of the Ebisu-sha Shrine, which existed before the shipyard opened and which has maintained its form since the shipyard closed, will be maintained, and improved where necessary, along with the hillside and forests spreading out behind it and also the attractive fishing ports and villages that fringe the Obataura Inlet.

(3) Ohitayama Tatara Iron Works (Area 1 Hagi/Component Part 1-3)

The Ohitayama Tatara Iron Works is the archaeological remains of an ironworks that utilized the ancient Japanese tatara ironworking technique to supply the iron for making the necessary nails and anchors, etc., for building Western-style wooden sailing warships to reinforce the military power of the Hagi (Choshu) Clan, which was concerned about maritime defense. It illustrates the challenge phase of trial and error in the fields of iron and steel manufacturing and ship-building.

Hagi City will maintain the archaeological site in a sustainable condition. Where exposed remains such as stone walls have deteriorated, the causes of that deterioration will be identified and maintenance and reinforcement work undertaken using methods that minimize the impact on the remains.

At the same time, the city will build paths and other instruments that enable the ironmaking process to be envisioned to help visitors gain a full understanding. The connections between the site and the Ebisugahana Shipyard where the Western-style warships were built will also be actively highlighted.

Landowners and managers will appropriately manage the surrounding forests that were the source of the fuel coal for the ironworks, as well as the river which provided the water necessary for scouring iron sand. In relation to forests in particular, Hagi City and forest owners and/or managers will recreate over the long term the forestscape that existed when the ironworks was operating.

(4) Hagi Castle Town (Area 1 Hagi/Component Part 1-4)

Hagi Castle Town comprises the Ruins of the Castle, the District of the Upper Class Samurai, and the

District of the Merchant Class. It illustrates the state of an entire local community during Hagi’s challenge phase of trial and error in the fields of iron and steel manufacturing and ship-building.

Hagi City will carry out restoration work to maintain historic buildings, etc., and underground archaeological remains in a stable condition and maintain the attractive landscape of the castle remains and Hagi Castle Town. For the castle remains, to maintain the stability of the stone walls, which convey the ambience of the original castle, any areas where there is swelling or loosening will be restored using primarily traditional methods. The outer moat and earthen wall at the eastern edge of the Castle Town has already been completely restored, so in general only the necessary spot restorations will be made to maintain the moat and earthen wall in its current state. Traditional buildings in the districts of upper class samurai and of merchant class will generally be restored to maintain them in a stable condition in their current state, with areas that were clearly added at a later time converted and restored to traditional materials.

Multiple tour routes will be set up to enable visitors to understand the history and functions of the three areas making up Hagi Castle Town, with road signage and explanatory boards installed to convey information to visitors.

(5) Shokasonjuku Academy (Area 1 Hagi/Component Part 1-5)

Shokasonjuku Academy is a place of education that fostered many individuals who played an active role in Japan’s modernization and industrialization from late Edo period into the early years of Meiji era. It is a component part that illustrates the Hagi’s challenge phase of trial and error in the fields of iron and steel manufacturing and ship-building.

As the owner, Shoin Shrine (a religious corporation) will maintain the Yoshida Shoin residence and the school building in a good and stable condition, and strengthen any areas that become unstable. Based on regular monitoring by Hagi City, Shoin Shrine will also make repairs at the appropriate time. The hedge surrounding the compound will be replanted based on the historical drawings, etc., restoring the scope and the atmosphere of the original grounds. The routes used by shrine worshippers and site visitors will also be separated to prevent crowding within the shrine compound and mitigate visitor pressure.

(6) Shuseikan (Area 2 Kagoshima/Component Part 2-1)

Shuseikan is the remains of the factory complex the Satsuma Clan built for the Shuseikan Project, which was launched as a means of encouraging new industry and making Japan a strong and wealthy nation in the face of the threat posed by the Western powers. It illustrates the challenge phase of trial and error in the field of iron and steel manufacturing up to the phase in which Western science and technology was introduced in the field of shipbuilding.

While no areas of the above-ground remains or the underground archaeological remains of the reverberatory furnace and spinning mill, etc. appear to be in urgent need of treatment, the owners (Kagoshima City and Shimadzu, Ltd.) will engage in regular monitoring and, in the case that deterioration or damage is identified, conduct excavation surveys and restoration work.

The owner will create an observation route that enables visitors to visualize the industrial systems of the time, including cannon manufacturing, shipbuilding, and textile manufacturing, setting up information and guidance boards along the way and also installing planar markers on the surface ground

of protective earthen layer to display the locations, scales and structure of the underground archeological remains.

The division of the respective guidance functions of Shoko Shuseikan (Former Shuseikan Machinery Factory) and the Former Foreign Engineer’s Residence will be clarified, and Shimadzu, Ltd. will build a new guidance facility in a location convenient for visitors to present an overview of the Sites of Japan’s Meiji Industrial Revolution and the Shuseikan Project as a whole.

(7) Terayama Charcoal Kiln (Area 2 Kagoshima/Component Part 2-2)

The Terayama Charcoal Kiln is the remains of a large kiln built for the mass production of hard charcoal as the fuel needed for the Shuseikan Project. It illustrates the challenge phase of trial and error in the field of iron and steel manufacturing.

Kagoshima City will conducted a displacement measurement survey of the kiln’s masonry, engaging in restoration to maintain the masonry in a stable condition. The deciduous broad-leaved trees around the kiln remains, as well as the stream running down the western side which supplied the charcoal cooling water, are both indispensable elements in understanding the hard charcoal production system. The city will therefore manage and maintain these elements as appropriate and undertake excavation surveys, restoration and environmental improvement where necessary.

To enable visitors to understand the role of the kiln in the white charcoal production and utilization system from the various coal production processes (gathering raw materials, firing the kiln, extracting and cooling the charcoal) to transportation to Shuseikan, as well as the use of hard charcoal in the reverberatory furnace, etc., the city will install explanation boards for the kiln remains, as well as planar markers indicating the locations, scales, and structure of the underground archeological remains of related facilities on the surface ground. The city will also improve the paths leading to the kiln remains where necessary in order to maintain a safe visitor environment.

(8) Sekiyoshi Sluice Gate of Yoshino Leat (Area 2 Kagoshima/Component Part 2-3)

Sekiyoshi Sluice Gate of Yoshino Leat is a water channel intake modified to supply water driving a waterwheel as a source of power for the Shuseikan Project including operation of blast furnace. It illustrates the challenge phase of trial and error in the field of iron and steel manufacturing up to the phase in which Western science and technology was introduced in the field of shipbuilding.

The current intake was modified in the Taisho era (1912-1926), but the water channel is used even today for agricultural irrigation water and is deeply involved in the lives and livelihoods of people of the local community. In consideration of these factors, Kagoshima City will work with the relevant administrative organizations to maintain the shape of the intake as modified in the Taisho era, while also arranging and improving the exterior of concrete structures and other aspects added in the Showa era (1926-1989) and later to the extent that the channel’s use for agricultural irrigation water is not impaired.

Kagoshima City will take steps to explain the mechanism for water intake from the river and the historical process of changes and developments from establishment as a sluice gate to extension, improvement, and modification of the sluice gate, while also reflecting the results of future surveys. Tour routes, etc., will also be improved to ensure a safe viewing environment for visitors.

(9) Nirayama Reverberatory Furnaces (Area 3 Nirayama/Component Part 3-1)

The Nirayama Reverberatory Furnaces are the remains of a cannon manufacturing plant, the centerpiece of which was a smelting furnace, which operated in the late Edo period. It illustrates the challenge phase of trial and error in the field of iron and steel manufacturing.

Izunokuni City will approach restoration with a view to the process of historical changes and developments of the site, which, while centered on the operational period, began with construction research in the late 19th century and has extended through the shutdown of operations and subsequent conservation up to the present. The city will therefore maintain the structure, including a steel truss on the wall exterior that was installed during later restoration work to ensure seismic integrity. In that process, the city will study restoration methods that accord top priority to preserving bricks as they were at the time of construction, reflecting these results in the restoration.

Izunokuni City will install planar markers of the locations and scales of the underground archaeological remains and explanation boards in order to provide information of industrial systems related to cannon manufacturing, whereby the furnaces and related underground facilities were integrated with the river area that supplied power, based on the process of historical changes and developments of the site. Vegetation will be cut down and the environs enhanced so that visitors can easily see the design and structure of the furnaces.

(10) Hashino Iron Mining and Smelting Site (Area 4 Kamaishi/Component Part 4-1)

The Hashino Iron Mining and Smelting Site comprises three constituent elements; Smelting Site, Transportation Site used to transport iron ore, and Iron Mining Site, that illustrate Hashino’s status as the birthplace of the modern iron and steel industry in Japan.

Kamaishi City will restore any areas where stonework in the foundation walls and the furnace has loosened, swollen, or fallen out, aiming to maintain and reinforce the conservation environment in a stable condition. The city will immediately undertake restoration of the areas that were largely impacted by the typhoon in August, 2016.

Also, Kamaishi City will install explanation boards to communicate the way in which the various remains functioned together to form an early modern mining, transportation, and iron manufacturing system. The forest manager will also strive to return the surrounding forests, which provided the charcoal, to the forestscape that existed when the site was operating so that visitors can experience the atmosphere of early modern iron manufacturing.

(11) Mietsu Naval Dock (Area 5 Saga/Component Part 5-1)

The Mietsu Naval Dock is an archaeological site where the Saga Clan acquired Western shipbuilding technology from the late Edo period into early Meiji, improving and disseminating that technology and training personnel. It illustrates the challenge phase of trial and error in the field of ship-building.

Saga City will engage in monitoring to ascertain the current state of the component part and the buffer zone. The city will maintain underground archaeological remains buried safely underground in that state, and maintain the current state of the exposed structures above ground and the topography of the inlet, which has remained in virtually the same form since the days when the dock was in operation, removing or transferring facilities which obstruct the view and improving their appearance.

The city will also avoid exposing underground archaeological remains to view, instead providing in-situ exhibits above the remains teamed with those installed in public utilization facilities nearby. While visitors may not be able to see the underground archaeological remains, the city will provide exhibitions and explanations that enable them to visualize the naval dock site and the activities there and comprehensively understand the whole picture, including the historical background and flow.

(12) Kosuge Slip Dock (Area 6 Nagasaki/Component Part 6-1)

The Kosuge Slip Dock is a site illustrating the fusion of traditional Japanese shipbuilding and ship repair technologies with Western industrial technologies to achieve Western European industrialization in an extremely brief period of time.

As the starting point of Japan's shipbuilding industry, Nagasaki City and Mitsubishi Heavy Industries' Nagasaki Shipyard will maintain the remains from the dock's operational days in the Meiji period with a focus on those remains contributing to the Outstanding Universal Value. At the same time, reflecting the process of historical changes and developments of the dock remains, restoration work will be conducted in line with the particular characters of each remains and their historical changes through to the present, including those remains of 1937-53, when the site continued to function as a boat factory. Restoration work will begin with those areas where marked deterioration has occurred.

Explanation and information boards and guides will be installed to help visitors understand the state of the Kosuge Slip Dock in terms of Outstanding Universal Value, and the role of the various constituent elements as they observe the actual part, including the Hauling hut, Hauling machinery, slip dock rails and stone masonry and banks that were all part of the hauling mechanism.

(13) Takashima Coal Mine (Area 6 Nagasaki/Component Part 6-6)

The Takashima Coal Mine was the first mine in Japan to adopt modern coal mining methods, and along with the Hashima Coal Mine (Area 6 Nagasaki/Component Part 6-7) that carried on those mining technologies, it played an important role as the birthplace of the modern coal industry, fueling coal-powered steamships and other modes of transport, iron making, and steel making.

As most of the remains other than the pit remains have yet to be examined, Nagasaki City will conduct excavation surveys, etc. alongside day-to-day maintenance including minor repairs in order to improve the pit remains and the surrounding environment. Underground archaeological remains will be preserved in-situ underground, with their location and size marked above the ground surface.

Conceptualizing the Takashima Coal Mine and the Hashima Coal Mine which carried on Takashima's mining technologies as a singular set of resources for experiencing the history of the coal mining industry, Nagasaki City will install explanation boards to provide information in ways that shed light on the facilities' functions and their relation to each other to help visitors to understand the coal mining system from the perspective of the process of historical changes and developments of the site from the early Meiji era when Western techniques were introduced, through the termination of mining operations to the years following its shutdown.

(14) Glover House and Office (Area 6 Nagasaki/Component 6-8)

Glover House and Office; the residence and office of trader Thomas Glover, was built on a hill overlooking the Nagasaki shipyard, and is the oldest western-style wooden building in Japan today. It

vividly conveys to modern times the role that Glover played in the industrial revolution of the Meiji era.

Nagasaki City will improve the current state of the building, which is showing signs of deterioration, and then restore it to the design and form of the Meiji era in line with the way that Glover House and Office was originally used. Vegetation will be trimmed back to allow a good view of facilities illustrating the location of stonework and cliffs, etc. around the residence to recreate an appearance reminiscent of the time when Glover lived in the residence.

The explanation boards will be installed so that visitors can compare the current appearance against old photographs, conveying information that focuses on the value of Glover House and Office in terms of architectural history as well as the relationship between Glover and the Sites of Japan's Meiji Industrial Revolution.

(15) Miike Coal Mine (Area 7 Miike/Component Part 7-1)

Coal was a key commodity for Meiji Japan's industrialization as a fuel for ship and cokes for iron and steel and one that Japan possessed in abundance. Miike Coal Mine was the second to be developed with modern Western technology, after the Takashima Coal Mine in Nagasaki Prefecture, where steam power was first introduced.

The development of a mass distribution system required railways and a suitable port critical for the export of large volumes of coal. It is thus one of the component parts of the property demonstrating the time when the base of Japanese coal industry was established.

Omuta City and Arao City will preserve evidence focused on the period when the foundations of the coal industry were established, as well as that illustrating the totality of the Miike Coal Mine, which embraced multiple functions and technologies even after the end of the 19th century as the mine responded to changes in industrial activities and the social situation. In addition to day-to-day maintenance and management, this will include regular monitoring of the state of conservation of the component part and restoration work to reinforce and stabilize the materials and structures of buildings and remains.

In this area, Omuta City and Arao City will install explanation and information boards conveying to local residents and visitors the historical features of the site from two perspectives; (i) the process of historical changes and developments from the period when the foundations of the coal industry were established to the time when the mine closed, and (ii) the spatial spread of mining industrial landscape including company housing and other remains, with a focus on the remains of shafts and railway, and port as elements of the modernized coal mining and transportation system.

(16) Miike Port (Area 7 Miike/Component Part 7-1)

Mitsui conglomerate tried to link the pits to the port for the efficient mass distribution of coals and developed Miike Port in Ariake Sea near the mines, to allow large vessels to moor at the port and mechanically upload large amount of coal by coal loader on wharf. The Ariake sea is famous for its shallow and marshy tidal flats with 5.5 m tidal range. It was a major civil engineering challenge to build the coal port that Miike needed. A pair of control breakwaters/groin flanks a long, narrow navigation channel. The port's unique design created a shape that was dubbed "the hummingbird". The water level of the inner floating basin is controlled by a pair of Lock gates and a set of Sluice gate. It illustrates the

Meiji Japan’s engineering skills that enabled the successful industrialization of the country by the early twentieth century. Miike port is still working as an Industrial Port.

Fukuoka Prefecture (the Port Authority), Omuta City, and the Miike Port Logistics Corporation developed the Miike Port conservation work program in fiscal years 2016-2017 in close collaboration with the State Party including the Ports and Harbours Bureau of the Ministry of Land, Infrastructure, Transport and Tourism, and the Cabinet Secretariat.

The major conservation issue with Miike Port is the conservation of the north groin. Conservation Work Program of Miike Port has been developed to address its problems, and it is being implemented. The work started in 2009 and is still continuing. Other anticipated works are ongoing minor repairs and maintenance. This Conservation Work Program is based on the concept of the Miike Port Plan, but is fully informed by the Conservation Management Plan submitted to UNESCO, and heritage advice from Japan and abroad, based on proper heritage assessment in achieving the protection of World Heritage values.

(17) Misumi West Port (Area 7 Miike/Component Part 7-2)

In response to the increased coal output from Miike Coal Mine, Misumi West Port was completed in 1887 to the design of Dutch engineer A. Rouwenhorst Mulder as a port where large ships could dock. It illustrates the phase of introduction of Western technologies in the field of port construction.

Uki City will maintain the design and form of the piers, drainage channels, the traditional town divisions, and wells, etc., and the topography of the hinterland, which are the constituent elements contributing to the Outstanding Universal Value of the World Heritage property, as well as conserve the surrounding landscape by restricting development, etc., so as to protect and communicate the appearance of the port back when it was constructed.

Uki City will install explanation and information boards so that visitors and local residences can experience the role that Misumi West Port played in the advance of the coal industry in the Meiji period as they walk around the town, understanding the history of Misumi West Port inclusive of topography illustrating the background to the port’s construction in this location, drainage channels and other elements of the water utilization system which are still in use today, and other facilities that formerly fulfilled juridical, administrative and navy functions, as well as the scale of the town that was built through reclaiming land.

(18) The Imperial Steel Works, Japan (Area 8 Yawata/Component Part 8-1)/Onga River Pumping Station (Area 8 Yawata/Component Part 8-2)

The Imperial Steel Works, Japan’s first fully integrated iron and steel mill, comprises the three constituent elements of the First Head Office, Repair Shop, and Former Forge Shop. The group of these elements and the Onga River Pumping Station retain the original appearance and is still in operation today. It illustrates the establishment of the foundations of the iron and steel industries in the process of Japan’s modernization.

The interior of the First Head Office will be restored to the original design. The two shops and the pumping station will be repaired and seismically strengthened and their exteriors restored to the extent possible without impacting on the Outstanding Universal Value of the World Heritage property, while

also maintaining the original materials to the greatest possible extent.

The content of the above plan is noted in the State of Conservation Report submitted to the UNESCO World Heritage Center on September 28th, 2017 pursuant to Paragraph 172 of the "Operational Guidelines for the Implementation of the World Heritage Convention", attached as **Appendix h)-5**.

5. Prioritised projects currently underway

Conservation measures and other priority projects currently underway in relation to the 23 component parts are noted in **Appendix b)-17**.

6. Reference materials

Please refer to **Appendix a)-1** for the standard form for establishing the "Conservation, Restoration, Presentation and Public Utilization Plan" for each of the component parts, as a source of the Programmes for each component part.

Appendix b)-1 Conservation work programme and implementation programme for Hagi Reverberatory Furnace (Area 1 Hagi/Component Part 1-1)

Appendix b)-2 Conservation work programme and implementation programme for Ebisugahana Shipyard (Area 1 Hagi/Component Part 1-2)

Appendix b)-3 Conservation work programme and implementation programme for Ohitayama Tatara Iron Works (Area 1 Hagi/Component Part 1-3)

Appendix b)-4 Conservation work programme and implementation programme for Hagi Castle Town (Area 1 Hagi/Component Part 1-4)

Appendix b)-5 Conservation work programme and implementation programme for Shokasonjuku Academy (Area 1 Hagi/Component Part 1-5)

Appendix b)-6 Conservation work programme and implementation programme for Shuseikan Complex (Area 2 Kagoshima/Component Part 2-1)

Appendix b)-7 Conservation work programme and implementation programme for Terayama Charcoal Kiln (Area 2 Kagoshima/Component Part 2-2)

Appendix b)-8 Conservation work programme and implementation programme for Sekiyoshi Sluice Gate of Yoshino Leat (Area 2 Kagoshima/Component Part 2-3)

Appendix b)-9 Conservation work programme and implementation programme for Terayama Charcoal Kiln (Area 2 Kagoshima/Component Part 3-1)

Appendix b)-10 Conservation work programme and implementation programme for Hashino Iron Mining and Smelting Site (Area 4 Kamaishi/Component Part 4-1)

Appendix b)-11 Conservation work programme and implementation programme for Mietsu Naval Dock (Area 5 Saga/Component Part 5-1)

Appendix b)-12 Conservation work programme and implementation programme for Kosuge Slip Dock (Area 6 Nagasaki/Component Part 6-1)

Appendix b)-13 Conservation work programme and implementation programme for Takashima Coal Mine (Area 6 Nagasaki/Component Part 6-6)

Appendix b)-14 Conservation work programme and implementation programme for Glover House and Office (Area 6 Nagasaki/Component Part 6-8)

Appendix b)-15-1 Conservation work programme and implementation programme for Miike Coal Mine (Area 7 Miike/Component Part 7-1)

Appendix b)-15-2 Conservation work programme and implementation programme for Miike Port (Area 7 Miike/Component Part 7-1)

Appendix b)-16 Conservation work programme and implementation programme for Misumi West Port (Area 7 Miike/Component Part 7-2)

Appendix b)-17 Conservation measures currently being implemented on a priority basis at component parts

Recommendation c)

Define acceptable visitor threshold levels at each component site to mitigate any potential adverse impacts, commencing with those most likely to be at risk.

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B p 97) noted the following points as the premise of Recommendation c) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- The number of visitors at component sites is likely to increase based on the trend for previously inscribed properties in Japan. The level of increase will vary at each component due to their geographical location, ease of access and the number of hours they are open for public access. Monitoring measures will be put in place to record the level of visitation if the nominated property is inscribed.
- ICOMOS considers that a strategy needs to be developed to assess and determine the acceptable carrying capacity at each component site to ensure that there are no adverse impacts on the fabric particularly at such sites as the Shokasonjuku Academy (Area 1/Component Part 1-1) and Glover House and Office (Area 6/Component Part 6-8).

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation c).

Surveys will be conducted of current visitor numbers with the aim of reducing the adverse impact that increasing visitor numbers could have on the component parts, with a visitor management strategy created based on the results. The possibility/necessity of setting visitor threshold levels will also be carefully examined, factoring in the scale, nature, and location of each of the component parts.

The specific procedure will be as follows:

1) Surveys of current visitor numbers preliminarily started in the latter term of FY 2015, and will practically continue for three years in FY 2016-2018 to ascertain the current state of and trends in visitor numbers at each of the component parts.
2) In parallel with these surveys, a common visitor management vision for all component parts ("common visitor management vision") will be identified as a future target.
3) The current state of visitor management and issues faced at each of the component parts will be ascertained and policies and methods for improving that situation indicated, ensuring consistency with the common visitor management vision.
4) The results of the survey of current visitor numbers will be analyzed in FY 2019, and a visitor management strategy based on the common visitor management vision drawn up in parallel to the survey will be created as the process for realizing that vision.
5) The possibility/necessity of setting visitor threshold levels will also be carefully examined for each of the component parts.

3. Outline of srveys assessing the current state of visitor numbers for each component part (interim report)

Surveys of current visitor numbers at each of the component parts were preliminarily launched in the latter term of FY 2015, and will be practically conducted in the next three years until FY 2018. Survey results from FY 2015-17 are outlined below. Further details can be found in **Appendix c)-1**.

(1) Outline of surveys assessing the current state of visitor numbers

In FY 2016, two types of surveys—quantitative surveys for all component parts and qualitative surveys of three selected component parts ahead of other component parts were undertaken.

In FY 2017, quantitative and qualitative surveys are being undertaken for all component parts, as well as visitor satisfaction surveys.

1) Outline of quantitative surveys

These surveys ascertained the daily number of visitors to each of the component parts and fluctuations in this. Where any impact meriting special note was observed at a component part, this was recorded.

Assessment of visitor numbers was conducted at each of the component parts using the appropriate method for that part given its particular scale, nature, and location, as well as personnel arrangements for visitor management.

2) Outline of qualitative surveys

The impact of daily fluctuations in visitor numbers on the component part, as well as on the safety, security, and comfort of visitors, was observed and recorded for three of the component parts that receive the most visitors—Glover House and Office (Area 6 Nagasaki/Component Part 6-8), Former Shuseikan Machinery Factory (a part of Area 2 Kagoshima/Component Part 2-1), and Sengan-en Garden (a part of Area 2 Kagoshima/Component Part 2-1) —ahead of the same survey at other component parts. The amount of time which visitors spent at the component parts was also ascertained.

In FY 2017, qualitative surveys will be undertaken of all component parts and the results analyzed in order to identify indicators for management promoting visitor understanding of the component part and boosting visitor satisfaction. These indicators will be used together with the results of the visitor satisfaction surveys that were undertaken in parallel to the qualitative surveys to set target levels.

3) Outline of visitor satisfaction surveys

The degree of visitor satisfaction, issues, and prospects were ascertained by collecting questionnaires from visitors to the various component parts. These surveys were launched in May 2017, with questionnaires collected primarily during Golden Week (holiday season) in May and the summer vacation in August when visitor numbers are greatest.

(2) Survey results (interim report)

1) Results of quantitative surveys

It was discovered that daily visitor numbers to the component parts fluctuate significantly over weekdays, weekends, and vacation periods, as well as according to whether or not an event is being held.

The maximum scale of daily visitor numbers excluding event days was from around 100 to 6,000 per day (**Figure 1**, **Table 1**). No impact on the component parts of special note was reported.

A comparison of visitor numbers at the various component parts suggested that focusing on cases where visitor numbers are at least 2,000 per day was appropriate in terms of making a detailed analysis

of the impact on the component part and on the safety, security, and comfort of visitors. This finding was consequently used in the design of qualitative and visitor satisfaction surveys (survey frequency and the design of sample numbers) in FY 2017.

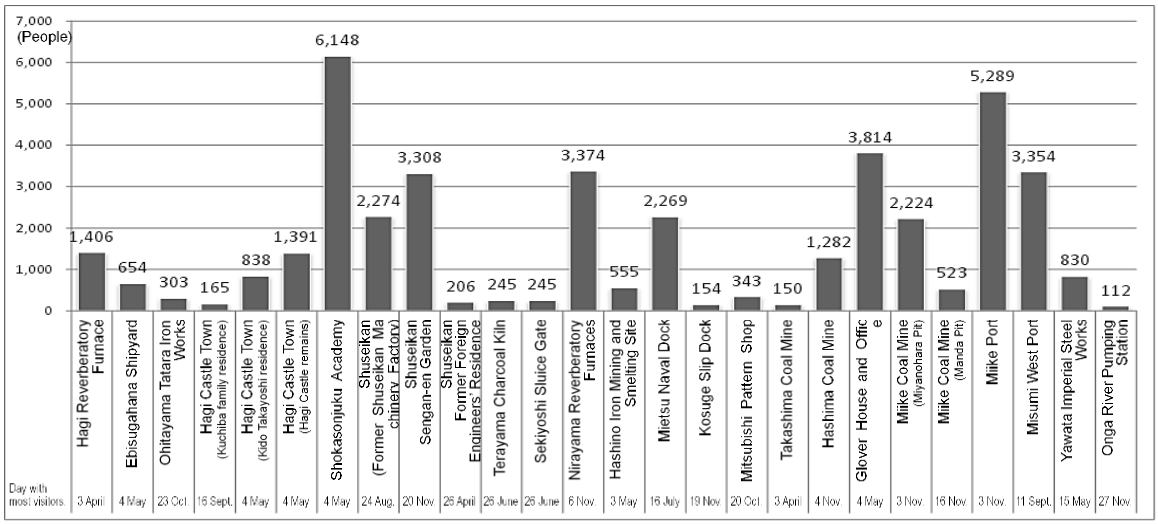


Figure 1: Maximum scale of daily visitor numbers outside event days

Component Part		Max no. of visitors (people/day)	No. of days with >2,000 visitors/day
Kagoshima	Shuseikan (Former Shuseikan Machinery Factory)	2,274	5
Nagasaki	Glover House and Office	3,814	33
Hagi	Shokasonjuku Academy	6,148	41
Kagoshima	Shuseikan (Sengan-en Garden)	3,308	20
Nirayama	Nirayama Reverberatory Furnaces	3,374	27
Saga	Mietsu Naval Dock	2,269	1
Miike	Miike Coal Mine (Miyanohara Pit)	2,224	1
Miike	Miike Coal Mine (Manda Pit)	9,000	1(event day)
Miike	Miike Port	5,289	1
Miike	Misumi West Port	3,354	22
Yawata	Onga River Pumping Station	2,000	1 (event day)

Table 1: Component Parts receiving 2,000 or more visitors/day and the number of such days

2) Results of qualitative surveys

- Impact of fluctuation in daily visitor numbers on the Component Part and visitor safety, security, and comfort

At Glover House and Office (Area 6 Nagasaki/Component Part 6-8), visitor pile-ups around the entrance were observed as a possible factor affecting the component part and visitor safety, security, and comfort. The same situation was not observed at Former Shuseikan Machinery Factory (a part of Area 2 Kagoshima/Component Part 2-1) or Sengan-en Garden (a part of Area 2 Kagoshima/Component Part 2-1).

At Glover House and Office, crowding occurs at particular times on days that attract many visitors because crowding around the entrance prevents people from entering the grounds; people stumble; people can't find the particular exhibit they were looking for; and because people gather where there is

a roof to shelter from the rain. These factors are thought to be impacting on visitor comfort and satisfaction. Situations like these are occurring in cases where travel groups such as students on school excursions are concentrated in one area.

No situations that could affect the component part and visitor safety, security, and comfort were found at Former Shuseikan Machinery Factory or Sengan-en Garden even on days with high visitor numbers.

These advance surveys confirmed that at the component parts where visitors enter buildings, crowding occurs where travel groups, etc., large enough to prevent smooth visitor movement are concentrated in entrance areas, etc. This could be prevented by changing visitor flows and managing the number of travel groups/visitors visiting the component part at the same time.

- Time spent by visitors at the component part

To increase understanding of the component part, the longer visitors spend at the component part the better. However, in cases where there are many daily visitors, people may not have sufficient time to experience the component part and the interpretation thereof.

At Glover House and Office, people tend to spend less time within the component part on days with numerous visitors. In the case of Former Shuseikan Machinery Factory, it was crowding on days with large visitor numbers that reduced the amount of time visitors spent at the component part.

Unlike Glover House and Office and Former Shuseikan Machinery Factory, where visitors spend time inside the buildings, Sengan-en Garden is a part of the component part that requires a lot of time to wander around its gardens and large open spaces, so no correlation emerged between fluctuations in visitor numbers and the time spent at the component part. Seasons were in fact found to have more impact on how long visitors stayed (more time in seasons when it is comfortable to be outside).

From the above results, survey frequency and sample numbers were determined according to whether or not visitors spend time inside the buildings at the component part, with qualitative surveys and visitor satisfaction surveys slated for FY 2017.

3) Results of visitor satisfaction surveys (results of questionnaires collected as at September 8, 2017)

- Time spent by visitors at the component part and their degree of satisfaction

Looking at visitor satisfaction by the amount of time spent at the component part, the ratio of visitors spending at least 15 minutes at the component part who said that they were “extremely satisfied” was high, particularly when visitors spent two hours or more.

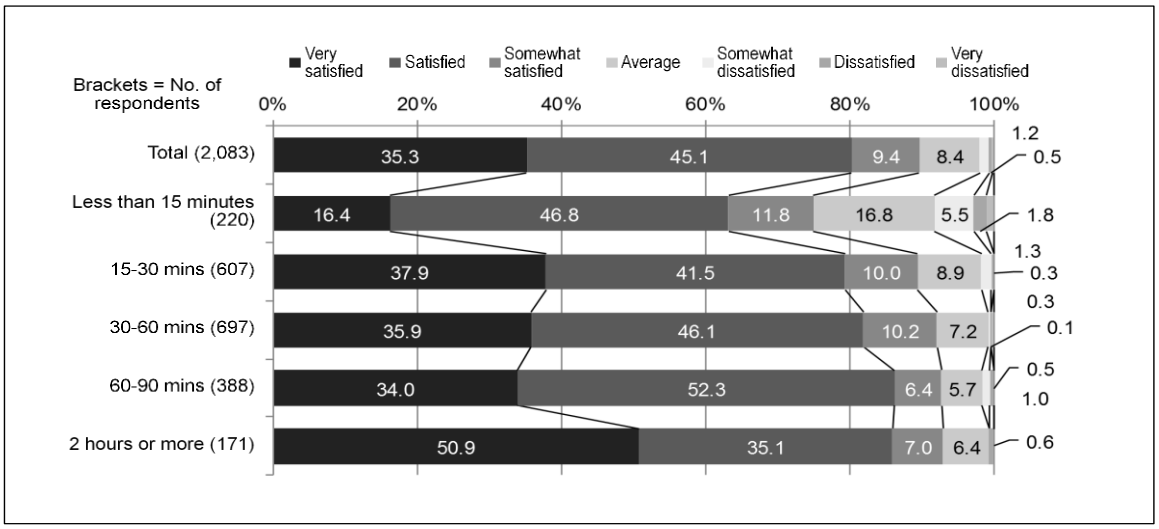


Figure 2: Relationship between amount of time spent at the component part and satisfaction with the component part

- Quality and quantity of interpretation and visitor satisfaction

Just under half (47%) of visitors used a guide of some nature (tour guide 18%, local guide 27%, audio guide 2%). Satisfaction levels were high: 53% of respondents said they were "very satisfied" with their guide and 38% said they were "satisfied" (**Figure 3**).

Looking at satisfaction with the component part by satisfaction with the guide, visitors who were "very satisfied" with their guide also had a high ratio of "very satisfied" responses in relation to the component part (**Figure 4**).

A high ratio of visitors said that information from their guide or from the Sites of Japan's Meiji Industrial Revolution guide app was the means by which they understood why the property of Sites of Japan's Meiji Industrial Revolution is inscribed on the World Heritage List, and why the component part they were visiting consists of the World Heritage property **(Figures 5** and **Figure 6**).

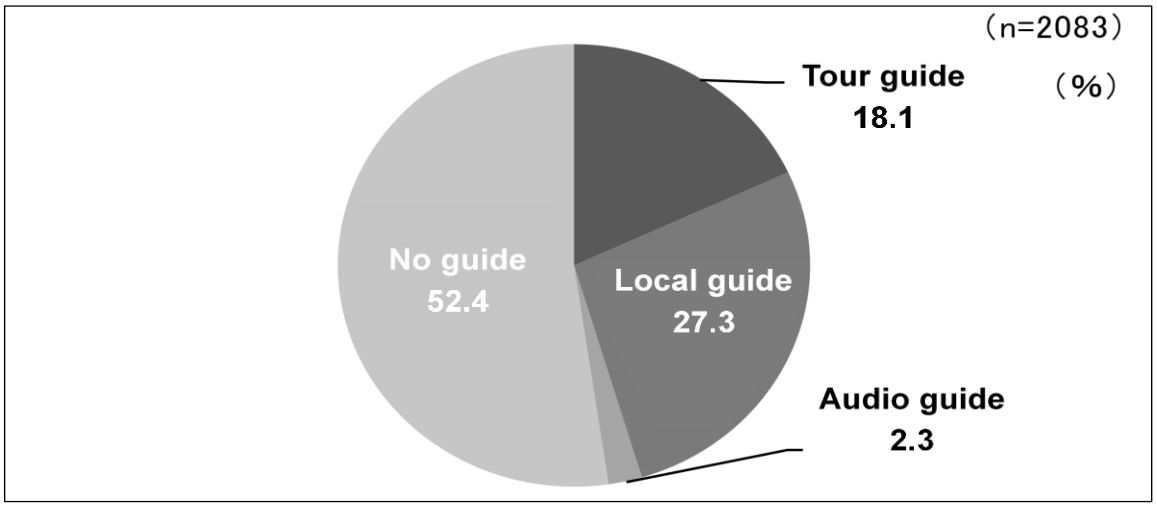


Figure 3: Whether or not a guide was used at the component part
(The "n" value at the top right represents the total number of responses)

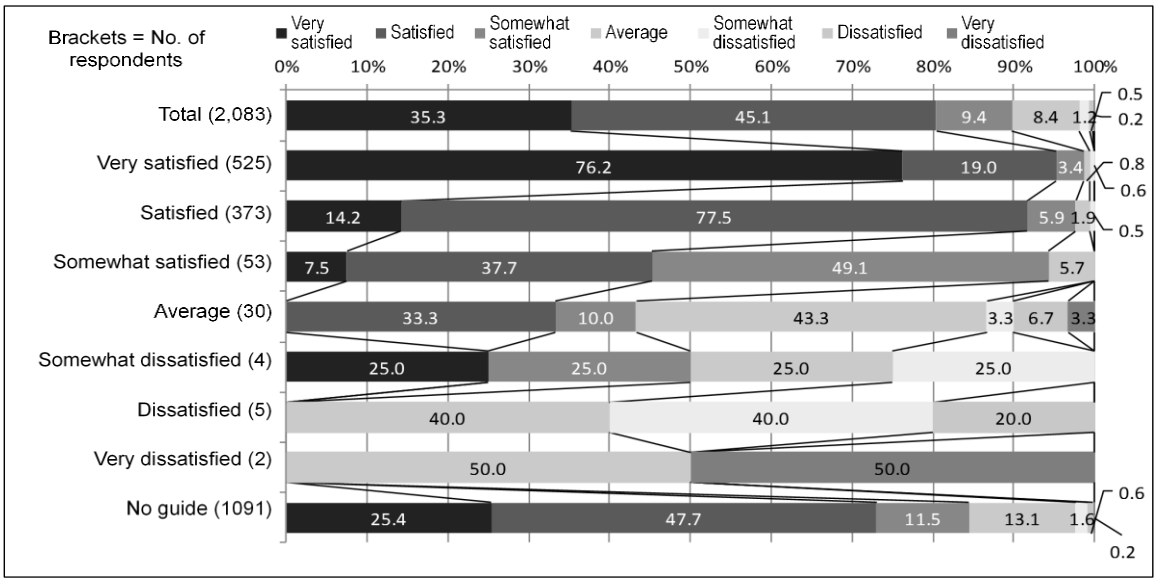


Figure 4: Relationship between satisfaction with guide and satisfaction with the component part

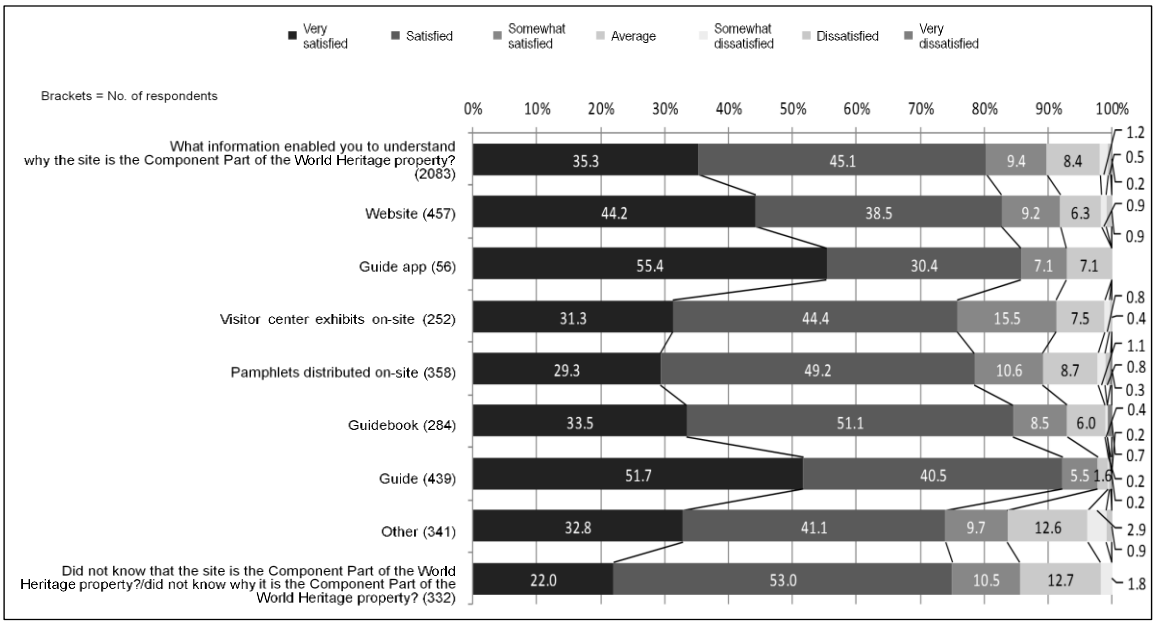


Figure 5: Means of understanding why the property of Sites of Japan's Meiji Industrial Revolution is inscribed on the World Heritage List

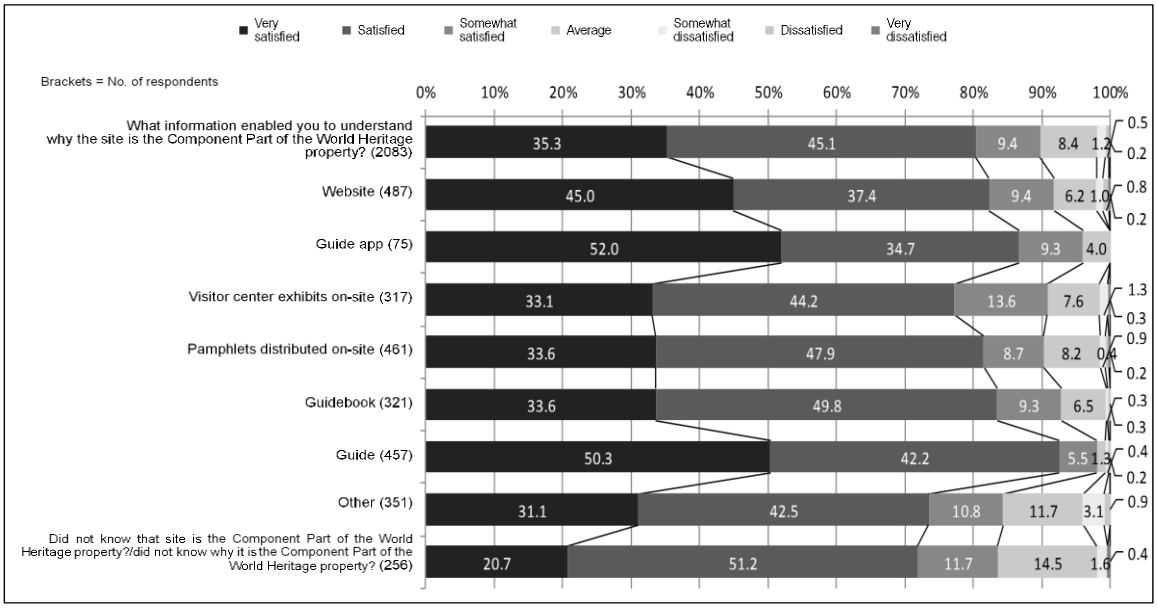


Figure 6: Means of understanding why the component part visited is world heritage

● Food, beverage, shopping, and other service opportunities, and degree of satisfaction

Inconvenient access (22%) was the most frequently noted component part issue, followed by "nowhere to eat" (9%), "not enough toilets and other convenience facilities" (9%), "no appealing souvenirs" (7%), and "boring/lacking in entertainment value" (6%) (**Figure 7**).

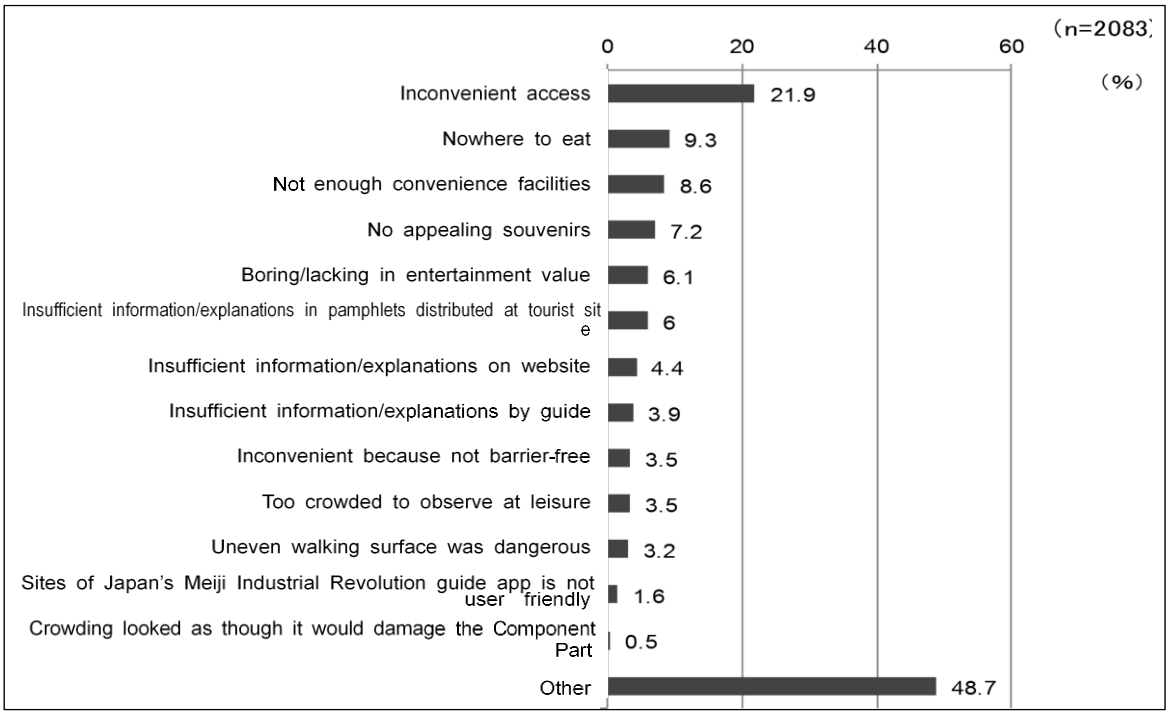


Figure 7: Component part problems and visitor requests

● Thinking on setting target levels

The importance of time spent by visitors at each of the component parts was also touched upon in "Results of qualitative surveys" above, but from the results of visitor satisfaction surveys, it was clear that visitors spending two hours or more at a component part tend to understand the value of the component part and be satisfied by their experience.

It also emerged that explanations from guides play a key role in promoting visitor understanding. The degree of satisfaction that visitors felt in relation to a component part changed according to whether or not they had a high-quality guide with whom they were "very satisfied." While based on a small sample, the Sites of Japan's Meiji Industrial Revolution guide app is also helping to boost visitor satisfaction.

On the other hand, facility, equipment and operational aspects such as convenience of access, restaurant and café facilities, and toilets are presenting problems in a relatively high ratio of cases. Arranging facilities and equipment that provide visitors with a comfortable experience will therefore also be an important aspect in ensuring that visitors spend a sufficient amount of time at the component part and understand its contribution to the Outstanding Universal Value.

From the above, it was clear that time spent, the quality of guides, and facility, equipment, and operational aspects each have a major impact in terms of achieving high levels of visitor understanding and satisfaction, and that these could serve as target standard management indicators.

4. Visitor management vision (targets)

(1) Scope of visitor management

The scope of visitor management will focus primarily on visitors (C), as well as the component part (A) and the surrounding environment (B). Component part (A) will be monitored to check whether visitors (C) are having a physical impact on (A), with any risk of this to be forestalled. (A) and (B) will be checked for the appropriate provision of information and services to encourage visitor (C) understanding and boost visitor (C) satisfaction (**Figure 8**).

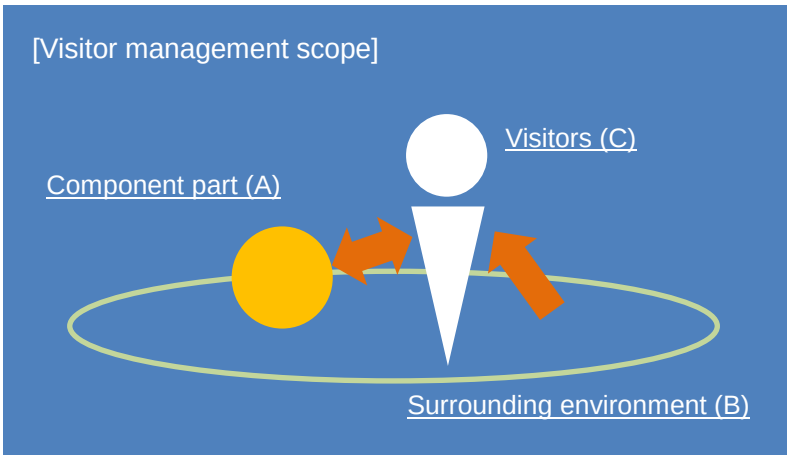


Figure 8: Scope of visitor management

(2) Visitor management vision (targets)

The visitor management vision envisages a state whereby (i) the component part (A) which is subject to visitor management and (ii) the component Part (A)/surrounding environment (B) supplement the following two states, thereby providing visitors (C) with safety, comfort, security, and a sense of satisfaction, as well as the motivation to visit again.

(i) Component part (A)

State whereby visitor congestion at the component part is alleviated and behavior which could cause damage is monitored and prevented so as to avoid visitors having a physical impact such as damage or wear to the land or to materials, etc.

(ii) Component part (A)/surrounding environment (B)

State whereby the necessary facilities, equipment, and operational arrangements are secured so that visitors can spend their time at the component part comfortably, safely, and with peace of mind, and also have the opportunity to increase their understanding through the information they receive about the Sites of Japan's Meiji Industrial Revolution as a whole as well as the particular component part, thereby feeling a sense of satisfaction and motivation to visit again.

5. Current state of and issues in visitor management at the various component parts and basic policies and methods for improvement

The current states of and issues in visitor management at the various component parts and basic policies and methods for improvement are noted in the tables attached as **Appendices from c)-2-1 to c)-2-19**.

Each of these tables has been compiled based on the relevant items in the visitor management section

of the "Conservation, Restoration, Presentation and Public Utilization Plan"[1] that have been created for each component part by the owner or manager as well as the relevant municipal authorities as the source of Conservation Work Programmes and Implementation Programmes pursuant to Recommendations a) and b).

6. Creation of visitor management strategy

(1) Visitor management strategy structure

A visitor management strategy will be created in FY 2019 to realize the visitor management vision (targets) noted in 4-(2). The structure indicated in **Figure 9** and **Table 2** (p.26) will serve as the basis for creating the strategy.

(2) Management indicators

Based on the visitor management vision for each of (i) component part (A) and (ii) the component part (A)/surrounding environment (B), target items will be identified and management indicators set for each of these (**Table 2**). The targets will be set on the basis not only of the results of the quantitative and qualitative surveys (time surveys and behavior observation surveys) conducted in FY 2016-18, but also the results of customer satisfaction surveys conducted in FY 2017-18.

The visitor management vision (targets) will be compared with the management indicators in order to lay out phased target levels, with the determination of whether or not the visitor management vision (targets) has been achieved at the various stages to be made according to whether or not these standards have been achieved (**Figure 9**).

Whether or not the visitor management visions and targets for both (i) component part (A) and (ii) the component part (A)/surrounding environment (B), and whether or not visitors (C) consequently feel safe, comfortable, satisfied with their experience, and motivated to visit again will be determined through visitor satisfaction surveys.

(3) Development of visitor management measures

The implementation state and results of the measures to avoid negative impacts by visitors below will be confirmed, and if they were not realized, new measures will be developed and implemented.

a) Installing fences and surveillance equipment, etc.

b) Operating a surveillance regime

c) Establishing facilities and securing flow lines to ensure visitor safety and security

d) Providing appropriate information to convey value to visitors (including the use of guides)

e) Securing time for experiencing the component part

To boost visitor satisfaction, measures will also be needed to increase the quality and quantity of interpretation and enhance food, beverage, and other services at the component part (A) and the surrounding environment (B).

[1] While the current state of and issues in visitor management at the various component parts and basic policies and methods for improvement are noted in the "Conservation, Restoration, Presentation and Public Utilization Plans" created for each component part by the owner or manager of the component part as well as the relevant municipal authorities as the source of the Conservation Work Programmes and Implementation Programmes pursuant to Recommendations a) and b), they are not included in the Conservation Work Programme and Implementation Programmes (Appendices a)-2 and from b)-1 to b)-16 pursuant to Recommendations a) and b) in this State of Conservation Report. Please refer to the current state of and issues in visitor management and basic policies and methods for improvement as noted in the tables attached as Appendices from c)-2-1 to c)-2-19.

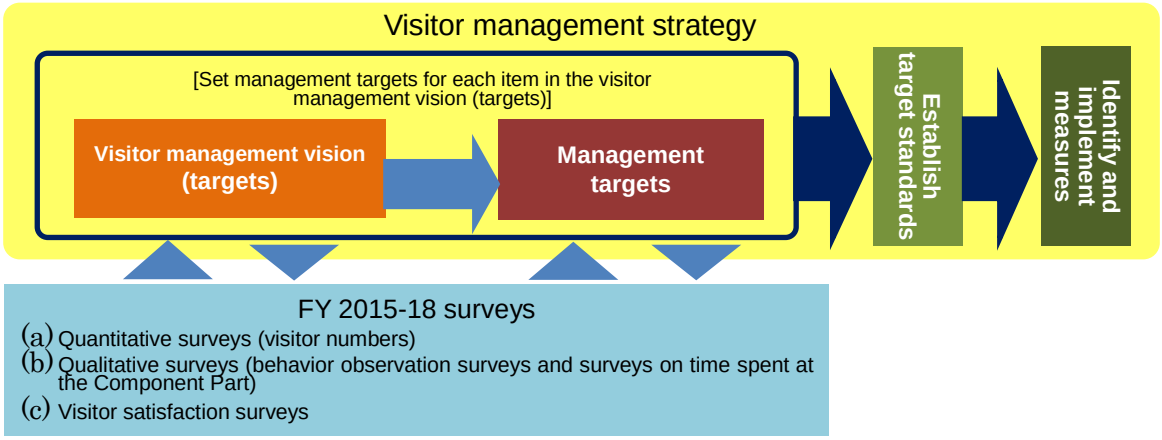


Figure 9: Structure of visitor management strategy (corresponds to Table 2)

Subject of visitor management	Visitor management vision (targets)	Management indicators	Surveys implemented
(a)Component part (A)	・No physical damage to the land and materials of the component part ・Facilities, equipment and operational arrangements in place so that the component part can be physically protected	・Is there a crowding situation that could lead to physical damage? ・Are security arrangements in place? (physical distance, surveillance, etc.)	○FY 2016-18 ⇒Quantitative surveys (visitor numbers) ○FY 2017-18 ⇒Qualitative surveys (behavior observation surveys)
(b) Component part (A)/surrounding environment (B)	・Facilities, equipment and operational arrangements in place so that visitor safety and security can be retained ・Visitors able to focus on feeling value (comfort, time) ・Facilities, equipment and operational arrangements in place to contribute to promoting and deepening visitors' understanding ・Facilities, equipment and operational arrangements in place for enjoyment of visit	・Can danger be avoided and is there a strong sense of safety and security during visit? ・Do visitors have sufficient time to observe the Component Part comfortably? ・Is interpretation of a high standard and quantity, sparking and heightening visitor interest? ・Do visitors have the opportunity for food, drink, shopping, and other services?	○ FY 2015 ⇒Identification of visitor flow lines and creation of an impact area map ○ FY 2016-18 ⇒Quantitative surveys(visitor numbers) ○ FY 2017-18 ⇒Qualitative surveys (behavior observation surveys and time surveys) ⇒Visitor satisfaction surveys

Table 2: Management targets to be established in the management strategy (correspond to Figure 9)

7. Establishment of visitor threshold levels

Based on the visitor management strategy that will be created in FY 2019 pursuant to the scale, nature, and location of each component part and the results of visitor surveys, and bearing in mind also the results of improvements made to visitor management issues based on the "Conservation Work Programme and Implementation Programme" of each component part pursuant to Recommendations a) and b) and "Interpretation Strategy" pursuant to Recommendation g), careful examination will be made for the possibility/necessity of setting visitor threshold levels of each of the component parts in order to secure high levels of visitor understanding and satisfaction.

8. Reference materials

Appendix c)-1 Survey report on visitor numbers (interim report)

Appendix c)-2-1 Current state, issues and directionality in relation to visitor management at Hagi Reverberatory Furnace (Area 1 Hagi/Component Part 1-1)

Appendix c)-2-2 Current state, issues and directionality in relation to visitor management at Ebisugahana Shipyard (Area 1 Hagi/Component Part 1-2)

Appendix c)-2-3 Current state, issues and directionality in relation to visitor management at Ohitayama Tatara Iron Works (Area 1 Hagi/Component Part 1-4)

Appendix c)-2-4 Current state, issues and directionality in relation to visitor management at Hagi Castle Town (Area 1 Hagi/Component Part 1-5)

Appendix c)-2-5 Current state, issues and directionality in relation to visitor management at Shokasonjuku Academy (Area 1 Hagi/Component Part 1-6)

Appendix c)-2-6 Current state, issues and directionality in relation to visitor management at Shuseikan (Area 2 Kagoshima/Component Part 2-1)

Appendix c)-2-7 Current state, issues and directionality in relation to visitor management at Terayama Charcoal Kiln (Area 2 Hagi/Component Part 2-2)

Appendix c)-2-8 Current state, issues and directionality in relation to visitor management at Sekiyoshi Sluice Gate (Area 2 Hagi/Component Part 2-3)

Appendix c)-2-9 Current state, issues and directionality in relation to visitor management at Nirayama Reverberatory Furnaces (Area 3 Nirayama/Component Part 3-1)

Appendix c)-2-10 Current state, issues and directionality in relation to visitor management at Hashino Iron Mining and Smelting Site (Area 4 Kamaishi/Component Part 4-1)

Appendix c)-2-11 Current state, issues and directionality in relation to visitor management at Mietsu Naval Dock (Area 5 Saga/Component Part 4-2)

Appendix c)-2-12 Current state, issues and directionality in relation to visitor management at Kosuge Slip Dock (Area 6 Nagasaki/Component Part 6-1)

Appendix c)-2-13 Current state, issues and directionality in relation to visitor management at Takashima Coal Mine (Area 6 Nagasaki/Component Part 6-6)

Appendix c)-2-14 Current state, issues and directionality in relation to visitor management at Hashima Coal Mine (Area 6 Nagasaki/Component Part 6-7)

Appendix c)-2-15 Current state, issues and directionality in relation to visitor management at Glover House and Office (Area 6 Nagasaki/Component Part 6-8)

Appendix c)-2-16^{-1} Current state, issues and directionality in relation to visitor management at Miike Coal Mine (Miyanohara Pit) (Area 7 Miike/Component Part 7-1)

Appendix c)-2-16^{-2} Current state, issues and directionality in relation to visitor management at Miike Coal Mine (Manda Pit) (Area 7 Miike/Component Part 7-1)

Appendix c)-2-17 Current state, issues and directionality in relation to visitor management at Misumi West Port (Area 7 Miike/Component Part 7-2)

Appendix c)-2-18 Current state, issues and directionality in relation to visitor management at The Imperial Steel Works, Japan (Area 8 Yawata/Component Part 8-1)

Appendix c)-2-19 Current state, issues and directionality in relation to visitor management at Onga River Pumping Station (Area 8 Yawata/Component Part 8-2)

No negative impact by visitors is expected due to limited access to the component parts that are currently working (the four component parts within the Mitsubishi Nagasaki Shipyard belonging to Area 6 Nagasaki [Component Part 6-2 to 6-5]. Therefore no appendices on their current state, issues and directionality have been attached.

Recommendation d)

Monitoring the effectiveness of the new partnership-based framework for the conservation and management of the nominated property and its components on an annual basis;

1. Background

While nominating the Sites of Japan's Meiji Industrial Revolution for inscription on the World Heritage List in 2015, the Cabinet Secretariat of the Government of Japan laid out the General Principles and Strategic Framework for the Conservation and Management of the Sites of Japan's Meiji Industrial Revolution in order to take on all responsibilities in relation to the conservation and management of the property and respond to international obligations and requests.

Under this strategic framework, all relevant national and local government agencies and private owners involved in the conservation and management of the component parts participate in the protection of the Sites of Japan's Meiji Industrial Revolution as partnership members, sharing appropriate information and views amongst the relevant parties and engaging in harmonized decision-making. The governance structure developed to that end comprises (1) Local Conservation Councils set up for each Area, (2) site-specific Working Groups set up beneath the National Committee of Conservation and Mnagement, and (3) a National Committee of Conservation and Management ("Conservation Committee") (**Figure 1**).

The Industrial Heritage Expert Committee including Working Properties ("Expert Committee") comprising domestic and international members with expertise in this field was also established to garner views on the appropriateness of conservation, management and interpretation measures for the property.

Given the above governance structure, the report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B p. 99) notes the following point as the premise of the Recommendation d) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- ICOMOS recommends that the State Party monitor the effectiveness of the new partnership-based framework for the conservation and management of the nominated property and its components on an annual basis. It is also recommended that the State Party monitor the implementation of the conservation management plans.

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation d).

To check whether the governance structure is functioning properly, a checklist will be created based on the three points below in relation to the effectiveness of the structure (**Appendix d)-1)**), and monitoring will be conducted on an annual basis. Results of checking and evaluation work by the Local Conservation Councils and site-specific Working Groups will also be compiled into an annual report (**Appendix e)-3)**) and reported to the Conservation Committee.

- Are Local Conservation Councils and the Conservation Committee meeting regularly organized and functioning properly?

- Are site-specific Working Groups meeting where necessary?
- Are reports for each Area being made by both Local Conservation Councils and site-specific Working Groups to the Conservation Committee, and is the partnership structure functioning properly on the basis of good communication?

The site-specific Working Groups were set up to ensure communication and cooperation between the working and non-working component parts in the three Areas (Area 4 Kamaishi, Area 6 Nagasaki, Area 7 Miike) that contain both, but because communication and cooperation at the Local Conservation Council level has been sufficient to date, Working Groups have not been convened.

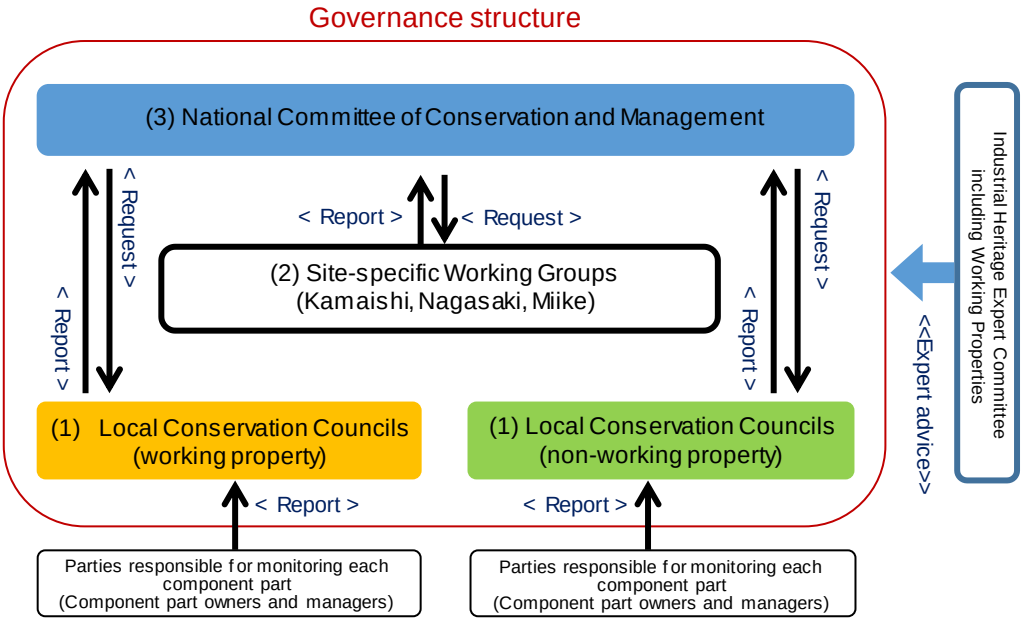


Figure 1: Governance structure

3. Monitoring results

The meeting schedules and minutes from the governance structure comprising (1) Local Conservation Councils, (2) Site-specific Working Groups, and (3) Conservation Committee, as well as of Expert Committee, which advises these groups from an expert perspective, are appended as **Appendices d)-2 to d)-4**.

Monitoring revealed that groups (1) and (3) have met regularly from the time of inscription of the property on the World Heritage List to the present; that they are functioning properly; and that there is good mutual communication and cooperation through annual reports, with the governance structure operating appropriately.

4. Reference Materials

Appendix d)-1): Checklist of Governance Framework Validation

Appendix d)-2): Past records of the schedule and agenda of the meetings of Local Conservation Councils of individual Areas

Appendix d)-3): Past records of the schedule and agenda of the meetings of National Committee of Conservation and Management

Appendix d)-4): Past records of the schedule and agenda of the meetings of Industrial Heritage Expert Committee including Working Properties

Recommendation e)

Monitoring the implementation of the conservation management plans, the issues discussed and the decisions made by the Local Conservation Councils on an annual basis;

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B p. 100) noted as the premise of Recommendation e) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

However, while Chapter 6 of the "Conservation Management Plan" (CMP) for each component part[1] lays out an overarching consistent monitoring approach such as observational indicators, measurement content, timing, and who will be in charge of recording observations, a sufficient level of detail was not provided for the implementation of work on each constituent element contributing to the Outstanding Universal Value as noted in the CMPs (Chapter 2).

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation e).

To make monitoring more effective, all the information on the current state of component parts needs to be gathered and monitoring undertaken systematically based on the parts and materials of each constituent element of the component part. Monitoring charts will therefore be created in line with the characteristics of each component part.

The state of implementation of the above monitoring will be reported to Local Conservation Councils at least once a year in order to feed the results of monitoring appropriately back into conservation and management.

3. Monitoring Procedure

The monitoring procedure will be as follows.

1) The following four types of monitoring will be implemented:

- Monitoring for the component part and the buffer zone as a whole

Monitoring charts for the component part and the buffer zone as a whole consist of "individual charts" and "general charts" (**Appendix e)-1**). Multiple fixed points first will be selected in appropriate locations within each component part and its buffer zone and "individual charts" will be created based on photographs regularly taken from the fixed points to ascertain changes in the outlook and/or landscape. The contents of "individual charts" will then be compiled into "general charts". Monitoring results on changes in outlook and/or landscape identified through the monitoring charts will be reflected in the annual report (**Appendix e)-3**).

- Monitoring for the component part

The "individual charts" will be created that records all the current information for each part of the various constituent elements and others making up the component part according to the nature of the

1 "Conservation Management Plan" (CMP) for each of the component parts are included in the Nomination Document in 2014.(see http://whc.unesco.org/uploads/nominations/1484.pdf, pp. 561-2584)

particular part. The "general charts" will be created by bringing together these "individual charts", then monitoring charts will be completed (**Appendix e)-1**). Monitoring results identified through monitoring charts ("individual charts" and "general charts") will be reflected in annual report (**Appendix e)-3**).

- Monitoring of interpretation activities

The results of various types of activities undertaken in relation to interpretation, including lecture meetings and seminars etc., will be compiled and reflected in annual report (**Appendix e)-2**).

- Monitoring of related groups

The results of various types of activities undertaken by the groups involved in the conservation and management of the component parts will be compiled and reflected in annual report (**Appendix e)-2**). The template for an annual report will be created based on the observation indicators laid down in the CMP for each component part (**Appendix e)-2**), and actual monitoring results based on the observation indicators[2] will be reflected in annual report.

2) Local Conservation Councils will confirm the content of annual report and, where necessary, discuss the issues and make decisions. The schedule and agenda of Local Conservation Council meetings to date are noted in **Appendix d)-2**.

4. Monitoring results

As an example, monitoring charts of Shuseikan (Component Part 2-1), the Terayama Charcoal Kiln (Component Part 2-2), and the Sekiyoshi Sluice Gate of Yoshino Leat (Component Part 2-3) in Area 2 Kagoshima (**Appendix e)-3**), as well as their annual reports (**Appendix e)-4**), have been attached as representative of the 23 component parts of the property.

The three component parts were selected on the grounds that they include all four types of remains contained in the 23 component parts: (1) stone walls (including stonework structures); (2) buildings; (3) underground archaeological remains and the related topography; and (4) gardens and ponds.

5. Reference materials

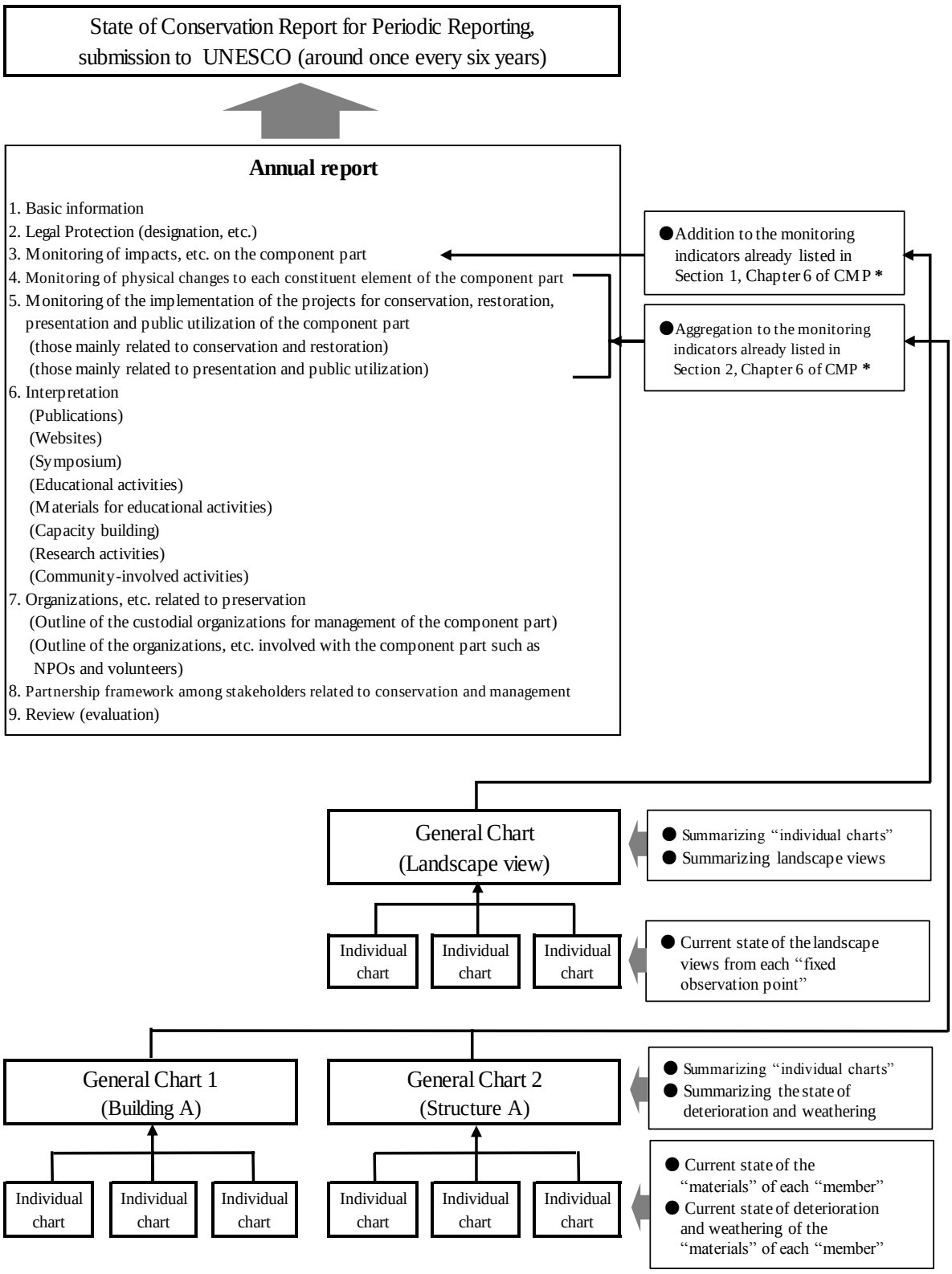
Appendix e)-1): Monitoring charts consisting of general and individual charts (samples)

Appendix e)-2): Examples of general and individual charts for Shuseikan (Area 2 Kagoshima/Component Part 2-1), the Terayama Charcoal Kiln (Area 2 Kagoshima/Component Part 2-2), and the Sekiyoshi Sluice Gate of Yoshino Leat (Area 2 Kagoshima/Component Part 2-3).

Appendix e)-3): Template for Annual Report FY20XX for the "Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining"

Appendix e)-4): Example of Annual Report FY 2016 for Shuseikan (Area 2 Kagoshima/Component Part 2-1), the Terayama Charcoal Kiln (Area 2 Kagoshima/Component Part 2-2), and the Sekiyoshi Sluice Gate of Yoshino Leat (Area 2 Kagoshima/Component Part 2-3).

[2] See Chapter 6 of CMPs for each component part



* CMP: "Conservation Management Plan" for each of the 23 component parts of the property were attached to the Nomination Document in 2014.

Figure 1. Relationships between UNESCO State of Conservation Report for Periodic Reporting by the Government of Japan, annual report by the Local Conservation Councils, and general/individual charts by the owners and municipalities concerned

Recommendation f)

Establishing and implementing an ongoing training programme for all staff and stakeholders responsible for the day-to-day management of each component to build capacity and ensure a consistent approach to the nominated property's ongoing conservation, management and presentation;

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B, p. 100) noted the following points as the premise of the Recommendation f) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- Though the conservation management plans provide consistency on the overall policies for the components' conservation and management, there are variations between the plans as mentioned above. In order to ensure consistency across each of the components, ongoing regular training and capacity building is needed on the appropriate conservation and management methods.
- ICOMOS considers that capacity building through training needs to be better articulated, particularly to ensure a consistent conservation and management approach across all components of the nominated property.
- It has not been demonstrated that the private companies have internal heritage expertise. It is essential that the relevant managers and staff within the private companies undergo training to understand OUV and how each of the sites contributes. It is also important that the companies engage/consult with relevant heritage experts as required, particularly with regard to balancing the need for routine maintenance with the need for conservation.

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation f).

(1) Identification of the current state and issues in relation to capacity building of human resource and clarification of the policies in individual Areas and component parts

The current state and issues of capacity building of human resource in each component part (capacity building measures already being implemented) will be identified with a view to the Area as a whole, then future approach will be clarified.

(2) Identification of the current state and issues in relation to capacity building of human resource and clarification of the policies that are common to the property as a whole

Personnel involved in conservation, restoration, presentation and public utilization measures for the component parts can be divided into the four types as below. Based on the results of (1), common policies and methods of capacity building of human resource for the property as a whole will be indicated for each type of personnel.

a) Owners and managers of the component part
b) Personnel engaged in actual conservation and management work on-site at the component part (designated administrators, etc.)
c) Personnel engaged in routine maintenance and management work on-site at the component part (including cleaning and repairs)

d) Personnel engaged in permanent interpretation work on-site at the component part, including volunteer guides.

(3) Identification of the common state of capacity building of human resource across all the component parts and introduction of the improvement process

To ensure consistency in capacity building of human resource across all the component parts, the current state will be regularly checked and improvements made where necessary.

3. Current state, issues, and future policies of capacity building of human resource in the individual Areas/component parts

In relation to 2-(1), the current state, issues, and future policies of capacity building of human resource in each of the Areas and component parts are laid out in **Appendices f)-1 to f)-8**.

Methods for capacity building of human resource currently being implemented in each of the Areas and component part will be continued while also maintaining consistency with the across-property capacity building policies and methods noted in 4 below.

4. Policies and methods of capacity building of human resource that are common to the property as a whole

The policies and methods that are common to the individual Areas and component parts are noted in (1) to (4) below.

(1) Necessary capacity for each type of human resource

ⓐ Owners and managers of the component part

Owners and managers of the component part must have appropriate understanding of the Outstanding Universal Value of Sites of Japan's Meiji Industrial Revolution consisting of 23 component parts as a whole, as well as the positioning and characteristics of the particular component part therein, and have the capacity to pursue various measures for appropriate conservation and management and those for proper conservation, restoration, presentation and public utilization holistically pursuant to existing CMPs as well as "Conservation, Restoration, Presentation and Public Utilization Plan" developed by the owners, managers and municipal authorities concerned.

ⓑ Personnel engaged in actual management work on-site at the component part (designated administrators, etc.)

Personnel engaged in actual management work on-site (personnel or groups designated as designated administrators, etc.) must have a precise understanding of the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution consisting of 23 component parts as a whole, as well as the positioning and characteristics of the particular component part therein, and have the capacity to execute various measures for conservation and management, and those for proper conservation, restoration, presentation and public utilization under the guidance of the owners or managers of the component part.

ⓒ Personnel engaged in routine maintenance and management work on-site at the component part (including cleaning and repairs)

Personnel engaged in routine maintenance and management work (including cleaning and repairs) on site at the component part must have a precise understanding of the Outstanding Universal Value of the Japan's Meiji Industrial Revolution consisting of 23 Component Parts as a whole, as well as the positioning and characteristics of the particular component part therein, and have the capacity to execute cleaning, repairs, and other maintenance and management work without fail at the component part under

the guidance of the owners or managers of the component part.

(d) Personnel engaged in permanent interpretation work on-site at the component part, including volunteer guides

Personnel engaged in permanent interpretation work on site at the component part must have a precise understanding of the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution consisting of 23 component parts as a whole, as well as the positioning and characteristics of the particular component part therein, and have the capacity to provide interpretation of the component part without fail to visitors under the guidance of the owners or managers of the component part.

(2) Necessary training for each type of human resource

Of the training items necessary for each of the types of personnel noted in (a) to (d) below, (i) to (v) are common items to all types of human resources, while (vi) is the training item required for the particular type of personnel.

(a) Owners and managers of the component part

(i) Overview of the World Heritage property (including the concept of the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972))

(ii) Understanding of the Outstanding Universal Value of the property and the positioning and characteristics of the relevant component part therein

(iii) Understanding of conservation and management mechanisms for the property as a whole

(iv) Understanding of the CMP and "Conservation, Restoration, Presentation and Public Utilization Plan" for the relevant component part (including the Area concerned)

(v) Understanding of the conservation and management mechanisms (monitoring methods, regular training, etc.) for the relevant component part (including the Area concerned)

(vi) As the officer in charge of capacity building of human resource, a comprehensive grasp of the duties of the various types of personnel in (b) to (d) and an understanding of methods for dealing with issues that arise

(b) Personnel engaged in actual management work on-site at the component part (designated administrators, etc.)

(i) Overview of the World Heritage property (including the concept of the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972))

(ii) Understanding of the Outstanding Universal Value of the property and the positioning and characteristics of the relevant component part therein

(iii) Understanding of conservation and management mechanisms for the property as a whole

(iv) Understanding of the CMP and "Conservation, Restoration, Presentation and Public Utilization Plan" for the relevant component part (including the Area concerned)

(v) Understanding of the conservation and management mechanisms (monitoring methods, regular training, etc.) for the relevant component part (including the Area concerned)

(vi) Understanding of specific conservation and management methods (directing works for cleaning and repairs, use of the daily checklist, emergency responses, etc.) for the relevant component part

(including the Area concerned)

(c) Personnel engaged in routine maintenance and management work on-site at the component part (including cleaning and repairs)

(i) Overview of the World Heritage property (including the concept of the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972))

(ii) Understanding of the Outstanding Universal Value of the property and the positioning and characteristics of the relevant component part therein

(iii) Understanding of conservation and management mechanisms for the property as a whole (in the context of routine management, distinguishing between dos and don'ts, as well as understanding liaison methods in the event of a problem arising in terms of conservation and management as a World Heritage component part)

(iv) Understanding of the CMP and "Conservation, Restoration, Presentation and Public Utilization Plan" for the relevant component part (including the Area concerned)

(v) Understanding of the conservation and management mechanisms (monitoring methods, regular training, etc.) for the relevant component part (including the Area concerned)

(vi) Understanding of specific conservation and management methods (points to note in routine duties, use of the daily checklist, etc.) for the relevant component part (including the Area concerned)

(d) Personnel engaged in permanent interpretation work on-site at the component part (including volunteer guides)

(i) Overview of the World Heritage property (including the concept of the Convention Concerning the Protection of the World Cultural and Natural Heritage (1972))

(ii) Understanding of the Outstanding Universal Value of the property and the positioning and characteristics of the relevant component part therein

(iii) Understanding of conservation and management mechanisms

(iv) Understanding of the CMP and "Conservation, Restoration, Presentation and Public Utilization for the relevant component part (including the Area concerned)

(v) Understanding of the conservation and management mechanisms (monitoring methods, regular training, etc.) for the particular component part (including the Area concerned)

(vi) Understanding of methods of interpreting the relevant component part (including the Area concerned) for visitors

(3) Project items which should be added to the work for capacity building of human resource

(a) Project items for capacity building for the owners and managers of the component part

Many of the cities involved with the Sites of Japan's Meiji Industrial Revolution implement (i) and (ii) of the training for capacity building noted in 4(2)(a) at training sessions for new hires, etc., but do not really implement (iii), (iv) and (vi). The future goal will be to implement training for all items (i) through (vi) making use of training tool mentioned in 4 (3)(d)(i).

In addition, there are many cases where personnel do not gain a sufficient understanding through classroom training, so visits to other component parts and exchange with their owners and managers will also be considered as means of ensuring understanding of the Outstanding Universal Value of the

Sites of Japan's Meiji Industrial Revolution.

In particular, as personnel transfers within municipal authorities can lead to a change in officers, the aim will be to provide the new appointees with proper training. Another aim will be to hold training sessions for officers from not only those departments and divisions primarily in charge of World Heritage conservation and management, but also from departments and divisions handling tourism promotion, P.R., and infrastructure management, etc.

In conjunction with the Cabinet Secretariat of Government of Japan, the World Heritage Council for the Sites of Japan's Meiji Industrial Revolution, which was set up in order for municipal authorities to work together on conservation, management and interpretation for the property as a whole as well as the individual component parts, holds training sessions twice per every year. The sessions target officers from municipal authorities, etc., involved in measures supporting conservation and management and practical work for conservation, restoration, presentation and public utilization at the various component parts, dealing from a comprehensive perspective with the system of World Heritage Convention, the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution, and methods for conservation and management of the property as a whole. These sessions will be continued. Training sessions held to date are noted in **Appendix f)-9**.

(b) Project items for capacity building for the personnel engaged in actual management work on-site at the component part (designated administrators, etc.)

Many Areas do not conduct training sessions for personnel involved in management work, and this will need to be addressed. In the Area 7 Miike, Arao City holds training sessions at the regular Manda Pit meetings for the designated administrators, and training contents are to be enhanced.

In terms of the upcoming schedule, training session for personnel engaged in management work will be held in Area 2 Kagoshima and other Areas.

Training material mentioned in 4(3)(d)(i) also must be utilized for seminars for the staff from municipal authorities who run the training sessions for personnel involved in management work.

(c) Project items for capacity building for the personnel engaged in routine maintenance and management work on-site at the component part (including cleaning and repairs)

While various groups are involved in cleaning, repairs, and other types of routine maintenance and management work in each Area, at this moment no Areas or component parts other than Area 2 Kagoshima (Component Part 2-1 Shuseikan) and Area 6 Nagasaki (Component Part 6-8 Glover House and Office) implement the work for capacity building.

In Area 2 Kagoshima, local neighborhood associations within the individual component parts undertake cleaning activities, and training sessions are scheduled for members of these associations.

However, large-scale training sessions are not necessary for all Areas, and in some areas it will be sufficient to hold small-scale training for staff education and provide information by distributing materials, etc.

Measures will be taken so that when companies and groups handling cleaning and security are instructed on their tasks, items (i) to (vi) are communicated to them, and training will be provided where necessary through the concise educational material indicated in 4(3)(d)(i).

(d) Project items for capacity building for the personnel engaged in permanent interpretation work on-site at the component part

Many Areas hold training sessions for guides, but these focus on items (i), (ii), and (vi), which is not always adequate. Even when guides understand the history and characteristics of respective component parts, it is difficult for them to understand the Outstanding Universal Value of the property as a whole and the positioning and characteristics of the relevant component part therein.

Based on the current state mentioned above, Executive Committee for Capacity Building of Human Resources for Sites of Japan's Meiji Industrial Revolution including the National Congress of Industrial Heritage is currently underway of implementation of capacity building projects under the subsidies by the Agency for Cultural Affairs. These projects consists of creating capacity building materials and organizing seminars for the on-site visitor guides.

The capacity building materials will be created as three types as below.

(i) Materials that cover all information regarding the Outstanding Universal Value of Sites of Japan's Meiji Industrial Revolution as a World Heritage property, each component part's contribution to and positioning in the Outstanding Universal Value, and the system for conservation, management and interpretation of the property as a whole and its individual component parts. (Its completion will be scheduled in December, 2017).

(ii) Materials that help visitors to learn about the techniques to be transmitted to next generations. This was completed in October, 2017.

(iii) Materials that help visitors to learn about the history of industries of iron and steel, ship building, and coal mining. (completion of the learning guide material for iron and steel will be firstly scheduled in December, 2017)

Materials will be on Web-site to enable every one access. Seminars for on-site guides of individual component parts will be organized in each Area respectively between October 2017 and February 2018. The provisional schedule will be as follows.

2017;

October	Area 4 Kamaishi
November	Area 8 Yawata
December	Area 3 Nirayama

2018;

January	Area 1 Hagi, Area 2 Kagoshima, Area 7 Miike
February	Area 5 Saga, Area 6 Nagasaki

In the seminar, lectures utilizing the materials mentioned above and explanation regarding the user guide on how to operate mobile App. of the Sites of Japan's Meiji Industrial Revolution will be made.

In Area 6 Nagasaki, Nagasaki City held tours to Area 5 Saga's Mietsu Naval Dock (Component Part 5-1) , Area 7 Miike's Miike Coal Mine and Miike Port (Component Part 7-1), and Misumi West Port (Component Part 7-2) and social events exchanging information among local guides as part of volunteer guide training activities in FY 2015. The city will continue to promote tours for guides to visit other component parts, as well as exchange between guides from different component parts.

The World Heritage Council for the Sites of Japan's Meiji Industrial Revolution also holds an information exchange meeting and observation tours once a year to enable volunteer guides from the various regions to share the challenges they face, discuss solutions, and improve their conservation, management and interpretation skills. Meetings and tours to date are noted in **Appendix f)-9**.

(e) Implementation and improvement of the project items for consistent capacity building of human resource across the property as a whole

The state of the project items for capacity building of human resource at each component part as well as across the property as a whole, including those noted in (a) to (d) above, will be regularly checked to ensure consistent operation by the Cabinet Secretariat of the Government of Japan and relevant municipal authorities. Improvement measures will be examined and implemented based on the results.

5. Reference Materials

Appendix f)-1: Current state, issues, and directionality of capacity building of human resource in Area 1 Hagi

Appendix f)-2: Current state, issues, and directionality of capacity building of human resource in Area 2 Kagoshima

Appendix f)-3: Current state, issues, and directionality of capacity building of human resource in Area 3 Nirayama

Appendix f)-4: Current state, issues, and directionality of capacity building of human resource in Area 4 Kamaishi

Appendix f)-5: Current state, issues, and directionality of capacity building of human resource in Area 5 Saga

Appendix f)-6: Current state, issues, and directionality of capacity building of human resource in Area 6 Nagasaki (non-working property)

Appendix f)-7: Current state, issues, and directionality of capacity building of human resource in Area 7 Miike (non-working property)

Appendix f)-8: Current state, issues, and directionality of capacity building of human resource in Area 8 Yawata

Appendix f)-9: Schedules and content of training sessions and other plans held to date by the World Heritage Council for the Sites of Japan's Meiji Industrial Revolution

Recommendation g)

Preparing an interpretive strategy for the presentation of the property, which gives particular emphasis to the way each of the sites contributes to Outstanding Universal Value and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site1;

1 The World Heritage Committee takes note of the statement made by Japan, as regards the interpretive strategy that allows an understanding of the full history of each site as referred to in paragraph 4.g), which is contained in the Summary Record of the session (document WHC-15/39.COM/INF.19).

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B, pp 99-100) noted the following points as the premise of the Recommendation g) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015:

- *The presentation of the components is mainly place specific and does not present the OUV or indicate how each component relates to each other or to the whole property.*
- *What is urgently needed is clear interpretation to show how each site or component relates to the overall series, particularly in terms of the way they reflect the one or more phases of Japan's industrialisation and convey their contribution to OUV.*

Recommendation g) also referred to a footnote regarding the Government of Japan's statement at the time of the inscription, and indicated:

- *Preparing an interpretive strategy which allows an understanding of the full history of each site.*

2. Response: Methodology and Outputs

Methodology

The Government of Japan formulated the following methodology to respond to recommendation g) of the World Heritage Committee:

- Conduct a full **Interpretation Audit**, involving specially commissioned independent international experts at two principal levels: WHS-wide, and at component parts/sites;
- Develop the **Interpretation Strategy** based on the result of the Interpretation Audit and the ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (2008);
- Specially invite the President of the ICOMOS International Scientific Committee (ISC) on Interpretation and Presentation to review progress (WHS-wide and site-specific, including site visits) and provide specific advice on the interpretation of the **"full history" of each site**.

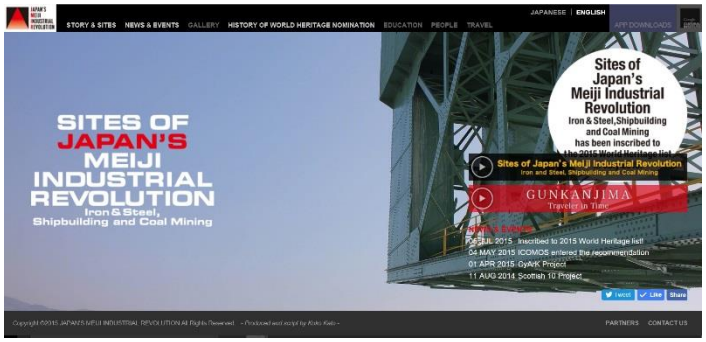
Outputs

1. Audit Report of WHS-wide Interpretation (May-September 2017, by Cabinet Secretariat and international experts),
   Audit Report of Component Parts/Site-Specific Interpretation and Presentation (January-September 2017, this report was prepared by an expert who, in a separate and earlier role, was the ICOMOS expert for the technical evaluation mission of the WH nomination);
2. Interpretation Strategy (Cabinet Secretariat, November 2017);
3. Included in 2. (above) is an Interpretation Plan that outlines outstanding issues identified during the Audit (with corresponding programmed actions), and actions based on the advice of the ICOMOS ISC President with specific regard to the interpretation of the "full history" of each site.

3. Outline of the "Interpretation Strategy"

The Interpretation Audit created a baseline of interpretive provision for "Sites of Japan's Meiji Industrial Revolution". This included substantial post-inscription achievements at a common WHS-wide level, and a range of site-specific developments at all component parts.

Examples of Existing WHS-Wide Interpretation



Website

Official Pamphlet

Map

App

DVD

Stamps

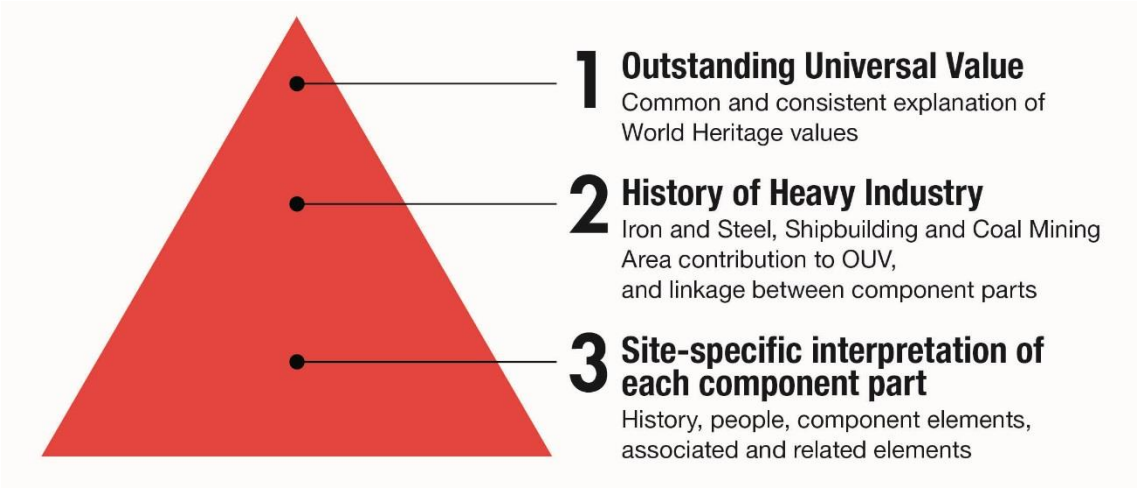
Commemorative Coin Sets

Whilst the ICOMOS Interpretation Charter, 2008 guides the structure and contents of the Interpretation Strategy, content is derived from input received from a wide spectrum of stakeholders; from the sites and their communities, and from local and national government agencies, to national and international experts (Refer to **Appendix g)-1**).

Hierarchical Approach to Layered Interpretation

Interpretation and Presentation of "Sites of Japan's Meiji Industrial Revolution":

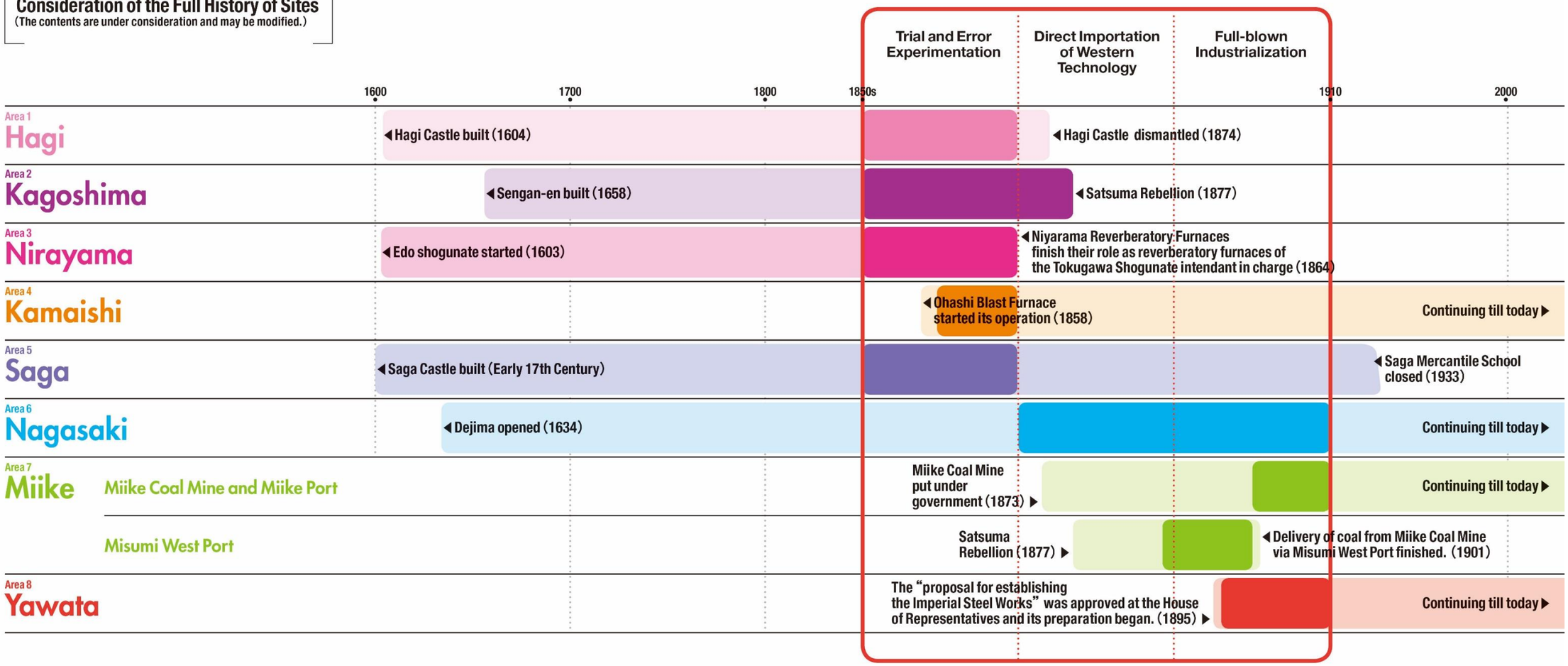
Hierarchy of values and themes



The overarching interpretive theme, derived from OUV, will be shared consistently between all areas and component parts. It acts as a headline theme for a hierarchy of area and site-specific themes and stories. This will ensure that all values – from World Heritage to local - are presented in an integrated manner across the entire property.

Interpretation flow at each local visitor centre: Hierarchy of Interpretation

Consideration of the Full History of Sites
(The contents are under consideration and may be modified.)



Related Sites

Shimonoseki City,Yamaguchi
Maeda Battery Site
Black Ships Arrived (1853)
Former British Consulate in Shimonoseki built (1906)

Iizuka City, Fukuoka Pref.
Former Mr. Den-emon Ito’s Residence
Major central capitals entered the Chikuho coal field with the introduction of selected pitting district (1889)
Chikuho Coal Mine closed (1976)

Tagawa City, Fukuoka Pref.
Ita Shaft Tower,formerly Mitsui Tagawa Coal Mine
The Two Chimneys of Ita Shaft, formerly Mitsui Tagawa Coal Mine
Mitsui Colliery bought Tagawa Coal Mining Organisation and established Mitsui Tagawa Coal Mine (1900)
Chikuho Coal Mine closed (1976)

Karatsu City, Saga Pref.
Former Takatori Residence
The shogunate permited coal mining by clans other than the Karatsu clan in the shogunate territory of the Karatsu district (around 1864)
Karatsu Coal Mine closed (1972)

In the support of the understanding of the “full history” of each site, sites that are supplementary to component parts are to be interpreted and the following definition applies:

Associated sites and facilities = Sites and facilities that possess local/national values that contribute to the understanding of the full history of each site

Related sites = Sites that are closely connected to, or belong to the same “family group” as, component parts of the Sites of Japan’s Meiji Industrial Revolution, and that supplement the series to fully understand its World Heritage significance; although such sites do not necessarily meet UNESCO requirements to be included.

Hierarchy of Physical Interpretation & Presentation

- Outstanding Universal Value
- ・Connection between industrial history and each area
  ・Positioning of component parts in the industrial history
- Explanations on component parts
- Explanations on related sites
- Information that contibute to the understanding of the "full history" of each site

Industrial Heritage Information Center

Area1 Hagi
- 1-1 Hagi Reverberatory Furnace
- 1-2 Ebisugahana Shipyard
- 1-3 Ohitayama Tatara Iron Works
- 1-4 Hagi Castle Town
- 1-5 Shokasonjuku Academy

Area2 Kagoshima
- 2-1 Shuseikan
- 2-2 Terayama Charcoal Kiln
- 2-3 Sekiyoshi Sluice Gate of Yoshino Leat

Area3 Nirayama
- 3-1 Nirayama Reverberatory Furnaces

Area4 Kamaishi
- 4-1 Hashino Iron Mining and Smelting Site

Area5 Saga
- 5-1 Mietsu Naval Dock

Area6 Nagasaki
- 6-1 Kosuge Slip Dock
- Mitsubishi
- 6-2 No.3 Dry Dock
- 6-3 Giant Cantilever Crane
- 6-4 Former Pattern Shop
- 6-5 Senshokaku Guest House
- 6-6 Takashima Coal Mine
- 6-7 Hashima Coal
- 6-8 Glover House and Office

Area7 Miike
- 7-1 Miike Coal Mine and Miike Port
- 7-2 Misumi West Port

Area8 Yawata
- 8-1 Imperial Steel Works, Japan
- 8-2 Onga River Pumping Station

Related Sites

Maeda Battery Site
Shimonoseki City, Yamaguchi Prefecture
Countering the combined navies of four countries The Shomonoseki Campaign From closed-period to open Japan

Former Mr. Den-emon Ito's Residence
Iizuka City, Fukuoka Prefecture
Former Mr. Den-emon Ito's Residence and Memories of Coal Mines of Chikuho Iizuka

Ita Shaft Tower, formerly Mitsui Tagawa Coal Mine The Two Chimneys of Ita Shaft
Tagawa City, Fukuoka Prefecture
Sakubei Yamamoto and Memories of Coal Mines of Chikuho Tagawa

Former Takatori Residence
Karatsu City, Saga Prefecture
Former Residence of Koreyoshi Takatori who made a fortune from the Takashima Coal Mine and Memories of Coal Mines in Karatsu

World Heritage Visitor Center

- Hagi Meiringakusha Visitor Center
- Former Shuseikan Machinery Factory (Currently Shokoshuseikan Museum)
- Former Kagoshima Foreign Engineer's Residence (Ijinkan)
- Nirayama Reverberatory Furnaces Guidance Center
- Hashino Iron Mining and Smelting Site Information Center
- Tsunetami Sano Memorial Museum
- Mitsubishi Heavy Industries Nagasaki Shipyard & Machinery Works Historical Museum
- Nagasaki City Gunkanjima Museum
- Former Mitsubishi NO.2 Dock House
- Nagasaki Port Terminal Building
- Omuta Coal Industry and Science Museum
- Ryujokan
- Kitakyushu Innovation Gallery & Studio
- Onga River Pumping Station Information Center

Associated facilities that exhibit component parts and industries

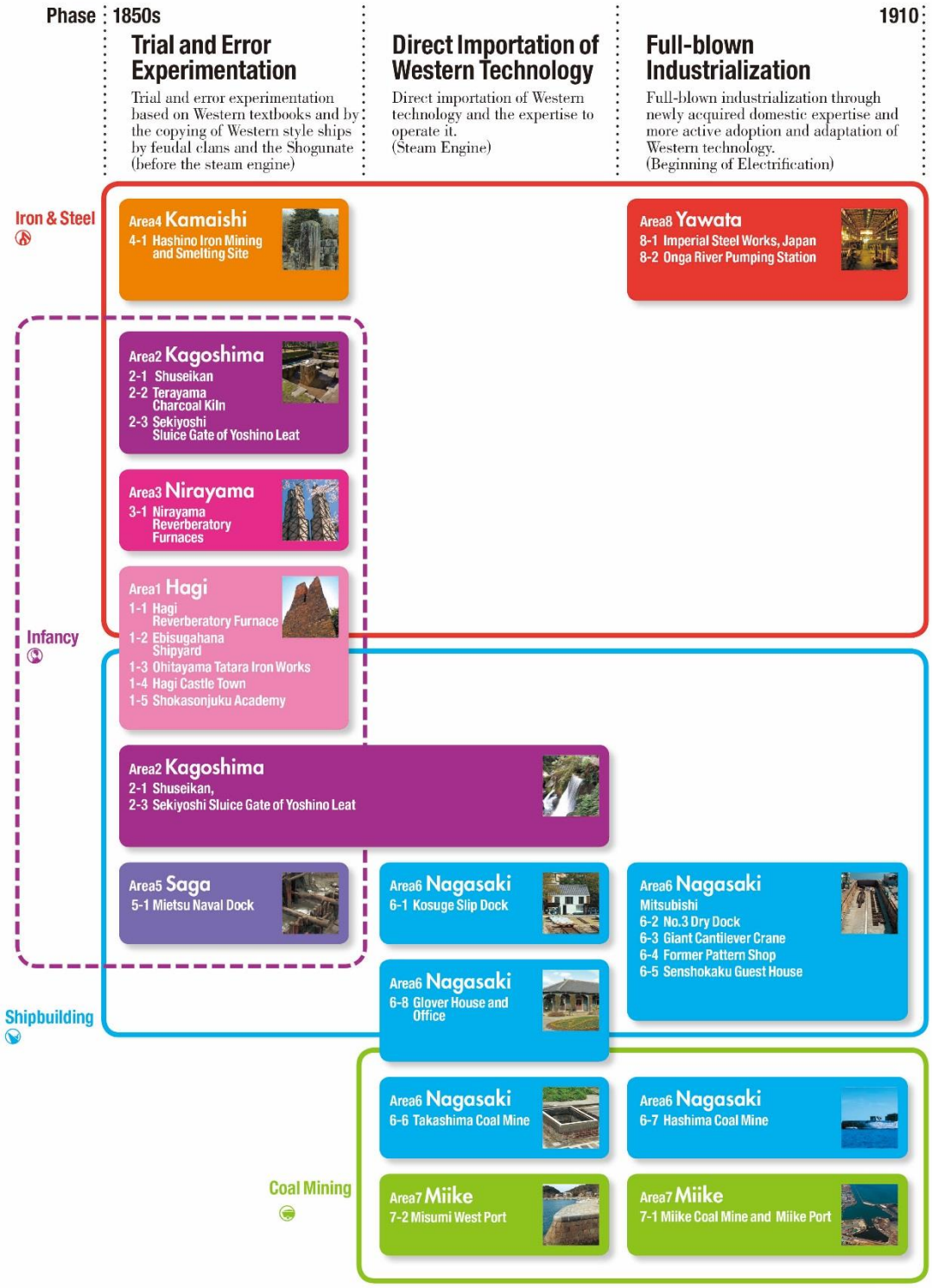
- Hagi Museum
- Ohitayama Tatara Information Center
- Ohitayama Tatara Exhibition Hall
- Shoin Memorial Museum
- Kagoshima Prefectural Museum of Culture Reimeikan
- Kagoshima City Museum of the Meiji Restoration
- Kagoshima City Museum of Archaeology
- Egawa Residence
- Iron and Steel History Museum
- Former Kamaishi Mine's Office Building
- Kamaishi Historical Materials Display
- Saga Castle History Museum
- Historical Museum Chokokan
- Nagasaki City Takashima Coal Museum
- Gunkanjima Digital Museum
- Miike Port observation deck
- Old Nagasaki Customs House Miike Branch Office
- Mikawa Pit
- Manda Pit Station
- Manda Coal Mine Museum
- The Imperial Steel Works, Japan First Head Office Viewing space
- Higashida Blast Furnace NO.1
- Onga River Pumping Station Viewing space

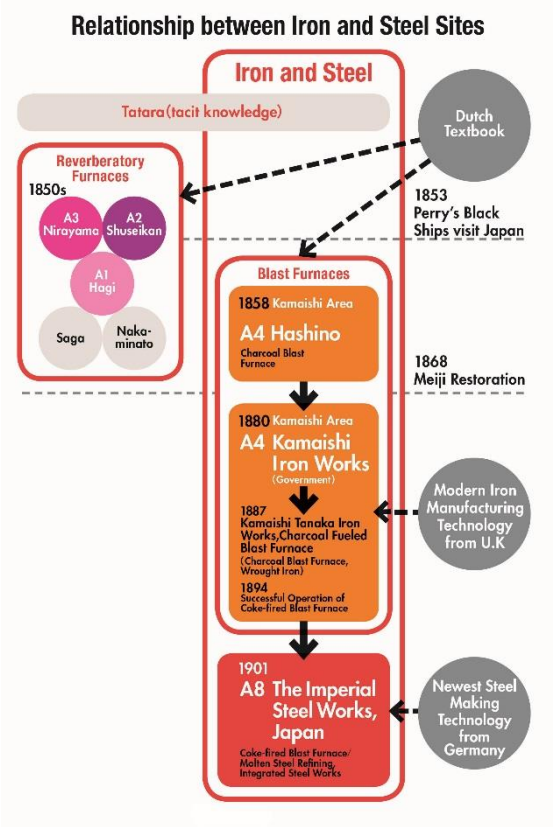
Associated sites and facilities that contribute to the understanding of the “full history” of each site

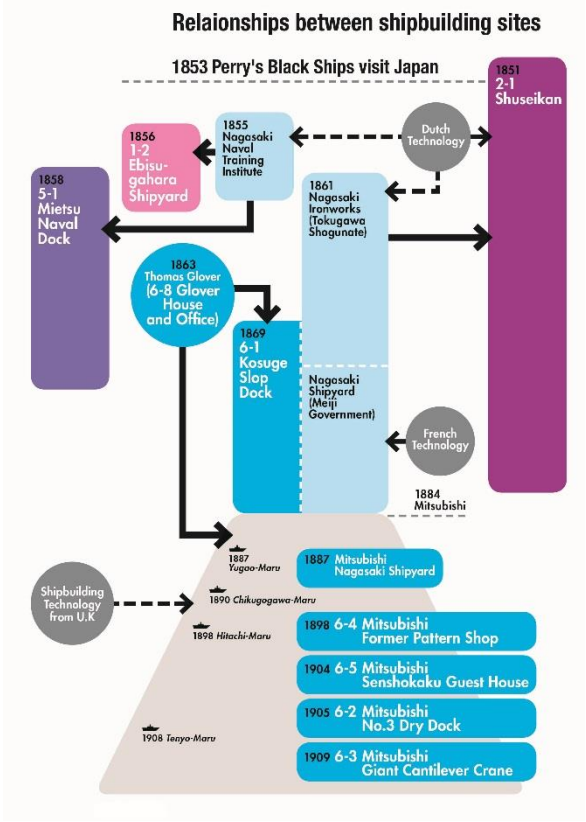
- Cradle of the Meiji Restoration
- Defending Japan's Southern Gateway／Samurai's Challenge in Science and Technology／Cradle of Industrial Japan
- Defending Edo／Challenge of the Iron Cannon
- Birthplace of Japan's Modern Iron and Steel Industry
- Defending Nagasaki／Samurai's Challenge in Technology／Developing skills for naval defense
- From Clan to Company／Mitsubishi Goshi Kaisha／Technology as the spirit for developments for the sea and land
- Mitsui, Miike, Coal Industry and Logistics／to Japan's First Coal-based Chemical Industry Complex
- The Imperial Steel Works and the Emergence of Industrial Japan / Japan's Industrial Revolution

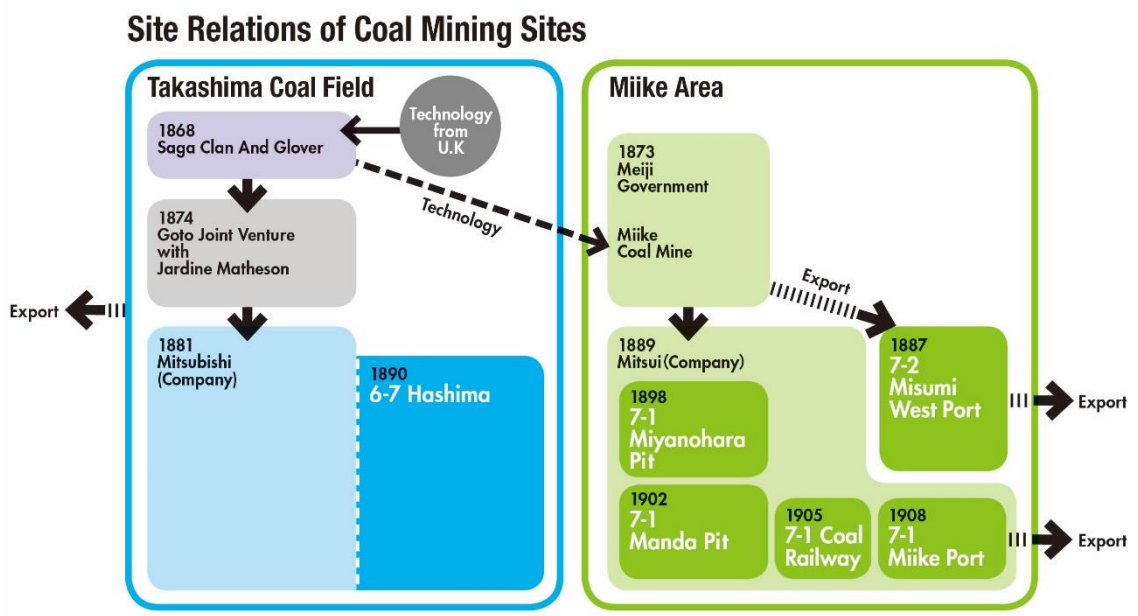
Chronological Development Phase of Three Industrial Typologies (1850s to 1910)

Industrial History of Japan in the Heavy Industries (Iron and steel,Shipbuilding and Coal Mining) in the period 1850s to 1910




Relationship between Iron and Steel Sites
Iron and Steel
Tatara (tacit knowledge)
Dutch Textbook
Reverberatory Furnaces
1850s
A3 Nirayama
A2 Shuseikan
A1 Hagi
Saga
Naka-minato
1853 Perry's Black Ships visit Japan
Blast Furnaces
1858 Kamaishi Area
A4 Hashino
Charcoal Blast Furnace
1868 Meiji Restoration
1880 Kamaishi Area
A4 Kamaishi Iron Works
(Government)
1887 Kamaishi Tanaka Iron Works,Charcoal Fueled Blast Furnace
(Charcoal Blast Furnace, Wrought Iron)
1894 Successful Operation of Coke-fired Blast Furnace
Modern Iron Manufacturing Technology from U.K
1901
A8 The Imperial Steel Works, Japan
Coke-fired Blast Furnace/ Molten Steel Refining, Integrated Steel Works
Newest Steel Making Technology from Germany


Relaionships between shipbuilding sites
1853 Perry's Black Ships visit Japan
1851 2-1 Shuseikan
1856 1-2 Ebisu-gahara Shipyard
1855 Nagasaki Naval Training Institute
Dutch Technology
1858 5-1 Mietsu Naval Dock
1861 Nagasaki Ironworks (Tokugawa Shogunate)
1863 Thomas Glover (6-8 Glover House and Office)
1869 6-1 Kosuge Slop Dock
Nagasaki Shipyard (Meiji Government)
French Technology
1884 Mitsubishi
1887 Yugao-Maru
1887 Mitsubishi Nagasaki Shipyard
Shipbuilding Technology from U.K
1890 Chikugogawa-Maru
1898 Hitachi-Maru
1898 6-4 Mitsubishi Former Pattern Shop
1904 6-5 Mitsubishi Senshokaku Guest House
1905 6-2 Mitsubishi No.3 Dry Dock
1908 Tenyo-Maru
1909 6-3 Mitsubishi Giant Cantilever Crane


Site Relations of Coal Mining Sites
Takashima Coal Field
Technology from U.K
1868 Saga Clan And Glover
Technology
1874 Goto Joint Venture with Jardine Matheson
Export
1881 Mitsubishi (Company)
1890 6-7 Hashima
Miike Area
1873 Meiji Government
Miike Coal Mine
Export
1889 Mitsui (Company)
1887 7-2 Misumi West Port
Export
1898 7-1 Miyanohara Pit
1902 7-1 Manda Pit
1905 7-1 Coal Railway
1908 7-1 Miike Port
Export

4. Summary of the “Interpretation Plan”

As an outcome of the Interpretation Audit and Interpretation Strategy, nine key steps are identified in the following programme:

Task	Description	Responsibility	Timescale
(1)	Consistent OUV rollout across all component parts	Cabinet Secretariat, local authorities	From FY 2018
(2)	Updates of the full history of each site	Cabinet Secretariat, local authorities	From FY 2018
(3)	Information gathering related to workers, including Korean workers	General Incorporated Foundation National Congress of Industrial Heritage	Continued from FY 2016
(4)	Establishment of the “Industrial Heritage Information Centre”, Tokyo	Cabinet Secretariat	During FY 2019
(5)	Consideration of a certification programme for the interpretation of “Sites of Japan’s Meiji Industrial Revolution”	General Incorporated Foundation National Congress of Industrial Heritage, local authorities	From FY 2018
(6)	Human resource training programmes and training manual	General Incorporated Foundation National Congress of Industrial Heritage, World Heritage Council	During FY 2017
(7)	World Heritage Route	World Heritage Route Promotion Council	Ongoing

(8)	Onsite and online interpretation generated from Digital 3D resources developed by the Scottish Ten for Nagasaki sites with no public access: No.3 Dry Dock, and the Giant Cantilever Crane – especially virtual visits	General Incorporated Foundation National Congress of Industrial Heritage	Ongoing
(9)	Onsite and online interpretation generated from Digital 3D resources developed by the Scottish Ten for Kosuge Slip Dock and Gunkanjima – notably digital reconstruction of the coal mine	General Incorporated Foundation National Congress of Industrial Heritage	Ongoing

Details of these steps are provided below.

(1) Consistent OUV rollout across all component parts

Based on the Interpretation Strategy, the consistent interpretation of OUV should be presented across all component parts. This will be agreed by all stakeholders, and coordinated and implemented commonly in a branded World Heritage style.

(2) and (3) Progress in dealing with the "full history" of each site, including information gathering related to workers

Advice from international experts who are members of the Expert Committee on the Industrial Heritage including Operational Properties (Cabinet Secretariat of Japan), from the international heritage expert who was the ICOMOS technical evaluation field assessor of the World Heritage nomination of "Sites of Japan's Meiji Industrial Revolution", and from the President of the ICOMOS International Scientific Committee on Interpretation and Presentation, comprises the following four key policies:

1) Focus on the interpretation of Outstanding Universal Value; in conformity with the primary purpose of the World Heritage, OUV of the inscribed property should be presented clearly at each site, not confusing with other, albeit related, issues. Based on this, Recommendation g) should be implemented.

2) The scope of the "full history" of each site, except for the OUV period (from 1850s to 1910) as described on page44, falls into two parts: prior to 1850s, and from 1910 to the present. The target of the full history should be narrowed down, considering the local values that supplement the understanding of the background of each component part. Where relevant, with regard to the interpretation of the full history on the location of each component part, high quality research such as collecting primary historical documents and recording oral testimonies should be carried out, and the result of this research should, at some stage, be made publicly available through appropriate media.

3) Given the focus on OUV, the interpretation of industrial workers' stories should focus on Japanese industrial workers during the OUV period, whilst the interpretation of those outside the OUV period may allow an understanding of the fact that the Government of Japan implemented its policy of requisition of workers under the National Mobilisation Law during World War II, and that there were a large number of those from the Korean Peninsula who supported Japanese industries before, during, and after the War.

4) In view of the above guidance, research on Koreans in Japan before, during, and after the War, including research on the policy of requisition of Korean workers, should be undertaken.

From the above policies provided (against each of the above points 1) to 4)), detailed progress and timescales are as follows:

1) A scheme has been developed in FY 2016-17, and the interpretation of OUV will be implemented at all sites, in a consistent manner, under the coordinated direction of the Cabinet Secretariat of Japan from FY 2018.

2) A specially commissioned "Interpretation Audit" noted that the "full history" as described on page 44 was already adequately interpreted at a number of sites. Those that require attention are planned for updates from FY 2018.
   In addition, the "Sakubei Yamamoto Collection" composed of annotated paintings and diaries is described on page 239 of the Nomination Document as materials to promote an understanding of industrial workers. The collection can be regarded as part of the Interpretation Strategy, since it was registered as the *Memory of the World* during the nomination process of the *"Sites of Japan's Meiji Industrial Revolution"*. The collection is of great significance in facilitating an understanding of the coal mine workers at that time in Chikuho Coal Mine that

supplied coal to make coke at Yawata. Currently, the collection is exhibited at facilities such as Tagawa City Coal Mining Historical Museum established in the same premise as the Ita Shaft Tower and the Two Chimneys of Ita Shaft, formerly Mitsui Tagawa Coal Mine, one of the related sites of the WHS.

3) As appropriate, workers' stories are planned for updates from FY 2018, based on primary historical documents and oral testimonies.

4) The Cabinet Secretariat of Japan intends to share the primary historical documents regarding workers' stories with the public, ultimately in the "Industrial Heritage Information Centre" to be located in Tokyo during FY 2019. Numerous research targets have been pursued, including oral testimonies, reviews of published materials, together with the investigation of primary historical documents hitherto little consulted.

(4) Establishment of the "Industrial Heritage Information Centre", Tokyo

When the World Heritage Committee adopted the Decision (39COM 8B.14) at its thirty-ninth session, a record of the Government of Japan's statement was referred to as a footnote to Recommendation g).

Thus, the Government of Japan is planning the establishment of the "Industrial Heritage Information Centre" as a comprehensive information centre in Tokyo during FY 2019, and the construction cost is included in the draft budget for FY 2018. As a "think tank" that contributes to dissemination and enlightenment of industrial heritage conservation, the Centre will dispatch information mainly on the overall property of "Sites of Japan's Meiji Industrial Revolution", as well as other information on industrial heritage, including workers' stories. The details of the contents are under consideration.

(5) Consideration of a certification programme for the interpretation of "Sites of Japan's Meiji Industrial Revolution"

Following the implementation of the Interpretation Strategy, in order to ensure a "quality assurance" of interpretation, a certification programme for a wide range of interpretive providers will be considered from FY 2018, promoting dissemination and enlightenment of interpretation at all component parts, as well as at related sites.

(6) Human resource training programmes and training manual

Following the inception series of interpretation lectures given at all component parts

during the Interpretation Audit, a further series of human resource training programmes are being provided at each site during FY 2017, together with the provision of a training manual to be used by sites’ interpretive staff and volunteers.

(7) World Heritage Route

Promotion of the World Heritage Route, providing WH guidance and tourism infrastructure, is ongoing. This includes maps and apps, GPS navigation, traffic signage using the common logo, and other aspects, guiding visitors to all component parts and related sites. The “Association for the World Heritage Route Promotion” comprises WHS stakeholders, tourism agencies, and transport agencies including railways, airlines, bus and taxi.

Promotion using Classic Car

Promotion at a Travel Fair in Taiwan, 2016

Special Promotion by JR Kyushu, Kumamoto Prefecture:
Special limited tours by Roman Cruise and ‘A’ Train for 80 people per day to visit Manda Pit and Misumi West Port.

(8) Onsite and online interpretation generated from Digital 3D resources developed by the Scottish Ten for Nagasaki sites with no public access: No.3 Dry Dock, and the Giant Cantilever Crane – especially virtual visits

In 2014, the 3D digital documentation work by the Scottish Ten resulted in the laser scanning of both the Giant Cantilever Crane and No.3 Dry Dock in Nagasaki. Both these sites are operational and cannot be accessed by members of the public. For this reason, detailed 3D model created by these surveys is being developed as a content of

official apps, providing virtual visits to the sites.

(9) Onsite and online interpretation generated from Digital 3D resources developed by the Scottish Ten for Kosuge Slip Dock and Gunkanjima – notably digital reconstruction of the coal mine

In 2014, the 3D digital documentation work by the Scottish Ten resulted in the laser scanning of both Kosuge Slip Dock and Gunkanjima in Nagasaki. Both these sites can be accessed by members of the public, but the enhanced digital resources provided by the detailed 3D record can be used to develop both onsite and online interpretation resources in the future.

5. Reference materials

Appendix g)-1 Interpretation Strategy

Recommendation h)

Submitting all development projects for road construction projects at Shuseikan and Mietsu Naval Dock and for a new anchorage facility at Miike Port and proposals for the upgrade or development of visitor facilities to the World Heritage Committee for examination, in accordance with paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention.

1. Background

The report of "ICOMOS Evaluations of Nominations of Cultural and Mixed Properties" (WHC-15/39.COM/INF.8B, p.96) noted the following points as the premise of Recommendation h) consequently included in the Decision by the World Heritage Committee at its 39th session in 2015.

- Proposed road at Shuseikan

  Japan's National Route 10 currently runs just outside the boundary and is within the buffer zone[1]. There is a proposal to bypass the road through the nearby mountain. The agency responsible for the development of the bypass is required to undertake its design and development in accordance with the Japanese Government's Cabinet Decision for the protection of World Heritage[2], and with conservation management plan and all relevant legislation. This project is currently in the planning phase. There is no date yet for construction to commence. This proposal provides the opportunity to enhance the component's setting with the removal of some modern small-scale commercial buildings and provide opportunities to enable more archaeological surveys to enhance understanding of the site.

- Proposed road at Mietsu Naval Dock

  Consultation locally, nationally and internationally has been undertaken to modify the original design for the construction of a road and bridge just outside the north east side of the buffer zone. As a result, the original bridge design has been modified to try and avoid impact on the site or on the visual setting with its distant views across the river. This development is still in the planning phase and a date for the commencement of construction is yet to be set. As this is a comparatively major project, further details should be submitted for review.

- Proposed development at Miike Port

  There is a proposal for the development of a new small anchorage facility for the local fishing fleet to provide safer access between the fishing fleet and much larger shipping vessels and to protect the fishing fleet from tidal surges. Planning for this development commenced prior to the development of the nomination but construction is not due to commence until the 2020s. However, subsequent to the nomination's development, the original design has been amended to minimise its physical and visual impact. The new facility is to be located at the western tip of the port and will cut into the existing dock. Further details should be provided for review.

[1] Currently, Route 10 (National Road 10) passes through the area of the component part and not the buffer zone. What ICOMOS has pointed out regarding this part, therefore, is wrong.

[2] General Principles and Strategic Framework for the Conservation and Management of the Sites of Japan's Meiji Industrial Revolution: See http://whc.unesco.org/uploads/nominations/1484.pdf, pp. 487-559.

● Proposals for new Visitor Centres/Facilities

There are proposals to develop new visitor facilities in the buffer zones to accommodate the anticipated visitor increase at:

・Hagi: new facility planned (construction from 2015 and open in 2017);

・Nirayama: new facility planned (construction from 2015 and open in 2016);

・Miike: new facility for Miike Port planned (construction from 2016 or later);

・Yawata: new facilities planned (new or extension at Kitakyushu, and new construction in Nakama from 2016 or later)

2. Directionality

Given the above, the following directionality has been determined in relation to Recommendation h).

(1) Proposals for which the progress reports have already been submitted

Of the four proposals for development projects referred to in Recommendation h), the progress reports were submitted on the following three component parts to the UNESCO World Heritage Centre on November 30, 2015.

(a) Progress report on the Shuseikan bypass authorized in city plan (see **Appendix h)-1**)

(b) Heritage impact assessment report for the road and bridge planned for the Mietsu Naval Dock (see **Appendix h)-2**)

(c) Progress report on the visitor centre (guidance facility) under construction at the Nirayama Reverberatory Furnaces (see **Appendix h)-3-1**)

(2) Proposals for which the progress reports will be submitted

The development of a new small anchorage facility at Miike Port which is referred to in Recommendation h) is currently at the planning and discussion stage. Once the plan outline has been firmed up, a progress report will be submitted.

While not mentioned in in Recommendation h), of the four planned Visitor Centres noted in the ICOMOS Evaluation Report, the progress report of Hagi Visitor Centre project will be submitted as a reference material attached to this State of Conservation Report (see **Appendix h)-4**).

(3) Proposals on hold

As for the construction project of Miike Visitor Centre and Yawata Visitor Centre noted in the ICOMOS Report, the details of the plan have not been decided at this moment, there is a possibility of consideration of the construction in the future.

The progress report on the restoration projects of the Imperial Steel Works, Japan (Component Part 8-1) and Onga River Pumping Station (Component Part 8-2), which will be launched within FY 2017, was submitted to the UNESCO World Heritage Centre on September 28th 2017, in accordance with the paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention. A copy of the report will be attached to this State of Conservation Report as **Appendix h)-5**.

3. Progress of projects and impacts on the Outstanding Universal Value

(1) Proposed Shuseikan bypass authorized in city plan

This plan entails moving the national road that currently passes through Shuseikan (Area 2 Kagoshima/Component Part 2-1) to the mountain area to the west of Shuseikan. While this will mean

the road running though the edge of the buffer zone, it will pass through a tunnel under the mountain side of Shuseikan, and will therefore have no impact on the view from the component part, and will also have no negative impact on the buffer zone which preserves the visual setting of the component part (**Appendix h)-1**).

The report submitted in November 30th 2015 was intended to report on the current state of progress. After that, Kagoshima Prefectural Government decided the road course, as was indicated in the progress report, on the Kagoshima prefectural city plan on December 22nd 2015.

When the Government of Japan has secured the funds and work begins on the implementation design, a heritage impact assessment will be undertaken and a further report will be submitted to the World Heritage Centre.

(2) Proposed construction of a new road and bridge at Mietsu Naval Dock

This is a plan for construction of the Ariake Coastal Road and a bridge to constitute part of this to adjoin the outside edge of the buffer zone for the Mietsu Naval Dock (Area 5 Saga/Component Part 5-1). Those elements contributing to the Outstanding Universal Value of the Mietsu Naval Dock are underground archaeological remains, so the construction work outside the scope of the component part and buffer zone will have no direct impact. The impact on the view from within the component part was also assessed and the design changed as a result, minimizing the impact on the visual setting. Consultations will also be continued between the road manager and Saga City as a heritage manager (**Appendix h)-2**).

(3) Plan for the construction of a Visitor Centre/Facility (guidance facility) at the Nirayama Reverberatory Furnaces

This is a plan for the construction of a Visitor Centre/Facility (guidance facility) on the adjoining land to the southwest of the Nirayama Reverberatory Furnaces (Area 3 Nirayama/Component Part 3-1). Construction of this facility will make a major contribution to understanding of the Outstanding Universal Value of the property as a whole and the positioning and characteristics of the Nirayama Reverberatory Furnaces in that. Full consideration has also been given to the surrounding landscape linking to the component part, and there are no issues in terms of the pre-construction procedures. Accordingly, the construction of this facility and development of the surroundings will have no impact on the Outstanding Universal Value of the property (**Appendix h)-3-1**).

The outside appearance of the facility, which opened in December 2016, as well as the state of the exhibits inside, are shown in **Appendix h)-3-2**.

(4) Construction of a new visitor centre in the buffer zone of Area 1 Hagi

This is a plan to restore a wooden building that was part of the Hagi Meirin Elementary School (located within the buffer zone of Hagi Castle Town (Area 1 Hagi/Component Part 1-4)), creating a World Heritage Visitor Centre there. The new facility will make a major contribution to understanding of the Outstanding Universal Value of the property, and of the positioning and characteristics of the five component parts of Area 1 Hagi therein (**Appendix h)-4**).

The new Visitor Centre is located within the buffer zone of Hagi Castle Town, and uses the interior of a restored wooden building that was originally part of Hagi City Elementary School, which opened

in 1885.

The two-floor wooden building (one of the four original school buildings) housing the Visitor Centre was originally built in 1935. In addition to restoring the interior and exterior of the building to its original appearance, the seismic resistance was also improved. There are also no issues in terms of the legal or consensus-building procedures in relation to its conservation, restoration, presentation and public utilization. Accordingly, the opening of the Visitor Centre and exterior repairs to the surrounding area will make a substantial contribution to understanding and conservation of the Outstanding Universal Value of the Sites of Japan's Meiji Industrial Revolution and will have absolutely no negative impact.

(5) Restoration of the Imperial Steel Works, Japan and Onga River Pumping Station

This plan aims at restoration of the buildings of First Head office, Repair shop, and Former Forge Shop included in the Imperial Steel Works, Japan (Area 8 Yawata/Component Part 8-1) and Onga River Pumping Station (Area 8 Yawata/Component Part 8-2). As for the building of First Head Office of which aseismic improvements have completed, its interior furnishing will be restored to the original state. Restoration of the deteriorated parts of the architectural members of the Repair shop, Former Forge Shop of the Imperial Steel Works, Japan, and Onga River Pumping Station will be undertaken. Every item of the project aims at maintaining and enhancing the constituent elements contributing to the Outstanding Universal Value (**Appendix h)-5**).

While removing original interior wall papers of the building of First Head Office due to considerable deterioration over time, they will be restored to the original state using traditional materials and techniques. Also, restoration will be undertaken for the deteriorated parts of the exterior wall of the buildings of Repair shop, Former Forge Shop of the Imperial Steel Works, Japan, and Onga River Pumping Station in order to maintain its stability. Instable structural elements found on the process of restoration, will be removed and replaced with the new materials same as original. Such improvements and treatments will enable enhancing the structure of the building as a whole and maintaining the architectural members contributing to the Outstanding Universal Value on a long-term basis.

4. Reference materials

Appendix h)-1: Progress report on the urban planning project road construction plan in the vicinity of Shuseikan

Appendix h)-2: Heritage impact assessment report on the road bridge construction project in the vicinity of Mietsu Naval Dock

Appendix h)-3-1: Progress report on the visitor facility (guidance facility) being constructed in the adjacent area of the Nirayama Reverberatory Furnaces

Appendix h)-3-2: Visitor centre/facility (guidance facility) opened in December 2016 at the Nirayama Reverberatory Furnaces

Appendix h)-4: Report on new Visitor Center in the buffer zone of Hagi Castle Town (Component Part 1-4/Area 1 Hagi)

Appendix h)-5: State of Conservation Report: Proposed works at The Imperial Steel Works, Japan, and Onga River Pumping Station—Component parts of the *Sites of Japan's Meiji Industrial Revolution—Iron and Steel, Shipbuilding and Coal Mining*.