

# Terms of Reference

## INTEGRATED TOURISM MASTER PLAN FOR BOROBUDUR-YOGYAKARTA-PRAMBANAN

### I. INTRODUCTION

The Government of Indonesia has decided to transform Indonesia's economy using tourism as one of the main growth drivers. More specifically, it aims to increase foreign visitors, domestic visitors, foreign exchange earnings, employment and tourism competitiveness through the integrated development of priority tourism destinations. The Government is preparing a tourism development program with the Ministry of Public Works and Housing (MPWH) as an executing agency, working together with several other Ministries and Agencies as implementing agencies, and bringing together APBN, APBDI, and APBDII<sup>1</sup> to implement the Government's program and achieve these goals.

The Government decided to sequence the development of priority destinations and to start the program with Lake Toba in North Sumatra province, Lombok in West Nusa Tenggara province and Borobudur-Yogyakarta-Prambanan in Central Java province and the Special Region of Yogyakarta. The program will include the preparation of Integrated Tourism Master Plans (ITMPs) for each priority destination in order to provide a strong framework for effective and sustainable tourism and land development.

The Government of Indonesia applied for financing from the World Bank toward the cost of the Integrated Infrastructure Development for National Tourism Strategic Areas (Indonesia Tourism Development Project, or the "Project"). The Government has requested for Advance and Grant financing for the preparation, and initial implementation, of the proposed Project . The World Bank has made available an Advance out of the World Bank's Project Preparation Facility and a Grant from the Indonesia Infrastructure Support Trust Fund. The subject consulting services ("the Services") include the development of an Integrated Tourism Master Plan for sustainable tourism development in Borobudur-Yogyakarta-Prambanan destination. The Services include the development of a Visitor Management Plan for the Borobudur Temple Complex, as detailed in Annex 4.

These terms of reference have been consulted upon as part of the public consultation on the Environmental and Social Management Framework (ESMF), and any required revisions identified during this consultation process has been added to the terms of reference and discussed with the Consultant at Contract Negotiation.

---

<sup>1</sup> APBN - *Anggaran Pendapatan dan Belanja* Negara Indonesia (State Expenditure Budget); APBDI - *Anggaran Pendapatan dan Belanja Provinsi* (Regional Expenditure Budget for Provincial level); APBDII - *Anggaran Pendapatan dan Belanja Daerah* (Regional Expenditure Budget for District level).

## II. SCOPE OF WORK

The Consultant will prepare an Integrated Tourism Master Plan, consisting of a) a phased overall development plan for the entire *tourism destination area* and detailed development plans for prioritized *key tourism areas* within the *tourism destination area* (defined in Annex 1); b) an investment and financing plan for infrastructure and services; c) an institutional development program and a capacity building program; and d) a Visitor Management Plan for the Borobudur temple Complex, as detailed in Annex 4. The Integrated Tourism Master Plan will provide the necessary framework for effective and sustainable tourism development, and will guide the downstream revision and/or preparation of spatial plans, sectoral master plans and other relevant plans at the Central and subnational level (identified in Annex 3).

An integrated approach is essential, combining international experience and local knowledge, seeking synergies between wide-ranging development initiatives, linking multi-sectoral infrastructure development with spatial development planning, and merging sustainable tourism development with the preservation of natural (including biodiversity), cultural heritage and social assets. Given the cumulative and induced impacts, and impacts of associated facilities, of tourism development, a holistic and systematic approach to the assessment of environmental, social and cultural heritage opportunities and constraints is warranted as part of the preparation of the Integrated Tourism Master Plan. Crucial is to actively engage a wide array of stakeholders throughout the planning process, including institutions at all levels of government, state owned enterprises (SOEs), the private sector and local communities.

The scope of work for the preparation of the Integrated Tourism Master Plan includes the following eight broad categories of interrelated tasks:

- A. Analysis of the institutional and legal, regulatory and policy framework;
- B. Analysis of demand and opportunities for *tourism destination area* development;
- C. Analysis of baseline conditions of spatial plans, infrastructure gaps and visitor attractions and facilities;
- D. Articulation of environmental, social, socio-economic, and cultural heritage opportunities and constraints;
- E. Preparation of growth projections and development scenarios;
- F. Detailing of the preferred development scenario;
- G. Formulation of the integrated tourism master plan (including a Visitor Management Plan for Borobudur Temple Complex); and
- H. Ensure active stakeholder engagement.

The Integrated Tourism Master Plan is conceived as a coordination platform for the development of the tourism destination and as the instrument that will pave the way for effective and sustainable tourism development. The Integrated Tourism Master Plan is intended to prevent the adverse impacts that can occur when tourism development proceeds in an unintegrated manner, such that growth in visitor arrivals outstrips provision of facilities to manage the burdens that growth may impose on natural and cultural<sup>2</sup> resources and host communities. It will identify the priority programs needed to strengthen tourism activities at the local level and will provide detailed recommendations for the preparation and revision of local and provincial spatial plans

---

<sup>2</sup> References to “culture”, “cultural” resources or assets, and “areas of cultural significance” include but are not limited to “cultural heritage”.

and sectoral master plans (*if necessary*), but is not in itself a spatial planning document with statutory effect under the Indonesian Urban Planning Framework.

### III. SPECIFIC TASKS

The Consultant will conduct a number of activities that have been identified as essential for the preparation of the Integrated Tourism Master Plan for each of the eight broad categories of interrelated tasks. The Consultant will make its own assessment, identify additional activities and requirements and prepare its work plan in the Technical Proposal accordingly. **Tasks A, B, C and D** will result in a thorough analysis and understanding of the baseline condition. **Tasks E-G and Annex 4** constitute a strategic and participatory planning exercise that will result in the formulation of the Integrated Tourism Master Plan. Active stakeholder engagement—**Task H**—is part and parcel of the entire approach throughout the assignment.

While carrying out **Tasks C, D, E, F, G and H, and Annex 4**, the Consultant will have to adopt and be in compliance with the ESMF of the Project, which will be provided to the Consultant by the Regional Infrastructure Development Agency (RIDA) of the MPWH and has been made available at [http://bpiw.pu.go.id/uploads/ESMF\\_ENGLISH.pdf](http://bpiw.pu.go.id/uploads/ESMF_ENGLISH.pdf). While carrying out this assignment, the Consultant is expected to set up, and perform the tasks from, a field office located in the destination. “Field” in Appendix B thus refers to within the “Borobudur-Yogyakarta-Prambanan” destination.

#### A. Analysis of the institutional and legal, regulatory and policy framework

The Consultant will make a thorough analysis of the existing institutional and legal framework related to integrated tourism and spatial development in the *tourism destination area*. This includes identification of agencies responsible for tourism development, spatial development planning, infrastructure planning, as well as environmental, social and cultural (including cultural heritage) management. The legal framework consists of spatial planning documents, such as the *Rencana Tata Ruang Wilayah* (RTRW) at *kecamatan*, *kota/kabupaten*, and provincial levels<sup>3</sup> and the *Rencana Detail Tata Ruang* (RDTR); sectoral master plans, such as for water supply, solid waste management, and power supply; environmental and social management plans, such as *AMDAL*, *UKL/UPLs*, and *LARAPs*;<sup>4</sup> Indigenous Peoples studies/documents; and cultural heritage site management plans,<sup>5</sup> among others. The Consultant will include in the analysis the following specific activities:

- Identification of the planning authority/authorities within the destination for the various components; e.g. land use, transport, utilities, and visitor management to main World Heritage Sites (WHSs).

---

<sup>3</sup> In Indonesia, subnational governance includes four levels: (1) province/*Provinsi*, (2) city/*Kota* and regency/*Kabupaten*, (3) sub-district/*Kecamatan* or district/*Distrik* and (4) urban community/*Kelurahan* or village/*Desa*.

<sup>4</sup> AMDAL - *Analisis Mengenai Dampak Lingkungan* (the Indonesian environmental assessment process); UKL-UPLs - *Upaya Pengelolaan Lingkungan Hidup / Upaya Pemantauan Lingkungan Hidup* (Environmental Management Plan/Environmental Monitoring Plan); LARAP - Land Acquisition and Resettlement Action Plan. Refer also to the ESMF.

<sup>5</sup> References to site management plans include, but are not limited to: carrying capacity assessments, conservation plans, visitor management plans, heritage impact assessments, and assessments of related institutional arrangements.

- Identification of all stakeholders and collaboration arrangements between them to develop the tourism program; e.g. governments, SOEs, private sector, communities, and nongovernmental organizations (NGOs).
- Evaluation of the regulatory framework within which planning implementation will occur.
- Review and evaluation of relevant existing spatial and sectoral development plans (including plans for national parks and heritage sites, *if applicable*), including all regulatory instruments and associated policy documents currently in place to guide and control development.

## **B. Analysis of demand and opportunities for *tourism destination area* development**

The Consultant will analyze local economic conditions and development trends to obtain a detailed understanding of the current situation and development potential of the *tourism destination area* in terms of population, employment, and regional economy with special focus on tourism development. This analysis will include the following specific activities:

- Assemble and review information on population (including ethnic minorities, vulnerable groups, Indigenous Peoples (IPs)) and employment growth trends, including temporary residents (visitors) and in-migration of job seekers.
- Assemble and review information on all areas of potential economic growth, such as agricultural production, fisheries, food processing, commercial enterprises, industry, and services including tourism and travel, to identify and assess the linkages between the various sectors of the economy affecting, and affected by, tourism development in the tourism destination area.
- Assemble and review information on domestic and foreign visitors and related accommodation, facilities, and attractions, past visitor trends and projected growth, and related demand for new tourism enterprises and services with particular emphasis on the Market Analysis and Demand Assessment study commissioned by the World Bank Group under a separate contract ([http://bpiw.pu.go.id/uploads/20170302\\_Borobudur\\_Market\\_and\\_Demand\\_Assessment.pdf](http://bpiw.pu.go.id/uploads/20170302_Borobudur_Market_and_Demand_Assessment.pdf)).
- Assemble and review information (i.e. from the Market Analysis and Demand Assessment study) on capabilities and skills of local businesses, especially local firms and communities to play an active role in, and benefit from, accelerated tourism development.

## **C. Analysis of baseline conditions**

The Consultant will thoroughly analyze all aspects of relevance for tourism development, including spatial development trends and patterns, infrastructure and service provision, visitor attractions, and visitor facilities. The analysis should result in an in-depth understanding of the baseline condition for tourism development and will identify both spatial planning (C1) and infrastructure and service provision (C2) issues.

### ***C.1 Spatial planning baseline data analysis***

The Consultant will collect, assemble and analyze relevant information on spatial conditions, environment and culture, including but not limited to:

- Existing land uses and land use planning provided by spatial plans and its gap.
- Spatial development patterns, especially growth patterns and trends of urban, semi-urban, and rural areas.
- Planned new development initiatives related to economic development.
- Tourism accommodations, attractions and their environmental, cultural (including cultural heritage) or social significance, recreation areas and facilities, including planned new investments.
- Land ownership (including land legacy issues<sup>6</sup>) with particular emphasis on *key tourism areas* and strategically significant development locations.
- Topography, vegetation and hydrology.
- Areas of environmental concern and/or significance – protected areas, natural habitats, biodiversity, (endangered) species, water bodies, irrigated paddy fields, natural hazard areas, etc.
- Environmental health conditions – water and air quality, cleanliness, occurrence of water and vector borne diseases (malaria, dengue, etc.) and other health hazards, security and safety concerns, etc.
- Areas of cultural significance – cultural heritage, historic, religious, viewsapes, archeological sites, historic trails.
- *If applicable*, Indigenous Peoples (IPs) presence (with map), social economic characteristics, habitats and customary lands.
- Social conflicts.

## ***C.2 Infrastructure and service provision baseline data analysis<sup>7</sup>***

The Consultant will collect, assemble and analyze relevant information on infrastructure provision and service delivery, identify and quantify deficiencies and constraints. This includes the following activities:

- Analysis of connectivity to/external access to the *tourism destination area* (based on the Market Analysis and Demand Assessment study), including identification of current condition, deficiencies and planned investments in airports and airlift capacity, ports, toll roads, national and provincial road network, railways, and the external (long distance) public transport system.<sup>8</sup>
- Detailed inventory of existing infrastructure and services and planned investment by both the private and public sector in the entire *tourism destination area* including

---

<sup>6</sup> Refer to ESMF on LARPF paragraphs 84–87 on the tasks for ITMP Consultant to assess land legacy issues

<sup>7</sup> The standards for *water supply* baselines are included in the SPM Permen PU 01/PRT/M/2014 and SNI 03-7065-2005; for *solid waste*, SPM Permen PU 01/PRT/M/2014, Permen PU 03-2013, SNI 19-2454-2002 and for *waste water*, SPM Permen PU 01/PRT/M/2014. The Consultant will ensure that all baselines meet the appropriate standards for the tourism development objectives.

<sup>8</sup> Based on the Market Analysis and Demand Assessment, the key entry points to Borobudur-Yogyakarta-Prambanan are: (i) for domestic visitors, the regional road network within the Yogyakarta-Solo-Semarang (JOGLOSEMAR) triangle; (ii) for international visitors, the current predominance of the Adi Sucipto International Airport in Yogyakarta is expected to shift after the construction of the new Kulon Progo Airport. The Consultant will review the applicable Master Plan and Development Plan (MPDP) for the relevant Strategic Development Region (*Wilayah Pengembangan Strategis*, WPS) of JOGLOSEMAR and recommend which programs on its list of programs should be prioritized from a tourism program perspective.

roads and transport, drainage and flood protection, water supply, wastewater management, solid waste management, power supply, IT and tourism specific services and facilities.

- Collect and provide all infrastructure maps (existing and planned infrastructure by the government and/or private sector).
- Detailed description and analysis of current infrastructure and service levels as baseline for program monitoring and evaluation at the *tourism destination area* level and the *key tourism area* level.
- Identify and quantify current gaps in infrastructure provision and service delivery compared to national standards at the *tourism destination area* level and the *key tourism area* level. This includes establishment of baseline level of services for water supply, sanitation, solid waste, and roads at the kecamatan level using relevant MPWH standards.
- Analyze if and to what extent planned public and private investments will alleviate or resolve identified deficiencies and what gaps remain.

#### **D. Articulation of *environmental, social, socio-economic and cultural heritage opportunities and constraints***

The Integrated Tourism Master Plan will guide the scale and spatial location of future spatial growth, infrastructure, and establish policies and practices to ensure that key environmental, social, community and cultural heritage assets are protected and impacts are properly managed and monitored. An in-depth understanding of constraints and opportunities for development of the *tourism destination area* is indispensable to ensure that tourism development will be sustainable. The underpinnings of the tourism industry are the cultural heritage, natural environment (including biodiversity), and unique cultural identity. The Consultant therefore will collect and interpret the relevant baseline data and develop maps and reports of challenges, opportunities, and constraints for environmentally and socially sustainable growth and for the various types of tourism facilities and supporting infrastructure. Potential environmental, social and cultural heritage impacts and risks of tourism development in general, and of the proposed infrastructure development and other activities specified in the Master Plan, will be assessed. For the assessment of heritage impacts, the Consultant will use as a reference the "Guidance on Heritage Impact Assessments for Cultural World Heritage Properties" (A publication of the International Council on Monuments and Sites, January 2011, [https://www.icomos.org/world\\_heritage/HIA\\_20110201.pdf](https://www.icomos.org/world_heritage/HIA_20110201.pdf)). Regarding Borobudur Temple Complex, the Consultant will conduct these assessments for the works and developments planned in zone 1, zone 2 and the area corresponding to zone 3 under the 1979 JICA Master Plan, and possibly including an even wider area. Tourism development, if not managed carefully, may lead—for instance—to the degradation of protected areas, the loss of biodiversity and endangered species, and the degradation of culturally significant assets. Nonetheless, tourism also has a strong potential as a driving force in the conservation of the country's environmental assets, protection of its biodiversity and natural habitats, the protection of cultural and heritage assets, as well as in environmental awareness and employment generation.

Aligned with any bylaws/codes of protected area or WHS's core and buffer zones, the maps should present "no development" zones, zones suitable only for certain types of development, zones with little or no restriction on type of development, and any recommended building regulations, etc. The World Bank safeguards policies would be taken into account in this task,

following guidance as presented in detail in the Environmental and Social Management Framework.<sup>9</sup> Elements of the policies that guide development toward positive outcomes on environmental, social (including gender), socio-economic and cultural heritage conditions will be taken into account in identifying opportunities, and prohibitions and restrictions presented in some of the policies will become parts of the constraints. Policies that are most relevant at this planning stage<sup>10</sup> are:

- OP 4.01 Environmental Assessment and its impact management hierarchy – prevent, minimize, mitigate, and compensate in declining order of preference
- OP 4.04 Natural Habitat and its restrictions on conversion of critical and natural habitat
- OP 4.10 Indigenous Peoples that has among its objectives avoiding or minimizing adverse effects on indigenous communities
- OP 4.11 Physical Cultural Resources which aims at protecting known and chance-finds of cultural property
- OP 4.12 Involuntary Resettlement with particular attention to the principles of avoiding or minimizing displacement, including economic displacement through restriction of access to customary natural resources
- *Environmental, Health, and Safety Guidelines* (World Bank Group, 2007 plus updates, commonly referred to as the EHS Guidelines)<sup>11</sup>. The applicable parts are the General Guidelines, which include air, water, and noise standards; community and workplace safety; pollution prevention; energy and water conservation, etc. plus a number of the sectoral guidelines including:
  - Tourism and Hospitality Development
  - Waste Management Facilities
  - Water and Sanitation
  - Ports, Harbors and Terminals
  - Airports
  - Toll Roads
  - Electric Power Transmission and Distribution.

The principles of the safeguards policies are presented in detail in the Environmental and Social Management Framework. The relevance of the sectoral EHS Guidelines in Task E is primarily in site selection for various types of infrastructure. Other aspects of the guidance they provide will be important in Task G.

### **E. Preparation of growth projections and development scenarios**

Based on the analysis of current conditions and growth potentials, the next step is to prepare growth projections (E1) and to translate these into spatial requirements in terms of possible development scenarios (E2) while taking identified opportunities and constraints (D) in due consideration. The Consultant will prepare GIS-based models for growth projections and for the

---

<sup>9</sup> [http://bpiw.pu.go.id/uploads/ESMF\\_ENGLISH.pdf](http://bpiw.pu.go.id/uploads/ESMF_ENGLISH.pdf).

<sup>10</sup> See also ESMF for reference

<sup>11</sup> [www.ifc.org/ehsguidelines](http://www.ifc.org/ehsguidelines)

preparation and visualization of different spatial development scenarios. It is expected that the model will be replicated and used in other tourism destinations and support the Ministry of Public Works and Housing and/or local authorities in the preparation of tourism development plans.

### ***E.1 Prepare growth projections and dedicated planning standards***

The Consultant will prepare growth projections for a period of 25 years and medium-term growth projections for 5 years, including tourism, other local economic sectors, population and employment. Population growth projections should consider permanent residents, temporary residents (foreign and domestic visitors), and possible influx of job seekers and their relatives attracted by economic opportunities because of accelerated tourism development. Visitor growth and related tourism employment projections will be derived from the Market Analysis and Demand Assessment study which allows for quantification of demand indicators such as peak visitor loads (at both the *tourism destination area* and *key tourism area* level), numbers of additional hotel rooms, additional capacity of transport networks (roads, airports etc.), numbers of skilled staff required etc.

### ***E.2 Prepare and discuss alternative spatial development scenarios***

The Consultant will prepare at least three different spatial development scenarios to accommodate and guide the projected growth and will present and discuss the findings, proposed planning standards and the development scenarios with all relevant stakeholders. These scenarios shall reflect varying tourism growth concepts and differing development models of future land use, and related environmental, social, socio-economic and cultural heritage opportunities and constraints. One scenario will be selected for further elaboration, in close consultation with Government of Indonesia (GOI) and which reflects the views of all relevant stakeholders. This specific task would include the following activities:

- Identify additional land needs for future residential, industrial, commercial, and tourism requirements, and infrastructure needs, including land requirements for housing of tourism employees and their relatives.
- Identify competing demands for land, natural resources and infrastructure for tourism development and other (non-tourism) economic sectors.
- Identify environmental, social, socio-economic and cultural heritage opportunities and constraints for growth (refer to task D).
- Identify opportunities for clustering of development to increase efficiency of land use, infrastructure and service provision, including opportunities for combined and cross-subsidized service delivery for tourist accommodations and facilities and local (low-income) communities.
- Assess infrastructure required in support of future development (roads, water supply, wastewater management, drainage and storm water management, solid waste management, housing, transportation, energy, telecommunications and other utilities).
- Identify strategic interventions, areas or activities that could promote or facilitate the private sector, local governments, and communities in participating in the development of visitor-related infrastructure, facilities, and attractions.



- Evaluate each development scenario in sufficient detail to allow stakeholders to compare them in terms of positive and negative economic, environmental, social (including gender) and cultural heritage impacts and adherence to the principles of the applicable World Bank safeguards policies.

### ***E.3 Preparation of a GIS-based spatial decision-making support system***

The Consultant will also prepare a GIS-based map that will show growth projections at the destination and link it with spatial development scenarios that will help stakeholders make the best decision based on the different scenario options. It is expected that the model could be replicated in other tourism destinations, by applying similar or different variables to the model that are considered important for the destinations. The MPWH will provide access to the relevant 1:25000 scale maps for the destination and, if available, 1:5000 scale maps relevant to the identified key tourism areas. The Consultant will use them to present a visual representation of the scenarios.

## **F. Detailing of the preferred development scenario**

After selecting the preferred scenario, the next task is to prepare an overall development plan for the entire *tourism destination area* (F1) and detailed development plans for existing and selected future *key tourism areas* (F2) (See Annex 1 for spatial boundaries of target areas for planning).

### ***F.1 Preparation of an overall development plan for the entire tourism destination area based on the preferred development scenario using GIS maps.***

Specific activities include:

- Prepare a provisional land use map for the entire *tourism destination area* (for years 2022 and 2042) including the detailed location, shape and size of new development areas with special emphasis on tourism development. The map could present “no development” zones, zones suitable only for certain types of development (restricted), zones with little or no restriction on type of development, etc.
- Identify issues (such as gaps, barriers) in the relevant legislative, policy, and planning frameworks, and their implementation, and provide recommendations that will benefit the sustainable outcomes of the tourism sector. The Consultant will provide specific recommendations on how to strengthen the existing programs and activities of the spatial and sectoral plans so that these can align with the vision proposed in the selected development scenario.<sup>12</sup>
- Identify and discuss land acquisition and tenure issues related to the preferred development scenario.
- In close collaboration with relevant government agencies, the private sector and local communities evaluate, discuss and define for each existing and new *key tourism area* the optimal development perspective, including carrying capacity, typology and extent of visitor accommodation, facilities and services.

---

<sup>12</sup> The Consultant will recommend, if applicable, prioritization of the tourism-relevant programs as identified in the MPDP.

- Evaluate phasing options and select priority existing and new *key tourism areas* for development with related detailed size and shape consistent with projected demand for all land uses and with special emphasis on tourism development in blocks of five years (2019-2023 / 2024-2028 / 2029-2033 / 2034-2038/ 2039-2043). The Market Analysis and Demand Assessment study already proposes priority existing and new *key tourism areas* (Annex 1), but these need to be refined, adjusted and/or confirmed as part of this task.
- Prepare conceptual designs and cost estimates for all required infrastructure and services with planning horizon of 5 and 25 years respectively for the entire *tourism destination area*.
- Identify major incremental threshold capacity needs (airport expansion, treatment plants, dump sites, etc.) and prepare a 25-year phasing plan for anticipated major threshold investment for all infrastructure and services.
- Prepare an integrated phasing plan for location and timing of infrastructure and service provision in a gradual way, making sure it responds to the projected visitor demand and it is designed to support and guide tourism development and minimize risks, with a planning horizon of 5 years and 25 years respectively.
- Assess the environmental, social (including IPs) and cultural heritage impacts related to the preferred development scenario at an appropriate scale and level of detail, taking into account cumulative and induced impacts and impacts of associated facilities, and prepare a high-level mitigation and monitoring plans in accordance with the ESMF.
- Identify and discuss natural (including biodiversity) and cultural heritage preservation issues related to the preferred development scenario and explore solutions that are compatible, instead of competing, with the infrastructure and service provision of the preferred development scenario.
- Identify local government and community awareness and capacity building needs for inclusive tourism development.
- Identify opportunities and needs for skills development for tourism market supply (education, SME development).
- Identify institutional arrangements to implement the development scenario.

## ***F.2 Preparation of detailed development plans for priority key tourism areas***

In close collaboration with relevant government agencies, the private sector and local communities, the Consultant will prepare detailed phased development plans (5 years planning horizon) for all current *key tourism areas* within the *tourism destination area* (existing clusters of hotel and visitor facilities and attractions) and for new *key tourism areas* that have been prioritized for tourism development in the first 5 years (2019-2023). The list of identified strategies, objectives, policies and programs included in the 5 year plans should be phased annually ( 2019 / 2020 / 2021 / 2022 / 2023). The plans should be presented at scale 1:5000 together with outline designs and cost estimates for all infrastructure and service provision using GIS-based maps. The Consultant will prepare the plan up to pre-feasibility level for selected infrastructure and service provision (e.g. 2019). The criteria for selection of infrastructure with pre-feasibility plan will be agreed by RIDA and the Consultant. The detailed development plans

must be directly linked to projected visitor growth and must be flexible enough to allow for adjustment in case real growth exceeds or falls short of expectations over the years.

The development plans will provide maps and detailed descriptions in terms of existing and future typology and character of the existing and prioritized new *key tourism areas*, detailed land use, specification of visitor accommodation capacity and typology, visitor facilities, services and attractions, housing for tourism sector employees and their relatives, existing and planned infrastructure and services, building regulations and development control. The detailed development plans will provide recommended dedicated planning standards and guidelines to manage and control development, including but not limited to:

- Building densities, floor-space ratios, maximum building heights
- Traffic planning and management
- Water demand, distribution and management
- Wastewater generation and management
- Solid waste generation and waste management
- Drainage and flood protection
- Street lighting
- Electricity demand
- Broadband internet services
- Natural hazards and risk mitigation
- Architectural styles and heritage conservation
- Road design standards to accommodate not only traffic demand, but also requirements for traffic management, pedestrians, road safety, landscaping, parking, signage, etc.
- Landscaping associated with residences, visitor facilities, and other land uses
- Environmental protection guidelines to protect and restore natural areas and biodiversity
- Cultural, religious, historic and archaeological guidelines to protect valued features
- Site Management Plans/ Conservation Plans / Visitor Management Plans / Crowd Control Plans for tourism sites with limited carrying capacity such as temples, heritage sites and cultural villages.
- Proposed institutional arrangements to monitor the condition of natural, social and cultural assets and to implement the plans for their protection
- Green space, scenic vistas and view-points guidelines
- Recreational use of rivers and lakes
- Efficient use of water in domestic, commercial and industrial uses
- Social Management Guidelines to avoid, or minimize potential social conflicts or adverse impacts due to the implementation of the development plan
- Indigenous Peoples Planning Framework/Guidelines to guide stakeholders implementing the development plan in case proposed activities potentially affect Indigenous Peoples<sup>13</sup>
- As one of UNESCO World Heritage Sites, the consultant shall prepare a Visitor Management Plan for the Borobudur Temple Complex to prevent the site to be overcrowded, as detailed in Annex 4 of the TOR. Rising visitor numbers have caused an overloading problem, especially during peak season. This is both damaging to the temple and detrimental to the visitor experience. Overcrowding also threatens the image of the site

---

<sup>13</sup> See link to the ESMF

among international markets, especially Europeans, as is evidenced by increasing recommendations on user-generated content websites to avoid the site as an “overcrowded tourist trap”.

**G. Formulation of the integrated tourism master plan,<sup>14</sup> consisting of a phased tourism development plan (G1), an investment and financing plan for infrastructure and services (G2 and G3), an institutional development program (G4), a capacity building program (G5) and a Visitor Management Plan (Annex 4)<sup>15</sup>**

### ***G.1 Prepare a phased tourism development plan***

Consolidate the results of the overall development plan (task F1) and the detailed development plans (task F2) and prepare a phased tourism development plan in GIS maps, consisting of:

- a land-use plan (1:25,000)
- a phasing plan showing priority locations for development in blocks of five years (2019-2023 / 2024-2028 / 2029-2033 / 2034-2038/ 2039-2043)
- Detailed development plans for 5 years (scale 1:5,000) for all existing *key tourism areas* and for selected new *key tourism areas* prioritized for the first 5 years of the Program
- a phased tourism accommodation, facilities and services development plan for 5 and 25 years respectively.
- If the Detailed Development Plan indicates that a proposed physical development or land development/use changes would involve involuntary land acquisition and/or resettlement, the Consultant will specify the relevant section of the ESMF<sup>16</sup> to address such land acquisition and/or resettlement.
- a natural assets preservation and environmental and social management plan
- a cultural heritage preservation management plan
- a natural hazards risk mitigation plan
- If the Detailed Development Plan indicates that a proposed physical development or land development/use changes would affect Indigenous Peoples, the Consultant will specify the relevant section of ESMF to address the impacts on Indigenous Peoples.
- implementation arrangements including recommendations regarding legal and regulatory initiatives required to give statutory effect to the integrated tourism master plan and its component parts.<sup>17</sup>

---

<sup>14</sup> The integrated tourism master plan will provide guidance to the local and provincial authorities during the revision process of local and provincial spatial and sectoral plans. The integrated tourism master plan will identify the priority programs, infrastructure and services needed to strengthen tourism activities on the destination.

<sup>15</sup> See Annex 2 for indicative outline table of contents.

<sup>16</sup> See the ESMF, including its specific Annexes, for guidance.

<sup>17</sup> In the event that it is determined that new laws or regulations are required to implement the master plan, these would be the subject of a separate engagement.

## ***G.2 Prepare a phased integrated infrastructure and services development plan***

Consolidate the results of the overall development plan (task F1) and the detailed development plans (task F2) and prepare an integrated and phased priority infrastructure and services development plan and related cost estimates for all sectors at prefeasibility level for 5 and 25 years respectively, together with conceptual designs. Prepare detailed cost estimates and an investment plan for the first five years. Prepare a 5-year financing plan including distinction of public and private sector contributions and evaluate the economic feasibility of proposed investments.

The investment plan must be directly linked to projected visitor growth and must be flexible enough to allow for adjustment in case real growth exceeds or falls short of expectations over the years. The investment plan must support and guide tourism development and will include:

- Area redevelopment
- External access: airports and airlift capacity, ports, toll roads, national and provincial road network,<sup>18</sup> railways, external (long distance) public transport
- Internal access: internal road network,<sup>19</sup> internal and short distance public transport facilities including water transport, non-motorized transport facilities, traffic management, sidewalks, road safety, parking, etc.
- Drainage and flood protection
- Water supply
- Wastewater management and sanitation
- Solid waste management and cleanliness
- Electricity supply
- Street lighting
- Public amenities
- Broadband internet services
- Specialized tourist related infrastructure such as visitor centers, marinas, jetties, boardwalks, hiking and biking tracks, pedestrian zones, signage, etc.

## ***G.3 Prepare a program of urgent infrastructure and services investments***

While the GOI budgeting process requires that ultimately by approximately August the investment program for fiscal year of the following year is defined, a budget revision process continues. In anticipation of the preparation of the development scenarios and the infrastructure and services development plan, and to accelerate the development of the tourism destination areas, the proposed highest-priority investments for these areas in the following year must be identified by the Consultant no later than August 1, and will be financed with any possible sources.

Investment in improved external access is only marginally related to spatial planning of development within the *tourism destination area*. The need for and phasing of this sort of connectivity infrastructure largely depends on existing deficiencies and overall growth

---

<sup>18</sup> For the road network which is part of the Program, this plan also has to include the needs in terms of maintenance and rehabilitation of existing road network for the five year period.

<sup>19</sup> For the road network which is part of the Program, this plan also has to include the needs in terms of maintenance and rehabilitation of existing road network for the five year period.

perspective. Informed decisions regarding this type of investment for following year can be responsibly made even though the spatial development scenarios are not ready yet. To this end the Consultant will prepare and discuss with all related government institutions an integrated investment program for gradual improvement of external access including all modes of transport on a schedule that can both keep pace with visitor growth and allow for adjustments if actual visitor numbers exceed or fall short of projections, with planning of 5 years and 25 years respectively, and identify urgent first year investment needs including:

- Airports and airlift capacity
- Ports
- Toll roads, national and provincial road network (including maintenance and rehabilitation)
- Railways
- External (long distance) public transport system.

In addition to external access, other highly urgent investments for fiscal year 2019 will need to be identified by August 1, 2018 as well. The Consultant will timely prepare and discuss with all related government institutions a 2019 investment program of urgently needed investments that most likely will come as priority under the master plan. This may concern investments that resolve current deficiencies in infrastructure and service delivery but also other urgent interventions that have been identified at this stage of the Master Planning process as viable and inevitable, technically, environmentally and socially sound and allowing for gradual future upscaling in accordance with population and tourism growth and associated incremental demand for infrastructure and services.

#### ***G.4 Prepare an institutional development program***

The Consultant will prepare an institutional development program for management of sustainable tourism development in the destination area. The institutional development program must ensure that all relevant government institutions are committed to implement the Integrated Tourism Master Plan in a concerted effort. Preparation of the institutional development program will be done in close collaboration with all stakeholders in the destination area (government institutions, SOEs, (semi-)government authorities, private sector, local communities, etc.) and will at least include the following activities:

- Assessment of local government/sub-national government, central government (line ministries), private sector and local community interest and commitment to the realization of the integrated tourism master plan
- Identification of roles and responsibilities of all relevant (semi-) government institutions in implementation of the integrated tourism master plan
- Identification of management and coordination responsibilities, including annual action plan preparation, monitoring and evaluation of progress and performance indicators, environmental and social safeguards, etc.
- Identification of planning and coordination mechanisms for management of development in the entire *tourism destination area* and specific arrangements as necessary for sub-areas, i.e. the *key tourism areas*, *cultural heritage sites*, *environmentally and socially sensitive areas*, etc.

- Identification of the need for downstream revision of formal (spatial) plans and regulations and identification of the responsible government institutions.

### ***G.5 Prepare a capacity building program***

The capacity building program must ensure that all stakeholders are ready and capable to implement the Integrated Tourism Master Plan. The capacity building program should cover relevant government institutions, the private sector and the local communities and will consist of:

- A government institution capacity building program
- A private sector, SME and skills development program, with a focus on enhancing competency based certification aligned with private sector needs and improving firm capabilities related to service quality.
- A local community capacity building program

Preparation of the capacity building program will be done in close collaboration with relevant stakeholders and will at least include the following activities:

- Assessment of local government/sub-national government, central government (line ministries), private sector, and local community capacity to realize the integrated tourism master plan
- Identification of institutional capacity building needs for management of tourism development
- Identification of capacity-building needs for implementation of environmental and social mitigation and monitoring plans including safeguards.
- Identification of community capacity building needs for inclusive tourism development
- Identification of additional needs for private sector, SME and skills development
- Identification of formal, non-formal, and mature-learner needs

## **H. Ensure active stakeholder engagement**

Pro-active outreach and public presentations are essential to engage the private sector, local communities, local governments, and related central government institutions. Building on the initial stakeholder mapping<sup>20</sup> and based on the Stakeholder Engagement Plan (as part of the Inception Report), through regular consultations with government institutions and other stakeholders, the Consultant should seek feedback and consensus on all intermediate and final deliverables.<sup>21</sup> The Consultant shall ensure that all comments and/or considerations raised during the formal approval and ratification process are reflected in the final draft of the Integrated Tourism Master Plan. Seeking stakeholder feedback and support should at least extent to:

- The purpose and vision of the Integrated Tourism Master Plan;
- Range of tourism opportunities suited to the destination;

---

<sup>20</sup> RIDA will share the mapping with the Consultant upon Contract Award.

<sup>21</sup> The Consultant will ensure that the consultation process for the preparation of Borobudur's Visitor Management Plan (Annex 4) will involve all relevant stakeholders including the newly established Badan Otorita, PT. TWC, Ministry of Education and Culture and *Kabupaten Magelang*.

- Diversity of land use development that should occur in the destination and where this development should occur;
- Potential environmental, social and cultural heritage impacts and risks of the proposed land use/development plans/changes or physical development; this should be incorporated as consideration in developing alternative development/land use development scenario;
- The proposed alternative development scenarios as well as the final preferred development scenario;
- Roles and responsibilities of all relevant (semi-)government institutions in implementation of the integrated tourism master plan
- Roles and responsibilities of local communities, associations, village, sub-district, district and provincial governments in the implementation of the integrated tourism master plan, particularly in managing the tourist attractions.
- Existing and future employment opportunities in tourism, commercial enterprises, industry, agricultural production, etc.;
- Potential areas where the private sector, local governments and SOEs are interested to invest in tourism-related sector;
- Formal, non-formal and mature-learner education needs.
- The final draft of the Integrated Tourism Master Plan

#### IV. DELIVERABLES AND TIMELINE

Task	Deliverables	Timeline (months from signing contract)
	Inception Report, including stakeholder engagement plan	1
	Baseline Analysis Report (Task A, B, C, D)	4
	Growth projections and development scenarios (Task E)	5
	The overall development plan (Task F1)	9
	Detailed development plan for priority key areas (Task F2)	9
	Phased tourism development plan (Task G1)	11
	Phased integrated infrastructure and services development plan (Task G2)	11
	Visitor Management Plan	11
	Program of urgent investments (Task G3)	August 1, 2018
	Capacity building program (Task G4)	11
	Final Integrated Tourism Master Plan (Task G)	12



## V. KEY EXPERTS

Position	Minimum Qualifications
Team Leader (Urban Planner / Civil Engineer)	Relevant university level education (Master's degree) and at least 15 years' relevant international experience
Tourism development expert (Economist)	Relevant university level education (Master's degree) and at least 15 years' relevant international experience including relevant international experience with visitor management plans
Urban / regional planner	Relevant university level education (Master's degree) and at least 10 years' relevant experience
Architect / Urban designer	Relevant university level education (Master's degree) and at least 10 years' relevant experience
Roads and transport expert (Roads Engineer)	Relevant university level education (Master's degree) and at least 10 years' relevant experience
WATSAN and SWM expert (Sanitary Engineer)	Relevant university level education (Master's degree) and at least 10 years' relevant experience
Environmental specialist	Relevant university level education (Master's degree) and at least 10 years' relevant international experience
Social development specialist	Relevant university level education (Master's degree) and at least 10 years' relevant experience
Cultural heritage expert	Relevant university level education (Master's degree) and at least 15 years' relevant international experience, including experience with visitor management plans
Institutional development / capacity building expert	Relevant university level education (Master's degree) and at least 10 years' relevant experience
Skills development/firm capabilities expert	Relevant university level education (Master's degree) and at least 10 years' relevant experience

### After Addendum

In addition to the key experts above, to perform the tasks, the Consultant has to provide non-key experts such as an airport specialist, a port specialist, a railway specialist, and a public transport specialist as part of a pool of experts and other supporting staff, i.e. administration, mapping, technician, and other logistic operational support related to the task. The Consultant should also be able to demonstrate experience in disaster risk management.

## **Annex 1. Tourism Destination Area and Key Tourism Areas**

### **Borobudur-Yogyakarta-Prambanan Tourism Destination**

**In JOGLOSEMAR, Borobudur, Kota Yogyakarta, and Prambanan are the main drivers of tourism growth.** Other areas in Joglosemar, such as the city of Semarang, are unlikely to attract significant tourism. The vast majority (93%) of visitors to Borobudur Temple are domestic travelers who mostly arrive by car or bus. In 2015, 79% of domestic visitors arrived by land, 11% by air and the remaining by train. Most foreign visitors (65%) arrive by plane from Jakarta or Bali to Yogyakarta Adi Sucipto International Airport and are mainly from Europe (>80%). Hence, land transport is an important mode of transportation for domestic visitors while airports are the predominant gateways for foreign visitors. Yogyakarta is the destination base for domestic and foreign tourists, because it is a transport hub for road, air and rail, and the primary cluster of available accommodation (91% of hotel rooms are in DI Yogyakarta, 9% are in Kabupaten Magelang) and services, and because of its proximity to the main other attractions in the area such as Prambanan. Around 73% of visitors are estimated to come to Borobudur and Prambanan from Yogyakarta. Around 18% and 9% of the visitors come from Semarang and Solo respectively. Many domestic visitors and a significant proportion of foreign visitors to Yogyakarta do not visit Borobudur. Most visitors stay only a short period of time. The average length of stay in DI Yogyakarta and Kabupaten Magelang hotels is 1.8 nights for foreigners and 1.4 nights for domestic guests.

**Borobudur-Yogya-Prambanan is mostly expected to remain part of a destination tour for more foreign visitors (as ‘must-see’), but can also become a standalone destination for some proximity markets.** If the Borobudur experience is enhanced, it could attract larger numbers of Asian visitors, for whom Borobudur-Yogya-Prambanan could become a standalone destination. Through enhanced attractions (such as the cultural villages around Borobudur and tourism experience enhancement in Kota Yogyakarta and Prambanan), the average length of stay and daily expenditures could increase. It is expected that the mode of arrival and visitor distribution pattern will remain similar to the current context. Domestic visitors will continue relying on land transport for travelling; e.g., by 2041 it is forecast that around 73% of domestic visitors will arrive by land and 18% by air. As part of the Trans Java toll road, a planned Bawen-Magelang-Yogyakarta corridor is expected to benefit visitors, but it cannot be justified from a tourism point of view as it principally serves regional connectivity. Foreign visitors are forecasted to continue arriving by air and the new Kulon Progo Airport is expected to become the predominant gateway.

**Key to enhancing tourism attraction, especially foreign visitors, is the development of the Yogyakarta, Borobudur, and Prambanan as a coherent cultural destination.** It is envisaged to develop the destination as an internationally recognized symbol of Javanese traditional culture. The city of Yogyakarta is the main hub for tourism and transport infrastructure. Besides being a bustling town with a pleasant atmosphere and a famous shopping street (Malioboro), it is endowed with a rich living Javanese cultural heritage. The Kraton (palace) of Yogyakarta is a walled city within a city. It is not only the residence of the Sultan and his family, but it is also a living museum that centers on Javanese culture. At the Kraton, tourists can learn and see directly how Javanese culture continues to live and be preserved. The Palace houses a museum and there are regular performances of Javanese arts such as gamelan music, shadow puppet (wayang) shows, and traditional dances. The Water Castle (Taman Sari) is within the Kraton area and was built in the mid-18<sup>th</sup> century. It has four distinct areas: a large artificial lake with islands and

pavilions located in the west, a bathing complex in the center, a complex of pavilions and pools in the south, and a smaller lake in the east. Today only the central bathing complex is well preserved. Within an hour driving from Yogyakarta, Borobudur and Prambanan are magnificent historical Javanese temple complexes dating back to the 8<sup>th</sup> to 9<sup>th</sup> and the 9<sup>th</sup> to 10<sup>th</sup> century respectively. They are both UNESCO World Heritage Sites and they are managed by PT. TWC.

- The Borobudur temple complex consists of three monuments, the main Borobudur temple and two smaller temples nearby (Mendut and Pawon temples). The main temple of Borobudur is the largest Buddhist temple in the world. Apart from its magnificent scale, Borobudur is famous for its beautiful stone reliefs and statues.
- The Prambanan temple complex is the largest Hindu temple of ancient Java. Eight main and eight minor temples form the main Prambanan temple complex, but the remains of more than 200 mostly ruined smaller temples surround the main temple complex. Nearby are the Plaosan temples, consisting of two restored main temples and more than 100 small mostly ruined shrines.
- Another site with tourism growth potential is the Ratu Boko site, found adjacent to the Prambanan complex. It is a partly ruined Hindu palace complex that covers 16 hectares. The history of Ratu Boko is unclear, and much of what is understood about the site comes from inscriptions and even folklore. A mix of Buddhist and Hindu structures are found on the complex. The oldest inscription found on the site is believed to date back to 792 AD.

**The challenge for the Master Planning exercise is to plan and guide tourism development very carefully to ensure that historical, cultural and religious assets will be preserved and can be enjoyed as part of a living heritage.** Already, some adverse impact of overcrowding by tourist can be seen at Borobudur that suffers from increased visitor dissatisfaction and dampened visitor growth. Thus, one element of the Integrated Tourism Master Plan will be a Visitor Management Plan for Borobudur (refer to Annex 4). This will help to pacify growing discontent and stagnation, especially amongst foreign visitors, and to maintain the values for which the Borobudur Temple Compound was inscribed on the World Heritage List.

**The implications of pursuing a high-growth tourism scenario for planning and investment needs are presented in Figure 1.** Regional connectivity plans ensure sufficient connectivity between Borobudur, Yogyakarta and Prambanan, and the current and new airport. The Consultant will prepare an Integrated Tourism Master Plan consisting of:

- (a) An overall 25-year development plan for the destination area consisting of Borobudur Cluster covering Kecamatan Tempuran, Kecamatan Mertoyudan, Kecamatan Muntilan, Kecamatan Borobudur and Kecamatan Mungkid<sup>22</sup>; Prambanan-Boko Cluster covering Kecamatan Prambanan in Kabupaten Sleman and Kecamatan Prambanan in Kabupaten Klaten and Yogyakarta Cluster covering Kota Yogyakarta.
- (b) **A detailed development plans (5 years) for priority key tourism areas:**
  - i. **The Borobudur Cluster covering two Kecamatan: Borobudur and Mungkid.**

---

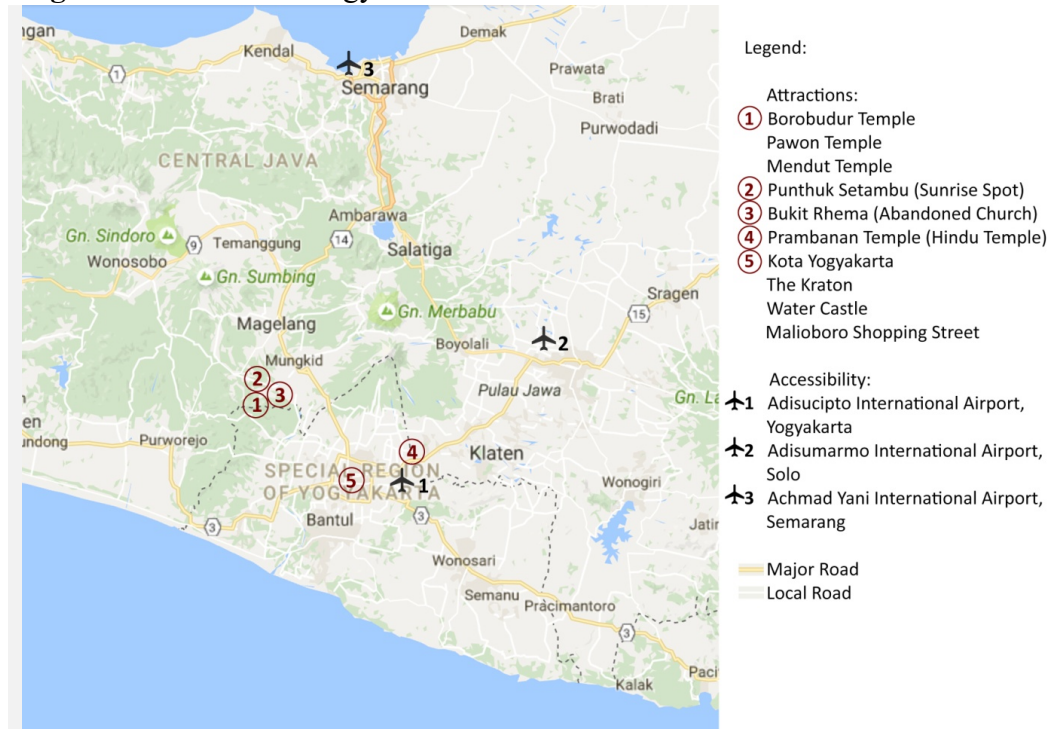
<sup>22</sup> Presidential Regulation 58/2014 includes seven Kecamatan within the boundary of Borobudur's Spatial Master plan: Tempuran, Mertoyudan, Muntilan, Kalibawang, Samigaluh, Borobudur, and Mungkid. The ITMP has excluded Kecamatan Kalibawang and Samigaluh considering that the area included in the Spatial Plan is minimal and no major tourism opportunities have been identified in these Kecamatan.

- ii. The Prambanan-Boko Cluster covering Kecamatan Prambanan in Kabupaten Sleman and Kecamatan Prambanan in Kabupaten Klaten.
- iii. The Yogyakarta Cluster including the Kraton, Taman Sari and Malioboro Street in the following Kecamatan: Kraton, Gedongtengen, Danurejan, Ngampilan, Kotagede and Gondomanan.

(c) Preparation of Borobudur Visitor Management Plan

As part of Task F of the Services, the Consultant will adjust or confirm the priority *key tourism* areas.

**Figure 1: Borobudur-Yogyakarta-Prambanan Destination Definition**



Detailed implication for Integrated Tourism Master Plan Consultants' Services:

Integrated Tourism Master Plans consisting of:

- (a) An overall 25-year development plan for the destination area consisting of Borobudur Cluster covering Kecamatan Tempuran, Kecamatan Mertoyudan, Kecamatan Muntilan, Kecamatan Borobudur and Kecamatan Mungkid; Prambanan-Boko Cluster covering Kecamatan Prambanan in Kabupaten Sleman and Kecamatan Prambanan in Kabupaten Klaten and Yogyakarta Cluster covering Kota Yogyakarta.
- (b) A detailed development plans (5 years) for priority *key tourism areas*:
  - i. The Borobudur Cluster covering two Kecamatan: Borobudur and Mungkid.
  - ii. The Prambanan-Boko Cluster covering Kecamatan Prambanan in Kabupaten Sleman and Kecamatan Prambanan in Kabupaten Klaten.
  - iii. The Yogyakarta Cluster including the Kraton, Taman Sari and Malioboro Street covering the following kecamatan: Kraton, Gedongtengen, Danurejan, Ngampilan, Kotagede and Gondomanan.
- (c) Preparation of Borobudur Visitor Management Plan (Annex 4)

## **Annex 2: Indicative Outline Table of Contents**

### **PART I: GENERAL APPROACH**

#### **1. OBJECTIVES OF THE INTEGRATED TOURISM MASTER PLAN**

#### **2. STRATEGIC VISION**

*Tourism potential*

*Tourism carrying capacity and sustainable tourism*

*Local participation, job creation and poverty alleviation*

*Enabling business environment*

*Institutional arrangements*

### **PART II: MARKET ANALYSIS FOR AREA X/Y/Z (based on the Market Analysis and Demand Assessment study results)**

#### **1. TOURIST MARKET SUPPLY AND DEMAND ASSESSMENT**

*Supply assessment*

*Demand assessment*

*Investor analysis*

#### **2. MARKET STRATEGY**

*Future market demand analysis*

*Marketing and branding strategy*

### **PART III: DEVELOPMENT STRATEGY FOR AREA X/Y/Z**

#### **1. ANALYSIS OF EXISTING SITUATION**

*Boundary definition of the Integrated Tourism Development Master Plan Area X/Y/Z*

*Assessment of existing planning framework and review of current spatial plans*

*Review of the existing local institutional framework*

*Assessment of socio-economic situation and development trends (past 10 years)*

*Review of the overall economic activity in the area*

*Analysis of tourism related economic activity in area X/Y/Z (based on the Market Analysis and Demand Assessment study results), including:*

- Number of tourist, local and foreign, length of stay, expenditure pattern, etc.

- Overnight accommodation by type, capacity, and location
- Eateries by type, capacity, and location
- Cultural and natural tourist sites by type, location, and number of visitors
- Manmade tourist attractions by type, location, and number of visitors (theme park, tourist market, shopping center, etc.)
- Etc.

*Employment conditions in the local tourism industry (based on the Market Analysis and Demand Assessment study results), i.e.:*

- Gaps in demand and supply of tourism related employment
- Gaps (in quantity and quality) in skills requirements
- Position and potential of local SMEs

*Detailed description of the condition of natural and cultural assets (based on the Market Analysis and Demand Assessment study results and other previous studies), including:*

- Identification of natural and cultural assets within the Tourism Destination Area
- Assessment of the quality and uniqueness of natural and cultural assets
- Review of the current condition of natural and cultural assets

*Environmental health conditions (water and air quality, cleanliness, malaria occurrence and other health hazards, etc.)*

*Security concerns*

*Current land use (map)*

*Map showing the location and size of existing tourism areas:*

- areas where tourists stay overnight
- areas where tourists recreate: beach area, shopping center, (tourist-)markets, restaurants, bars, etc.
- areas near tourist attractions (cultural, natural, manmade)

*Inventory of current infrastructure and service provision, with a focus on the existing and new key tourism areas (based on the Market Analysis and Demand Assessment study results), i.e.:*

- External access: airports and airlift capacity, ports, national and provincial road network, railways, external (long distance) public transport system.
- Internal access: internal road network, internal and short distance public transport facilities, non-motorized transport facilities, pedestrian facilities, road safety, etc.
- Drainage and flood protection
- Water supply
- Sanitation and sewerage
- Solid waste management

- Electricity supply
- Street lighting
- Cleanliness and maintenance
- Traffic management and parking
- Pedestrian facilities
- Public amenities
- Broadband internet services

*Detailed identification of gaps in infrastructure provision and service delivery*

*Ongoing and planned public and private sector initiatives:*

- Public sector investment: what and when?
- Private sector initiatives: what and when?

*Impact of planned investments on resolving identified deficiencies and service gaps*

## 2. DEVELOPMENT SCENARIOS

*Growth projections for a period of 25 years and related medium-term growth projections for 5 years (based on the review of existing statistics, plans and documents):*

- Economic growth projection
- Industrial growth projection
- Visitor growth projection
- Employment growth projection
- Population growth projection, including temporary residents (tourists) and in-migration of job seekers

*Planning standards for tourism infrastructure and services (taking into account that visitors have a relatively high expectation of infrastructure and service standards).*

*Identification of additional land needs for future residential, industrial, commercial, and visitor requirements, including land requirements for housing of tourism employees and their dependents*

*Identification of community awareness and capacity building needs for inclusive tourism development*

*Identification of needs for skills development for tourism market supply (education, SME development)*

*Presentation of at least three different spatial development scenarios to accommodate the projected growth*

*Assessment of environmental and social impacts of each development scenario*

## 3. EVALUATION OF DEVELOPMENT SCENARIOS



*Identification of stakeholders and stakeholder representatives, at least from: Government institutions, private sector representatives, local residents and business community, local NGOs*

*Discussion of the findings, the proposed planning standards and the scenarios with all stakeholders*

*Selection of one scenario for further elaboration*

*Identification of stakeholders that will actively contribute the detailing of the preferred development scenario*

#### 4. THE PREFERRED DEVELOPMENT SCENARIO

*Detail the preferred development scenario in close collaboration with identified stakeholders:*

- Present a land use map (2022 and 2042) including the detailed location, shape and size of existing and new key tourism areas.
- Identify and discuss land ownership issues related to the preferred development scenario
- Identify and mitigate environmental and social impacts related to the preferred development scenario
- Identify and discuss cultural and natural heritage preservation issues related to the preferred development scenario
- Evaluate phasing options and select priority locations for development with related detailed size and shape consistent with projected demand for all land uses and with special emphasis on tourism development in blocks of five years (2019-2023 / 2024-2028 / 2029-2033 / 2034-2038/ 2039-2043)
- Identify additional needs for infrastructure and services on top of existing deficiencies based on the preferred development scenario and infrastructure standards with planning horizon of 5 years and 25 years respectively
- Present an integrated phasing plan for timing of infrastructure and service provision in a gradual and cautious way to minimize risks and to guide development
- Identify additional needs for SME and skills development
- Identify roles and responsibilities of all stakeholders in implementation of the preferred scenario
- Assess private sector interest and commitment to the realization of the development scenario
- Assess community interest and commitment to the realization of the development scenario
- Identify the need for downstream revision of other formal (spatial) plans and regulations (for indicative list see Annex 3)

#### 5. DEVELOPMENT PLANS FOR PRIORITY KEY TOURISM AREAS

*Present detailed development plans with 5 years and 25 years planning horizon for all the priority current key tourism areas within the Tourism Destination Area (existing clusters of hotel and tourist facilities and attractions) and for new key tourism areas that*

*have been prioritized for tourism development in the first 5 years (2019-2023) of the Program, including maps, planning standards, building regulations and conceptual designs with cost estimates.*

## 6. INTEGRATED INFRASTRUCTURE AND SERVICES DEVELOPMENT PLAN

### *Medium and long-term investment plan*

*Present consolidated results of the overall development scenario and the detailed development plans and present an integrated and phased infrastructure and services development plan and related cost estimates for all sectors at prefeasibility level for 5 and 25 years respectively, together with conceptual designs. The investment plan must support and guide tourism development and will include:*

- Area redevelopment
- External access: airports and airlift capacity, ports, toll roads, national and provincial road network, railways, external (long distance) public transport
- Internal access: internal road network, internal and short distance public transport facilities including water transport, non-motorized transport facilities, traffic management, pedestrian facilities, road safety, parking, etc.
- Drainage and flood protection
- Water supply
- Wastewater management and sanitation
- Solid waste management and cleanliness
- Electricity supply
- Street lighting
- Public amenities
- Broadband internet services
- Specialized tourist related infrastructure such as visitor centers, jetties, boardwalks, signage, etc.

### *Short-term investment plan*

*Present urgent first year (2019) investment plan for improved connectivity and critical first year basic infrastructure investment.*

## 7. CAPACITY BUILDING

*Present a capacity building program in close collaboration with identified stakeholders, including institutional capacity building at all levels of government, safeguard monitoring and downstream spatial plan revisions, community capacity building, and SME and skills development.*

## 8. INTEGRATED TOURISM MASTER PLAN

*Present an integrated tourism master plan for all sectors at prefeasibility level, including conceptual designs for all infrastructure and services for 5 resp. 25 years, consisting of:*

- a land-use plan
- a phasing plan showing priority locations for development in blocks of five years (2019-2023 / 2024-2028 / 2029-2033 / 2034-2038/ 2039-2043)
- detailed development plans for priority key tourism areas
- a phased tourism facilities development plan for 5 resp. 25 years
- a phased integrated infrastructure and services development plan for 5 resp. 25 years
- a private sector, SME and skills development plan
- a local community capacity building plan for inclusive development
- An institutional development plan for management of tourism development
- If sufficient information on the land acquisition and/or resettlement is available for a particular land/infrastructure/facilities development as recommended by the ITMP, and if it has been decided that the ITMP recommendation will be implemented, then the Consultant will also prepare a land acquisition and resettlement action plan (LARAP) in accordance with the LARPF as specified in the ESMF.
- If sufficient information on the presence of and potential impacts on IPs is available for a particular land/infrastructure/facilities development as recommended by the ITMP, and if it has been decided that the ITMP recommendation will be implemented, then the Consultant will also prepare an Indigenous Peoples Plan (IPP) in accordance with the Indigenous Peoples Planning Framework (IPPF) as specified in the ESMF
- a natural assets preservation and environmental management plan
- a cultural heritage preservation management plan
- implementation arrangements
- detailed 5 years cost estimates and investment plan
- a financing plan including distinction of public and private sector contributions

## 9. ECONOMIC EVALUATION

## 10. ENVIRONMENTAL IMPACT EVALUATION AND MITIGATION PLAN

## 11. SOCIAL IMPACT EVALUATION AND MITIGATION PLAN

### **Annex 3: Responsibility for review of plans after completion of the Integrated Tourism Master Plan**

Once the Integrated Tourism Master Plan has been prepared, a number of spatial and sectoral plans have to be reviewed and improved or prepared as well, including:

1. Review of spatial plans:
  - a. RTRW Provinsi
  - b. RTRW (Rencana Tata Ruang Wilayah) Kawasan Strategis Pariwisata (across kota/kabupaten)
  - c. RTRW (Rencana Tata Ruang Wilayah) Kota/Kabupaten
  - d. RDTR (Rencana Detail Tata Ruang) Kawasan Strategis Pariwisata
2. Review of sectoral Master Plans:
  - a. Roads
  - b. Transport
  - c. Drainage and flood control
  - d. Water supply
  - e. Wastewater management
  - f. Solid waste management
  - g. Power supply
  - h. Plans of National Parks or World Heritage Sites (*if applicable*)
  - i. Other related master plan but are not limited to Site Management Plans, including Carrying Capacity Assessments, Conservation Plans, Visitor Management Plans, Heritage Impact Assessments and Assessments of related Institutional Arrangements.

A large number of government institutions will be involved in preparing/reviewing these plans. Most of the work will be done in close collaboration and consultation with relevant stakeholders. This preliminary note is meant to identify which government body at which level of government is formally responsible for preparation and/or review of these plans. It is an initial attempt to identify down-stream planning needs that the Consultant will build and improve on.

#### **Ad 1. Spatial plans**

Responsible for the preparation/review of the RTRW and the RDTR is the Bappeda of the Kota or Kabupaten of the area covered. If the planning area covers more than one local government, which is often the case for the RTRW for strategic areas, the Provincial Bappeda is responsible.

#### **Ad 2. Sectoral master plans.**

##### *Cultural Heritage*

Possible cultural heritage related downstream sectoral master plans include but are not limited to Site Management Plans, including Carrying Capacity Assessments, Conservation Plans, Visitor Management Plans, Heritage Impact Assessments and Assessments of related Institutional Arrangements.

##### *Roads*

There are number of institutions in each level of governments responsible in road sector. Most of the responsibilities fall to Ministry of Public Works and Housing (MPWH). Detail of the responsibilities are as the following table.

Institutions	Responsibilities
DG Highway - Ministry of Public Works and Housing	Develop national road master plan Develop and maintain national road network, including some toll roads Reconstruct and maintain provincial and district roads that have been classified as strategic roads  Regulate road sector
Toll Roads Authority – Ministry of Public Works and Housing	Regulate toll roads select toll road operators
Provincial Government	Develop provincial road master plan Develop and maintain provincial road network Develop local roads
Municipal/City Government	Develop municipal/city and local roads master plan  Develop and maintain municipal/city road network  Develop and maintain local roads
Village Government	Village roads

### *Transport*

Ministry of Transport (MOTr) responsible for development of transport infrastructures and service at national network (except road), and provincial and municipal/city governments responsible for provincial and municipals/city network. Detail of the responsibilities are as the following table.

Institutions	Responsibilities
DG Land Transport - MOTr	Develop road transport service master plan Develop ferry and inland waterway master plan  Regulate road transport sector Enact inter-province road based public transport route network Issue inter-province road based public transport service license to operators Develop inter-province road based public transport terminal Approve technical design and operation of road based public transport terminal

Institutions	Responsibilities
	<p>Develop and maintain ferry and inland waterway ports</p> <p>Develop ferry route network Issue ferry service license to operators</p>
DG Air Transport - MOTr	<p>Develop airport master plan Develop air transport service master plan</p> <p>Regulate air transport sector Enact regular air transport route network Issue regular air transport service license to operators</p> <p>Develop airport Approve technical design and operation of airport</p>
DG Sea Transport - MOTr	<p>Develop port master plan Develop shipping line master plan Regulate sea transport sector Enact shipping route network Issue regular shipping service license to operators</p> <p>Develop port Approve technical design and operation of port</p>
DG Railway - MOTr	<p>Develop railway master plan Regulate railway sector Develop and maintain inter-province railway network</p> <p>Issue inter-province railway public transport service license to operators Approve technical design and operation of railways line</p>
Provincial Government	Similar to MOTr, but for provincial network. Provincial governments must ask for approval from MOTr on technical design and operation.
Municipal/city Government	Similar to MOTr, but for municipal/city network. Municipal/city governments must ask for approval from MOTr on technical design and operation.

### *Drainage and flood control*

Ministry of Public Works and Housing (MPWH) responsible for development of drainage networks and flood control and provincial and municipal/city governments

responsible for provincial and municipals/city networks. Detail of the responsibilities are as the following table.

Institutions	Responsibilities
MPWH - DG Water Resources	<ul style="list-style-type: none"> <li>Develop water resource management and water conservation master plan</li> <li>Regulate water resource management and water conservation</li> <li>Implement and facilitate regulation of water resource management</li> <li>Develop drainage primary network master plan</li> <li>Develop standardization for water resource management</li> <li>Develop and supervise technical guidance for water resource management</li> <li>Evaluate water resource management implementation</li> </ul>
MPWH - DG Human Settlement	<ul style="list-style-type: none"> <li>Develop regulation for drainage system at settlement location</li> <li>Implement and facilitate drainage system regulation</li> <li>Develop drainage system at settlement location</li> <li>Regulate standardization of drainage system at settlements</li> <li>Develop national settlements plan to support tourism areas</li> <li>Develop and supervise technical guidance for drainage development at settlements</li> <li>Facilitate of asset handover development and system development for drainage at settlements to Local Government</li> </ul>
Public Works Agency at Provincial Level	<ul style="list-style-type: none"> <li>Regulate operational of water resource management at provincial level and inter-city/ kabupaten</li> <li>Develop RPI2JM for drainage services infrastructure</li> <li>Supervise operational and technical of water resource and drainage</li> <li>Provide license of water use and water resource</li> <li>Evaluate and control water resource management</li> <li>Implement decentralization of authority for water resource sector at provincial level</li> <li>Develop regional drainage system</li> <li>Technical supervision for construction</li> <li>Conduct physical construction of drainage and water</li> </ul>

Institutions	Responsibilities
	system
Public Works Agency at Kota/Kabupaten level	<p>Similar to Public Works Agency at provincial level, but for municipal/city network</p> <p>Develop RPI2JM for drainage services infrastructure</p> <p>Coordinate with other city government for inter-connection drainage system and water resource management</p>

### *Water supply*

Water supply is normally organized at the Kota or Kabupaten level. Responsible for sectoral master plan preparation and implementation is the local Kota/Kabupaten water supply company PDAM.

Institutions	Responsibilities
MPWH - DG Human Settlement	<p>Regulate drinking water system management at urban, rural and specific area</p> <p>Develop national water supply plan to support tourism areas</p> <p>Implement and facilitate regulation of drinking water system</p> <p>Regulate standardization for drinking water system</p> <p>Institutional facilitation of drinking water sector</p>
MPWH – BPPSPAM	<p>Regulate standardization for water supply especially for drinking water system</p> <p>Supervise water supply system to provincial and local government</p>
Provincial – Public Works Agency	<p>Develop drinking water master plan for provincial level (RISPAM)</p> <p>Develop RPI2JM for water supply</p> <p>Develop water supply services at regional level</p> <p>Technical supervision for construction</p> <p>Conduct physical construction of water supply</p>
City Government – PDAM at city level	<p>Develop regulation and strategy of drinking water and waste water management</p> <p>Develop drinking water master plan for city level</p>



Institutions	Responsibilities
	(RISPAM), including maintenance and control  Develop RPI2JM for water supply Develop Rencana Aksi Daerah Penyediaan Air Minum dan Penyehatan Lingkungan (RAD AMPL) Provide HH water connections, construction and O&M of city drinking water networks

*Waste water management and solid waste management*

Institutions	Responsibilities
DG Human Settlement	Regulate waste water and solid waste system Develop national waste water and solid waste management plan to support tourism areas  Implement waste water and solid waste system regulation including facilitate of land provision  Supervise technical guidance for waste water and solid waste management system Develop standardization for waste water and solid waste management
Public Works Agency at Provincial Level	Develop solid waste and waste water management system at regional level Technical supervision for construction Develop physical construction of waste water and solid waste system
City Government	Develop sanitation master plan (Buku Putih Sanitasi/BPS, Memorandum Program Sanitasi (MPS) and Strategi Sanitasi Total Berbasis Masyarakat (STBM) Develop technical regulation for waste water and solid waste management system Provide waste water and solid waste management services

Every local government should prepare a Strategi Sanitasi Kota/Kabupaten (SSK) covering both Waste water management and solid waste management. Responsible for preparation and implementation is the local Dinas PU.

*Power supply*

Responsible for the Power Supply sectoral master plan preparation and implementation is the national Power Supply Company PLN, which is also the provider of electricity.

Institutions	Responsibilities
Ministry of Energy and Mineral Resources – DG Electricity	Regulate electricity sector Implement and facilitate regulation of electricity sector  Develop electricity master plan Regulate standardization of electricity sector Supervise technical guidance of electricity sector Evaluate water resource management implementation
Energy and Mineral Resource Agency at Provincial Level	Develop technical regulation for energy sector (including electricity) and mineral resource Implement and facilitate regulation of electricity sector  Coordinate and supervise to technical implementation unit at regional and city/ kabupaten level
Power Supply Company at regional level	Develop master plan of electricity supply at regional level Provide electricity supply system

#### *Potential for improved efficiency*

Note that the responsibility for many sectoral master plans is delegated to local government (Kabupaten/Kota) as a result of the drive to decentralization. This may however result in less efficient provision of infrastructure. For example, the combined use of a raw water source or a solid waste disposal site by more than one local government might be much more efficient than each local government having its own facility. Therefore, the Integrated Tourism Master Plan should identify opportunities for combined use of resources and facilities between localities. In such cases the Province could take the lead in preparing sectoral master plans in close cooperation with the local governments involved. A good example of such cooperation already exists in Central Java Province, where *Kota* Yogyakarta and *Kabupatens* Sleman, Bantul, and Wonogiri are working closely together under the guidance of the Central Java Province to make integrated master plans for solid waste management, drainage and sanitation. The same could be done for roads and road transport where the Province could become leading in preparing a sectoral master plan covering all layers of government.

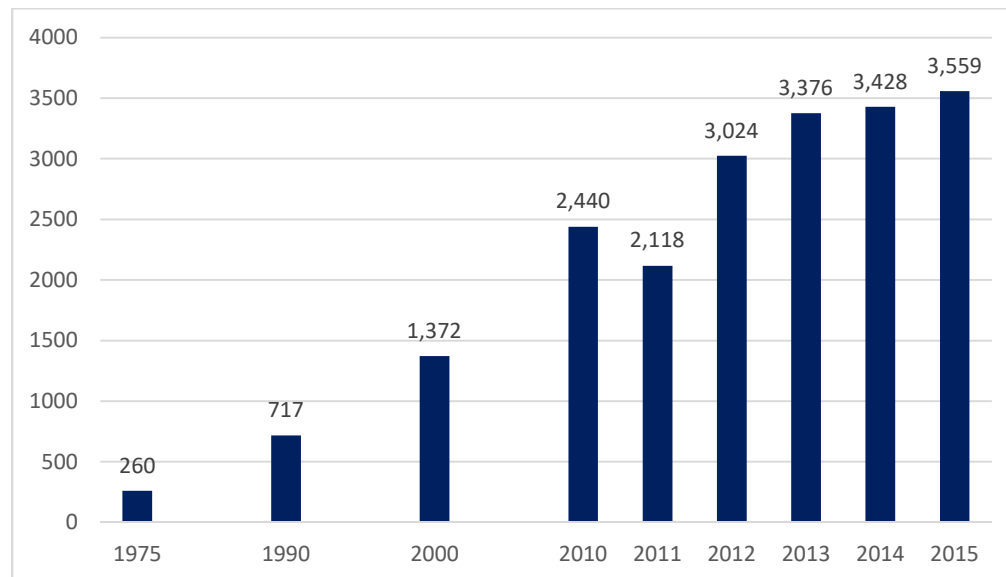
## Annex 4: Prepare a Borobudur Visitor Management Plan

### *Borobudur visitor attraction*

The Borobudur temple complex, a UNESCO World Heritage Site, is located approximately 40 km to the northwest of Yogyakarta's city center. It consists of three monuments, the main Borobudur temple and two smaller nearly temples (Mendut and Pawon temples). The main temple of Borobudur is the largest Buddhist temple in the world. Apart from its magnificent scale and setting, Borobudur is famous for its beautiful stone reliefs and statues.

In 2015, visitor numbers reached almost 3.6 million, which makes Borobudur the most visited paid-entry cultural site in Indonesia. The temple has been open to visitors for several decades. In 1974, as restoration works started, it recorded only 260,000 visitors, of whom 36,000 were foreigners. Since then, visitor numbers have experienced significant growth with an annual average rate of 8.8%. During the last 5 years, the numbers of visitors has increased by 1.1 million, which represents an annual average growth by 7.8%.

**Figure: Number of Visits to Borobudur Temple 1975 – 2015 (thousands of visits)**



Source: TWC

Admission prices for Indonesian residents are IDR 30,000 (~USD 2.3) for adults and IDR 15,000 (~USD 1.15) for students. The admission price for foreigners is USD 20 for adults and USD 10 for students. Borobudur temple is mostly visited by domestic visitors:

- Students and schoolchildren (1.2 million, 33%)
- Domestic adult visitors (2.1 million, 60%).
- Foreign visitors (256,000, 7%)

The top 5 nationalities for foreign visitors (2014 figures) are the Netherlands, Japan, Malaysia, France and Germany. Malaysia, Singapore, China and Australia are under-represented vis-à-vis their total visitor numbers to Indonesia.

Peak visitor periods occur during European summer holidays, Lebaran and Vesak day (the latter sees 40,000 to 60,000 worshippers, mostly from Indonesia). Foreign arrivals to Borobudur increased steadily from 2011 to 2014 before dropping slightly in 2015. Domestic arrivals show strong increase over the longer term although in recent years' growth appears to have slowed. As Borobudur is a well-known heritage destination in Indonesia, domestic tourists come from cities all across Indonesia (with a larger percentage from Java).

There has been some fluctuation in visitor numbers over the years reflecting natural disasters such as the eruption of Mount Merapi in late 2010 which resulted in the temporary closure of regional airports and causing damage to Borobudur because of volcanic ash.

**Figure: Growth in arrivals to Borobudur, 2010-2015**

Year	Foreign arrivals	Growth rate of foreign arrivals	Domestic arrivals	Growth rate of domestic arrivals	Total arrivals	Growth rate of total arrivals
2010	156,247	-	2,283,532	-	2,439,779	-
2011	168,028	8%	1,949,817	-15%	2,117,845	-13%
2012	193,982	15%	2,830,230	45%	3,024,212	43%
2013	227,337	17%	3,148,368	11%	3,375,705	12%
2014	268,664	18%	3,159,744	0%	3,428,408	2%
2015	256,362	-5%	3,302,328	5%	3,558,690	4%

Source: Annual reports of PT. Taman Wisata Candi Borobudur, Prambanan and Ratu Boko

### ***Borobudur heritage area management zoning and regulation***

The Indonesian government established five management zones for Borobudur with the support of UNESCO and Japan International Cooperation Agency (JICA). The overall management area covers over 15,000 square meters.

Zone I covers the area with a radius of 100 to 300 meters from the main temple, and consists of the three temples. Within this area the Ministry of Education and Culture is obligated to protect and maintain the physical state of the temples.

Zone II, with a radius of up to 2.5 kilometers, is the area where tourism, research, and conservation activities are carried out. This area is managed by a state-owned institute PT. Taman Wisata Candi Borobudur, Prambanan, and Ratu Boko (PT.TWC).

Zones III-V cover the area beyond 2.5 kilometers from the temple, where any planning, usage or development is monitored and managed by the local government of *Kabupaten* Magelang.

### ***Institutional framework and key stakeholders***

Several stakeholders participate in the preservation, management and development of Borobudur.

*UNESCO* – coordinated and funded the restoration of Borobudur (it provided a total amount of USD 7 million between 1972 and 1983); offers financial and technical support in case of

damage; and supports sustainable tourism development both in motivating and supporting the local community in the Borobudur area, and in supporting the preservation of the monument.

*The Coordinating Ministry of Maritime Affairs and the Ministry of Tourism*, in July 2017, launched the operation of the Borobudur Tourism Authority Board (BOP). The establishment of Borobudur BOP is based on the Presidential Regulation No. 46 of 2017 that was signed by President Joko Widodo on April 11. It is expected that the BOP will coordinate Borobudur's tourism planning and the development of the temple into a national and international cultural destination. It should be noted that this is a new entity formed by Presidential Regulation. While its specific mandate has yet to be formalized, its establishment may affect the roles of the various institutions with responsibility for managing the three parties listed below.

*The Ministry of Education and Culture, through the Borobudur Conservation Office*, is charged with conservation and preservation management of the Borobudur Temple (Zone I). It works with the Gadjah Mada University of Yogyakarta and various local counterparts in implementing these programs.

*PT. Taman Wisata Candi Borobudur, Prambanan and Ratu Boko* – a state-owned enterprise which manages tourist activities in Zone II; markets and promotes Borobudur in both local and international markets; and ensures the local community is benefitting from the tourism development of Borobudur.

*Kabupaten Magelang* – manages and enforces spatial planning, land use and development control in the greater Borobudur area (Zone III – V).

Surrounding villagers are of course key stakeholders as well, and should be engaged in the development, operations, and management of the destination. Kecamatan Borobudur consists of 20 villages all of which are part of the Government's tourism initiatives that promote local assets in order to attract tourists.

### ***Legal framework, spatial and management plans***

In 1979, the JICA Borobudur Master plan was prepared as a comprehensive plan that included conservation strategies, environmental management, landscaping, infrastructure redevelopment, village improvement, a land use plan, entrances and additional facilities, budget, and administrative structure. This plan was not institutionalized by GOI (except for the partial zoning adopted by Presidential Decree 1/1992). Since then, a large number of spatial plans and management plans for Borobudur have been prepared, as summarized in the following table:

	<b>Spatial Plans</b>	<b>Management Plans</b>
International	1979 – JICA Master plan	
	1991- Listed as World Heritage Site by UNESCO	
National	Law 26/2007 – Spatial Management	Presidential Decree 1/1992 – Management Plan of Borobudur and Prambanan.

	<p>Government Regulation 26/2008 – National Spatial Plan</p>	<p>Several studies have been conducted for the Borobudur Site: Studies on Supporting Tourism Facilities Evaluation in Borobudur Temple Compound (2005);  Study on Surrounding Community Perception of State of Conservation and Utilization of Borobudur Temple (2009); Study on Physical Carrying Capacity of Borobudur Temple (2009); Study on Visitor Behaviours in Zone I of Borobudur Temple (2010);  Study on Distribution Pattern and Visitor Flow (2010);  Study on Visitor Management of Borobudur Temple I (2012);  Standard Operational Procedures (SOPs) for the Conservation of Borobudur Temple and Surroundings (2013);  Study on the Perceptions of Visitors to the Visitation Comfort of Borobudur Temple (2013); Study on Visitor Management of Borobudur Temple I (2014), and  Monitoring and Evaluation Report of Borobudur Temple, Mendut Temple and Pawon Temple (2016).</p>
	<p>Presidential Decree 58/2014 – Spatial Plan of Borobudur and Surrounding Areas</p>	

	Presidential Regulation 46/2017 – Establishment of the Borobudur Tourism Authority Board	
Provincial	Provincial Regulation 6/2010 – RTRW Central Java 2009-2029	
Kabupaten	Kabupaten Decree 5/2011 – RTRW Kabupaten Magelang 2010 – 2030	

The most recent plan is the Spatial Plan of Borobudur and Surrounding Areas (Presidential Decree No. 58 Year 2014). Article 42 par. 2 indicates that the Management Plan for the Borobudur Area should be implemented by the responsible Ministry in the field of culture.

The Spatial Plan of Borobudur and Surrounding Areas is a local level plan and an operational and coordination tool with respect to the larger RTRW (*Rencana Tata Ruang Wilayah*, or Regional Spatial Plan), to ensure the preservation of Borobudur area as national and world heritage site.

The plan indicates the heritage area and provides direction for this area on land use intensity, maximum percentage of building footprint, minimum area of green open space, maximum building height, building character, and minimum required infrastructure. Besides this, the plan identifies the broad zoning, states the development intentions, and contains regulations relating to the permitted activities.

The extent to which the legal framework and jurisdictional authorities of the various agencies will be affected by the recent Presidential Regulation establishing the Borobudur Tourism Authority Board remains unclear.

### ***Constraints and concerns***

Notwithstanding its World Heritage Site status and significant marketing efforts and resources (e.g. TWC invested IDR 8.2 billion in 2014 on marketing and research of Borobudur, Prambanan and Ratu Boko), Borobudur is not receiving the same recognition as other attractions with similar international stature. Foreign visitors only account for 6 to 8% of total arrivals according to TWC entrance figures and they are mainly European.

The various management parties which have been historically responsible for Borobudur (the Borobudur Conservation Office, TWC, and Kabupaten Magelang) lack a common vision and clear mechanism to coordinate the conservation and promotion of Borobudur. Each party has its own mandates and objectives and is responsible for different sections of the site. TWC is more business orientated, while the local government's main interest is the contribution of tourism to regional and local income and employment. Thus, it is understandable that these organizations want more visitors to raise revenue and to contribute to the local economy. On the other hand, as

a conservation agency, the Borobudur Conservation Office is more concerned about the adverse impact that visitors may have on the temple.

The Borobudur Temple, although an impressive and massive monument, is rather small at around 15,000 square meters compared to the much larger scale world wonders such as the Great Wall of China or Angkor Wat in Cambodia. Rising visitor numbers have caused an overloading problem, especially during peak season. This is both damaging to the temple and detrimental to the visitor experience. Overcrowding also threatens the image of the site among international markets, especially Europeans, as is evidenced by increasing recommendations on user-generated content websites to avoid the site as an “overcrowded tourist trap”.

There are currently no systems in place to regulate or limit the number of visitors or to introduce mandatory guided tours to regulate tourist activities. Despite warning signs on all levels not to touch anything, the regular transmission of warnings over loudspeakers and the presence of guards, vandalism on reliefs and statues is a common occurrence. Some of the damage caused by vandalism by tourists is already irreversible.

UNESCO does not provide figures regarding the daily carrying capacity or the number of visitors per year however Borobudur Conservation Office hosted a physical carrying capacity assessment for Borobudur in 2009 and there has been no updated assessment since. While UNESCO considers the potential for “a small degree of damage caused by unsupervised visitors”, the potential damage caused by the risk of another volcanic eruption of Merapi or other volcano is greater than the issue of carrying capacity. Borobudur Temple is situated on a hill plateau surrounded by several volcanoes and hill formations, namely two pairs of twin volcanoes – Mount Sundoro/Sumbing in the northwest and Mount Merbabu/Merapi in the northeast – as well as the Menoreh hills in the south, and Mount Tidar on the north side. In 2010, volcanic ash from the eruption of Mount Merapi, with acidity levels of pH 3-4, covered the temple and stuck to the stone. The Borobudur Conservation Office staff took 40 days to conduct an emergency site clean-up; however, the temple’s entire post-eruption cleaning operation took one year.

In addition to threats due to natural disasters such as volcanic eruptions and earthquakes, natural deterioration from climatic influences also endangers the precious stone reliefs and overall structures of Borobudur Temple. The Ministry of Education and Culture, through the Borobudur Conservation Office, plays a crucial role in ensuring the safeguarding of Borobudur Temple for both present and future generations by conducting continuous conservation activities. UNESCO Jakarta has also been providing conservation and preservation support to the Borobudur Conservation Office since 2011 through the implementation of a number of significant conservation techniques, research findings, and the facilitation of collaborative work with the German conservation experts within the framework of the UNESCO/German Funds-in Trust Project.

The Borobudur Conservation Office has indicated (endorsed by both TWC and Kabupaten Magelang) that the optimal carrying capacity of the Temple itself is under 200 visitors simultaneously, which corresponds to a daily carrying capacity of around 3,000 visitors (1 hour per visitor and 15 hour operational days). Currently, this capacity is grossly exceeded, with an annual average daily number of visitors at 9,750 with a peak of 20,200 in the month of December. It seems therefore more than likely that measures of limitation or regulation of attendance are necessary.



Another concern is poor management of hawkers in the Borobudur compound which causes much frustration for tourists, leaving a negative image of the destination. There are 2 components to the hawker problem. The first is the chaotic vendor stalls that visitors must walk through before exiting the Borobudur compound which is incompatible with visitors' expectations of a world class heritage site. Many vendors travel from around Java to set up stalls, not benefitting the local communities. The second involves local villagers who received lifetime free access to the Temple when they were displaced from their homes to make way for the establishment of the Compound. Today, they enter the Temple and sell unrelated items such as water and snacks close to the temple itself. Both problems are exacerbated during peak periods and disturb and frustrate tourists. While TWC has been trying to control the hawkers for over a decade, it has limited power to police and regulate the local community.

### ***Pipeline projects around Borobudur***

TWC is planning with the Magelang local government to relocate the current vendors to a new market (around 6 hectares) with car park outside Borobudur. The existing market place may be turned into a botanical garden.

There is also a plan to add one more entrance and a ticket office. This is understood to be still in the planning stage.

TWC is trying to develop a smart ticketing system to better manage the number and flow of tourists. It is understood that this is already budgeted by TWC.

TWC has an ongoing campaign to develop the surrounding villages into tourism villages where guests can stay with themes based on the specialty of each. The program offers assistance in infrastructure and training and has been rolled out in the first few pioneer villages. The program is targeting all 20 villages within Kecamatan Borobudur. TWC is under the supervision of the Ministry of State Owned Enterprise and is currently working with 19 state-owned-enterprises providing community empowerment support by building *Balai Ekonomi Desa* (Balkondes), a community centre that promotes local potentials and could be used by the local community to showcase their products and provide activities such as handicrafts workshops, ceramic-making, traditional performances, small-scale village tours as well as training for the management of local guesthouses and local cuisine factories.

UNESCO has been implementing community empowerment programs in Borobudur and Prambanan since 2013. Under the support of AUSAID, in 2014, UNESCO and the Government of Indonesia launched a community run gallery (namely *Galeri Komunitas*) in Karanganyar village, within Kecamatan Borobudur. Galeri Komunitas has been supporting local crafts and promoting small businesses in the vicinity of Borobudur. UNESCO has been facilitating community empowerment support and business development assistance to the local communities working in the creative industries and with cultural products in 8 villages surrounding Borobudur and Prambanan. UNESCO is working closely with local counterparts and the private sector through their Corporate Social Responsibility Programs in facilitating sustainable community empowerment interventions and public awareness campaigns on heritage preservation in Borobudur and Prambanan.

During this year, under the support of Citi Foundation, UNESCO Jakarta is currently implementing the project “Youth Economy Empowerment in Indonesia’s Heritage Sites, through Capacity Building and Sustainable Tourism” in 6 targeted Kabupaten (Sleman, Klaten, Magelang, Yogyakarta, Samosir and Toba Samosir). This project aims to assist the Indonesian government to improve the livelihoods of communities, particularly the youth (18-25 years old) by building capacities in the production of cultural products and by promoting sustainable tourism in and around UNESCO World Heritage sites and other key priority tourist destinations designated as priorities by the President of Indonesia Joko Widodo in early 2016. The project is targeting 450 youths and will aim to give them business development assistance through cultural mapping, capacity building, organization of a competition, and promotional activities. Under this project, UNESCO Jakarta has targeted 150 youths in Borobudur and Prambanan areas.

In the area of conservation and under the support of the German Government, in 2017, UNESCO Jakarta has provided technical assistance in the area of temple conservation by implementing the project “Capacity-Building for the Conservation of the Borobudur Temple Compounds Within a Disaster Risk Reduction Framework”. Within this project UNESCO Jakarta supports the Borobudur Conservation Office team by conducting capacity-building efforts through implementing disaster mitigation measurements within their conservation activities.

Within the Zone 1, under the framework of UNESCO/Indonesia Fund-In-Trust project “Promoting Intercultural Dialogue through Capacity Building Training for Museum Development at UNESCO World Heritage Sites in Indonesia and Afghanistan” UNESCO Jakarta is working closely with the Borobudur Conservation Office and TWC in revamping of Museum Karmawibhangga in Borobudur, Magelang. By mid-September 2017, the newly revamped museum will be opened and it is expected to raise public awareness about the philosophy and stories about Borobudur temple reliefs and its valuable preserved objects.

### ***Requirements of the Borobudur Visitor Management Plan***

Borobudur cannot maintain, let alone increase its attractiveness without significant efforts aimed at improving and enriching the visitor experience. To avoid growing discontent and stagnation, especially amongst foreign visitors, a revision of the Borobudur experience is needed through the preparation of a Borobudur Temple Compound Visitor Management Plan.

Until now, the natural positioning of Borobudur temple as a unique cultural and religious site in Indonesia and Asia has not been sufficient to make the area a significant international (or even domestic) leisure tourist destination. Redefinition of the visitor experience should benefit the preservation of the site while contributing to increased revenues. To increase both the number of visitors and average expenditure per visitor, the Borobudur Temple Compound must become and be promoted as a world class heritage site offering an exceptional, almost life-changing, visitor experience. Visiting the Borobudur Temple Compound should be a peaceful and spiritual experience as part of a cultural journey to the heartland of ancient living Javanese culture in the Borobudur-Yogyakarta-Prambanan triangle. It should be:

- a temple compound at the center of a wider cultural landscape, highlighting historical and current features of Javanese culture;
- a place where visitors will be immersed and “initiated” into Buddhist culture; and

- represent one of the highlights of this “initiation”, by being exemplary in terms of quality of visitor experience (information, understanding of the site, scenography and services) and heritage conservation.

The Borobudur Visitor Management Plan should seek to guarantee the preservation of the site for present and future generations, whilst improving visiting conditions and maximizing the local economic impact. The Plan should result in improved visitor experience at the Borobudur Compound, with better information, better visitor flow regulations and better control over hawkers. It should also build on and learn from previous experience where a wide array of planning efforts has delivered inadequate results. The Plan should address all constraints and concerns and provide clear directives for temple compound management, visitor flow and crowd management, regulated and restricted temple access, admission tariff setting, efficient use of internal compound attractions and improved visitor information.

The Borobudur Visitor Management Plan will focus on the immediate visitor area of the temple compound and the surrounding areas to the extent that they are affected by the pattern of visitor traffic such as visitor approaches, assembly and entrance areas. In addition, the Plan should also address spatial planning issues beyond the immediate visitor area such access and vehicle management as well as land use management of the surrounding areas. Based on review of existing plans and discussions with relevant government institutions, the Plan should provide directions to ensure that the integrity of the Borobudur Temple Complex (including Mendut and Pawon temples) will not be impaired by developments in the surrounding areas. These directions should then inform the spatial planning components of the wider Integrated Tourism Master Plan as well as specific local plans. They should include, but not be limited to, preparing planning guidelines and restrictive measures in terms of zoning, land use, pedestrian and vehicle movement, building heights and densities, floor-space ratios, green open spaces, open vistas, architectural styles, landscaping, noise and air pollution, etc. Spatial planning guidelines and measures should be ambitious but realistic, based on firm commitments from all stakeholders, especially relevant government institutions, to enforce regulations once agreed.

Considering current institutional issues concerning the management of the temple compound and its surroundings, it is of the utmost importance to prepare the Borobudur Visitor Management Plan in close collaboration with all relevant government institutions and other stakeholders with a view to reach consensus and commitment on a common vision to ensure effective implementation and coordination of planned interventions. This may explicitly include proposals for revision of roles and responsibilities of relevant government institutions if this is deemed necessary for improved management of the Borobudur Temple Compound and its surrounding area. The results must be incorporated in the institutional development program and the capacity building program to be prepared as part of the overall scope of work for the Integrated Tourism Master Plan.

The Borobudur Visitor Management Plan will have a 25-year planning horizon, consistent with the overall Integrated Tourism Master Plan for the entire tourism destination area. An additional 5-year plan will be prepared by the Consultant in order to identify the short and medium-term interventions, investments and their related cost estimates. All proposed interventions and investments must be consolidated in the overall Integrated Tourism Master Plan.

## **Scope of Work**

The scope of work is to prepare a Visitor Management Plan for the Borobudur Temple Compound, , review related plans that together create a Site Management Plan, i.e.: Carrying Capacity Assessment, Conservations Plans, Heritage Impact Assessments, and related institutional arrangements, and identify and recommend any revisions/updates, as needed. In order to conduct the work, the Consultant will follow the principles and criteria set out in the Operational Guidelines for the Implementation of the World Heritage Convention as well as the guidance of the UNESCO Practical Manual for World Heritage Site Managers. The Consultant will also review the existing Conservation Plan and Carrying Capacity studies that have been conducted for Borobudur and reflect their findings in the present assessment, and recommend revisions of these plans as appropriate.

This assignment should also build upon the findings of the Borobudur-Prambanan-Yogyakarta Market Analysis and Demand Assessments. The assessments present relevant information on the baseline supply and scale and type of demand that will drive the development of selected tourism destinations and assess the investment needs (soft and hard) and identify its gaps. These assessments provide the evidence base for the development of the integrated tourism destination and will help inform the Government-led destination master planning process.

The Consultant will conduct the following three tasks. The Consultant will make its own assessment, identify additional activities and requirements and prepare its work plan in the Technical Proposal accordingly.

***Task 1. Review and reflect on Borobudur's Outstanding Universal Values***

- A. Review the site's inscription dossier to help formulate future policy and management objectives.
  - Analyze how the site's listing criteria should be reflected in its overall tourism policy and management objectives;
  - Develop an outline that can be used for later policy development under Task 2.
- B. List ways in which the site's Outstanding Universal Values could be reflected and incorporated into interpretation programs.
  - Review the criteria for which the site was selected for inscription on the World Heritage List, as well as the site's established policy and management objectives;
  - Select the species, monuments, art, etc., which are strongly identified with the site's Outstanding Universal Values;
  - Describe how these attractions can be best represented in interpretation materials, e.g., panel signage, brochures, leaflets, audio-guides, audio-visual media and mobile applications.
- C. List ways to monitor tourist attractions representing Outstanding Universal Values.
  - Review the section of the World Heritage Convention application form entitled "Format for Periodic Reporting" as well as the original nomination dossier;
  - Determine which elements of the site best represent Outstanding Universal Values, and state changes that may be appropriate in the request for periodic monitoring reporting data.

***Task. 2. Set policy goals, management objectives and prepare infrastructure plan***

- A. Analyze existing policy and management objectives

- Review laws and policies including those at the national level related to visitor management;
- Review laws, regulations and policies related to Borobudur's spatial planning framework, including those at the national, provincial and local level. The Consultant should build upon the findings of the Borobudur-Prambanan-Yogyakarta Market Analysis and Demand Assessment;
- Review the current site management plan (including its different components – carrying capacity assessments, conservation plans, visitor managements plans, past heritage impact assessments and existing institutional arrangements) or management strategies including any management plan or strategies currently under review or in development and analyze previous visitor management objectives;
- Review previous visitor management plans and policies, including an outline of who has done what and the strengths and weaknesses of these efforts;
- Identify gaps, i.e., what policies and objectives should be strengthened, and highlight future visitor needs making preliminary suggestions on actions to meet these needs.

**B. Gather data relating to visitor numbers, behavior and perceptions**

- Determine whether visitors to a site are local residents, foreign tourists, or other groups such as school students, day visitors, etc.;
- Identify the characteristics of different visitor groups, examine visitor behavior, patterns of flows, and determine how different groups use the site including access and egress.
- Collect existing visitation statistics on use, trends, travel patterns, activities and expenditures at the site;
- Develop and implement a visitor survey asking tourists about their behavior, activities, expenditures, satisfaction, perceptions, and preferences and have them compare the site with comparable attractions within their experience; identify visitor problems or areas of specific concern; and map these out;
- Undertake a survey of tour operators and travel companies active in bringing visitors to the site to obtain information regarding visitor and operator needs and preferences and have them evaluate the site against neighboring and comparable attractions;
- For this task, the Consultant should build upon the findings of the Borobudur-Prambanan-Yogyakarta Market Analysis and Demand Assessment.

**C. Meet with individual stakeholders, in interviews or by holding workshops, and develop a draft paper on the current issues affecting the conservation and management of Borobudur. The Consultant should consult:**

- community leaders to obtain their ideas for planning, tourism development in neighboring communities and the types of skills available in the community;
- management and administration staff of the different entities with a legal mandate to manage the site (i.e., PT TWC, Borobudur Conservation Office- Ministry of Education and Culture, Kabupaten Magelang, Borobudur Tourism Authority Board) in order to identify their concerns and issues;
- local guides for their views of visitor management as well as social and environmental conditions at the site;

- scientists and researchers to learn more about the site's environmental and social conditions in relation to visitation impacts;
- hotel owners and managers for their views on management problems, e.g., reservation systems and communication between the site and the hotels; and
- tour operators who package and sell tours to the site to determine tourists' and operators' needs and preferences.

#### D. Write tourism policies

- Based on the outputs of activities A, B and C develop visitor management policies for Borobudur Temple Compound. These policies should reflect the site's policy needs, management parameters, stakeholder concerns, the site's comparative advantage, and existing legislation and international conventions;
- Prepare an updated management structure for the site taking into account the legal status of the bodies, their authorities, their competency and responsibilities and the coordination mechanisms between them. The findings will be incorporated in the institutional development program and the capacity building program to be prepared as part of the overall scope of work for the Integrated Tourism Master Plan.
- Prepare a policy and vision statement document.

#### E. Develop management objectives

- If appropriate, and taking into account the vision statement, stakeholder concerns and management preferences for the site, use the outputs developed in the preceding activities to identify and map these according to different Recreation Opportunity Spectrum (ROS) classes<sup>23</sup> or similar technique;
- Draft the management objectives for either the whole site or each opportunity class, if ROS is being used;

#### F. Prepare a plan for infrastructure development

- Based on the identified management objectives prepare a plan for infrastructure development for the site;
- Assess and analyze the existing legal and regulatory spatial planning framework for the Borobudur Temple Compound described in activity A;
- Prepare a set of guidelines and recommendations for the preparation of the Borobudur-Prambanan-Yogyakarta Integrated Tourism Master Plan and for the review and preparation of additional spatial or sectoral plans related to this tourism destination, including all existing conservations plans for the Borobudur Temple Compound. In the

---

<sup>23</sup> **Recreation Opportunity Spectrum (ROS)** – The ROS is a means of describing how tourism and recreation will be managed for different areas within a site. It works under the assumption that certain activities fit best in certain physical areas. The identification and mapping of opportunity classes set out the desired conditions for the different areas and provide guidelines for management objectives including tourism/recreation activities and infrastructure development. Each classification entails management standards and desired conditions that fall within a site's policy goals. The information needed to identify and establish opportunity class areas should be drawn from background information on policy goals, existing legislation, and stakeholder concerns.

case of conservation plans, the Consultant should provide recommendations for their revision given the possible changes in the tourism volumes and conditions in the area.

- Prepare a set of recommendations for the preparation of the Heritage Impact Assessment (HIA) for the Borobudur Temple Complex. For additional information on the content and objective of this assessment, [https://www.icomos.org/world\\_heritage/HIA\\_20110201.pdf](https://www.icomos.org/world_heritage/HIA_20110201.pdf)
- Consultant should include, amongst other spatial or sectoral plans, the related plans that together create a Site Management Plan, i.e.: Carrying Capacity Assessment, Conservations Plans, Heritage Impact Assessments (HIA), and related institutional arrangements, and identify and recommend any revisions/updates, as needed:
  - In case during the performance of the assignment a separate consultant is assigned to prepare a HIA, the Consultant should ensure ongoing coordination, collaboration and facilitate access to all available findings and data to the team tasked with the HIA.
  - In case during the performance of the assignment, a significant finding or threat to Borobudur's Outstanding Universal Values is identified, the Consultant should refine and adjust the deliverables under its scope of work to ensure that the protected attributes of the property are maintained.
- For the assessment of heritage impacts, the Consultant will use as a reference the "Guidance on Heritage Impact Assessments for Cultural World Heritage Properties" (A publication of the International Council on Monuments and Sites, January 2011, [https://www.icomos.org/world\\_heritage/HIA\\_20110201.pdf](https://www.icomos.org/world_heritage/HIA_20110201.pdf)). Regarding Borobudur Temple Complex, the Consultant will conduct these assessments for the works and developments planned in zone 1, zone 2 and the area corresponding to zone 3 under the 1979 JICA Master Plan, and possibly including an even wider area.

### ***Task 3. Develop a monitoring system for Borobudur Temple Complex***

#### **A. Identify the site's tourism impacts and problems**

- Conduct desk research and stakeholder consultation to develop a prioritized list of existing impacts and threats at the site;
- Examine the cause-and-effect relationship of the identified impacts;
- Prepare an overview description of the impacts and preliminary list of actions needed to mitigate them.
- The Consultant should build upon the findings of UNESCO's sustainable tourism assessment and monitoring tools based on key indicators for Borobudur.

#### **B. Identify indicators**

- Based on the output of the previous activity develop a preliminary list of tourism indicators with justifications for their selection, and estimate associated monitoring costs.
- To the extent possible, the Consultant should identify indicators that characterize and quantify the heritage attributes of the Borobudur Temple Complex as well as the interrelationship between discrete heritage resources. It is expected that some of these indicators could also be used in the preparation of a HIA.

#### **C. Collect baseline data on the indicators selected**

- Develop a monitoring program and write a monitoring manual;
- Determine method to collect data;

- Determine how stakeholder partners could be involved in the monitoring process.
- D. Set standards for indicators**
- Building upon the data from activity C and previous carrying capacity studies, develop a preliminary set of indicator standards;<sup>24</sup>
  - If ROS opportunity classes are being used, set standards reflecting the different experiences desired in different areas of the site;
  - Prepare a set of guidelines and recommendations for the selection of indicators that will be monitored by the UNWTOs Sustainable Tourism Observatories<sup>25</sup> at the destination level in order to maximize efforts and coordinate data gathering and flow of information.

---

<sup>24</sup> Measurement standards for indicators provide targets for measuring tourism impacts to keep them within acceptable limits. Once standards are set, a regular monitoring framework will be used to determine the degree to which existing conditions vary from desired conditions.

<sup>25</sup> Sustainable Tourism Observatories (STOs) are being established by MOT at major tourism destinations under a sustainable tourism program of the UN World Tourism Organization (UNWTO). The establishment of STOs has been chosen for the following destinations: Sesaot, Lombok; Sleman, Yogyakarta, Pangandaran, West Java and Lake Toba in North Sumatra. STOs were formalized through an MOU signed between UNWTO and MOT in Jakarta in September 2016.