

# **Guideline for Smart Highway Award**

**15<sup>th</sup> August 2023**

**Issued by China Road Federation (CRF)**

## **1. General Information**

The guideline provides the background for setting up the Smart Highway Award, application and selection criteria of this Award.

### **1.1 Name of the Award**

The name of the Award is “Smart Highway Award”.

### **1.2 Background**

- A. To speed up the development and application of smart systems for highway operation and management in response to the rapid advancement of AI, 5G, Big Data, IoT and other smart technologies.
- B. The China Road Federation (hereinafter referred to as the CRF) has been promoting its corporation with international road engineering societies ever since its first participation in the 2<sup>nd</sup> Governing Council Meeting of Road Engineering Association of Asia and Australasia (hereinafter referred to as the REAAA) in 1978. As a member of the REAAA, CRF is willing to establish the Smart Highway Award (hereinafter referred to as the Award) as a gratitude for the long-term support from REAAA.
- C. The 119<sup>th</sup> Governing Council of REAAA granted permission for setting up the Smart Highway Award Management Committee (hereinafter referred to as the AMC). The Committee shall carry out the duty and responsibility for fund management and award selection according to the decision made by the 119<sup>th</sup> REAAA Council Meeting and the CRF Board of Directors.

### **1.3 Principle**

To recognize REAAA members for their outstanding achievement and contribution to the development and application of smart highway management system, to exchange and share the experience in smart

highway development, and to promote the cross-disciplinary integration and smart technology applications for road engineering.

#### 1.4 Sponsorship

The Award is sponsored by the CRF as a council member of REAAA. The Fund of the Award is sponsored by the Far Eastern Electronic Toll Collection Company (hereinafter referred to as the FETC) as a member of CRF.

#### 1.5 Facilitator

Representatives appointed by CRF shall assist the AMC in dealing with matters regarding the award.

## 2. Award

#### 2.1 Time Frame

In response to the rapid development of AI, 5G, Big Data, IoT and other smart technologies, selection and conferment of the Award shall take place once no more than every four years.

#### 2.2 Recipient of the Award

The recipient of the Award shall be called as “The Recipient of the OOOO (year) Smart Highway Award”.

#### 2.3 Form of the Award

Award recipient shall receive 20,000 US dollars as the prize money and an award plaque with the following texts inscribed.

We hereby present <u>(Recipient of the Award)</u> with this award for the <u>(Name of the Project)</u> in recognition for its outstanding achievement in the operation and management of highway in Asia and Australasia.
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#### 2.4 Announcement of the Award

The Award shall be announced by the REAAA Secretariate and conferred at the REAAA General Meeting or the Council Meeting.

## 3. Application and Selection

#### 3.1 Qualification

- A. Applicant shall submit the document of a project it selects as supporting material for competing for the Award. The submitted project shall be primarily composed of smart highway operation and management system and must be completed within 4 years before the announcement for application for the Award.
- B. The Highway referred to herein is a major roadway with more than one lane of traffic in each direction designed for automobile operation in higher speed. It has barriers or wide median strips separating traffic travelling in opposite directions, and grade-separated intersections without roundabouts or traffic lights in the main route. Access to the highway is controlled by ramp.
- C. Project stakeholders including project owner, engineering consultant companies, main or subcontractors are eligible for being candidates of the Award.
- D. The candidate must be an Institutional Member of the REAAA.
- E. Organizations affiliated with the members of the Award Selection Committee shall not be eligible for being selected as candidates.

### 3.2 Application

- A. The applicant shall fill out the application form truthfully, completely, and accurately, with at least one recommendation letter from a current REAAA council member(s) and a consent letter from the project owner if the applicant is not the project owner.
- B. Application documents including the application form, associated support material, consent letter from the project owner, and recommendation letter from a current REAAA council member shall be sent together by mail or encrypted email to the address designated by the REAAA secretariat.
- C. Incomplete or invalid application shall not be eligible for being selected as a candidate and shall be precluded from the Award selection process.

### 3.3 Selection Process

Selection process for the Award is illustrated in Figure 1. The schedule to be met and tasks to be implemented are listed in Table 1.

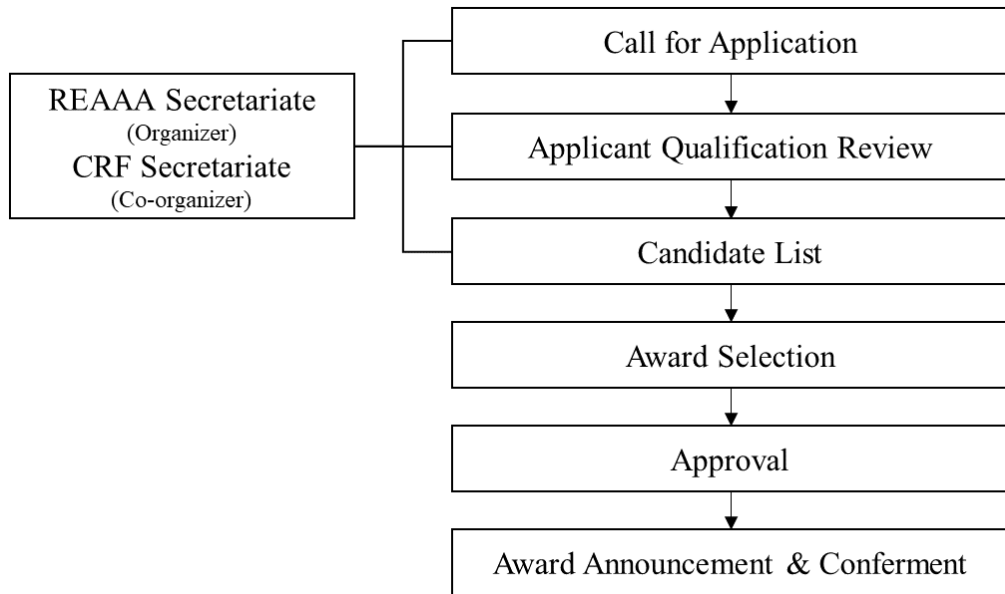


Figure 1. Selection Process

Table 1. Schedule for Selection of the Smart Highway Award

No	Task	Duration (month)	Starting Date
1	Calling for application	3	1 Mar 2024
2	Organizing application documentation	1	1 June 2024
3	Qualification review (by task team)	2	1 July 2024
4	Clarification for review comments (by applicants)	2	1 Sep 2024
5	Award selection (by Award Committee)	2	1 Nov 2024
6	Notify recipient of the Award	1	1 Jan 2025
7	Plaque preparation	1	1 Feb 2025

### 3.4 Candidates

A. The facilitator as specified in Clause 1.5 shall assist in organizing the application document and carry out qualification review for the REAAA Secretariat.

B. Qualified applicants shall be put into the candidate list for the

## Award Selection.

### 3.5 Award Selection

- A. Award selection shall be carried out by the Award Selection Committee (hereinafter referred to as the ASC) based on the criteria specified in Section 4 of the Guidelines.
- B. The Award shall be selected with the presence of more than half of the ASC members in the award selection meeting. The recipient of the Award shall be selected using the rank order method as specified in Clause 3.5.C.
- C. In compliance with the award selection criteria specified in Section 4, each of the ASC members shall rank the candidates from high to low in numerical order by consecutive natural numbers starting from one based on the total scores that each of the candidates makes. The sum of the rank orders for a candidate shall be calculated by adding up the rank orders this candidate receives from all the ASC members. The candidate with the lowest sum of rank orders shall be selected as the recipient of the Award.
- D. In case there are two or more than two candidates who finish with exactly the same lowest sum of rank orders, the selection process shall be implemented again by the ASC members that are present in the award selection meeting until one of these candidates can be selected as the recipient of the Award.
- E. In case any ASC member is not able to participate in the award selection meeting, she/he shall authorize a person as her/his representative to attend the meeting and carry out the voting when necessary.

### 3.6 Report

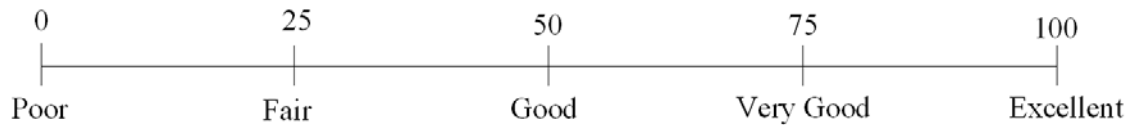
Results of the Award selection shall report to the Governing Council for approval.

#### **4. Award Selection Criteria**

The Award Selection Committee shall make the selection based on the following criteria:

- A. Being original or innovative application of Information and Communication Technology.
- B. Being newly developed or innovative technique, solution, service or business model.
- C. Being successful in the service, concept, or product it provided.
- D. Making contribution to society, economy, and sustainability.
- E. Being innovative for Big Data application.
- F. Being a system with high efficiency and reliability.
- G. Promoting the effectiveness for maintenance.
- H. Making contribution to the growth of emerging industries.
- I. Promoting safety and effectiveness for road operation.
- J. Promoting effectiveness for energy saving and carbon reduction

Each of the criteria shall be scored on a 1 to 100 scale. The sum of all scores in full marks is 1,000.



Fill up the score for each item on a 0 to 100 scale

Criteria (Score Scale)	Score		
	Candidate 1	Candidate 2	Candidate 3
A. Being original or innovative application of Information and Communication Technology (0-100)			
B. Being newly developed or innovative technique, solution, service or business model (0-100)			
C. Being successful in the service, concept, or product it provided (0-100)			
D. Making contribution to society, economy, and sustainability (0-100)			
E. Being innovative for the application of Big Data (0-100)			
F. Being a system with high efficiency and reliability (0-100)			
G. Promoting effectiveness for maintenance (0-100)			
H. Making contribution to the growth of emerging industries (0-100)			
I. Promoting safety and effectiveness for road operation (0-100)			
J. Promoting effectiveness for energy saving and carbon reduction (0-100)			
Total Score (0 - 1,000)			
Rank Order			
Suggestion:			
Signature:			

## **5. Others**

### **5.1 The Award Management Committee (AMC)**

The AMC shall be responsible for decision-making on fund management and award selection. The AMC is set up according to the resolution of the 119<sup>th</sup> REAAA Council Meeting. The CRF President shall hold the position of Chair and the Honorary Secretary-General of REAAA shall be the Vice Chair. Members of the Management Committee shall be appointed by the REAAA Governing Council after being recommended by the Chair of the Management Committee and approved by the Governing Council. Representatives of REAAA Council Members shall be invited to be Committee Members for sharing their experience on fund operation and management. A representative from CRF board of directors shall hold the position of the Secretary for the Committee.

### **5.2 The Award Selection Committee (ASC)**

The ASC shall be responsible for the award selection. In principle, term of office for the ASC shall not exceed 4 years. Members of the ASC shall be appointed by the AMC after being recommended by the Chair of the AMC and approved by at least half of the AMC Members. Basically, the total number of the ASC Members is seven. REAAA secretariat, supported by the CRF secretariat, shall be in charge of coordination and record-keeping in relation to the award selection.

### **5.3 Prize Money**

The amount of prize money (20,000 US dollars) will include handling fee and tax.

### **5.4 Cancellation of the Award**

Untruthful, incomplete, or inaccurate application information shall result in cancellation of the Award and return of cash prize and plaque.

### **5.5 Repetitive Conferment**

Same project can only be used for applying the Award once and is not allowed to be used by different applicants.

### **5.6 Other Details**

Other details not specified herein shall follow the Terms of Reference



for Smart Highway Award approved by the REAAA Governing Council or to be resolved by consulting with the AMC.

#### 5.7 Dispute and Resolution

Any dispute arose from the guideline and conferment of the Smart Highway Award shall be resolved by consulting with the AMC and the REAAA Governing Council.

5.8 CRF reserves its right to terminate or change the scope of the Award after the Award has been conferred 3 times.

5.9 Registration form will be released separately on REAAA website.