



# *ESTABLISHMENT OF NIGERIA ROAD ASSESSMENT PROGRAM.*



*n* RAP

Dr Boboye Oyeyemi MFR, mni, NPoM  
Corps Marshal

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# INTRODUCTION

Every year, about 1,350,000 people die in road crashes worldwide; 36,000,000 or more are injured or disabled.

Crash costs are typically 2 to 5% of national GDP each year, impacting every country on earth especially developing countries, where 9 out of 10 road deaths occur.



# INTRODUCTION (Cont'd)

As challenging as the problem is, the task of road safety is achievable if the requisite research, technology and expertise are adequately harnessed.

A purposeful enhancement of the existing road safety engineering practice will certainly create safe road infrastructure for all road users and in turn, reduce road deaths and injuries.

The United Nations had earlier aligned road safety to the quest for global development through the identification of some road safety related goals in the Sustainable Development Goals (3.6) and setting to halve the number of global deaths and injuries from Road Traffic Crashes (RTCs) by 2030.

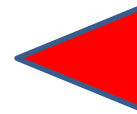
# GLOBAL BENCHMARK (Cont'd)

Also, on 2 Aug 2020, the United Nations General Assembly (UNGA) proclaimed the second Decade of Action on Road Safety 2021-2030. adopting a roll-over of the UN Decade of Action on Road Safety 2011-2020.

The UN Decade of Action is anchored on five (5) Pillars:

Pillar 1: Road Safety Management

**Pillar 2: Safer Roads and Mobility**



Pillar 3: Safer Vehicles

Pillar 4: Safer Road Users

Pillar 5: Post Crash Response

# GLOBAL BENCHMARK (Cont'd)


Global Road Safety Performance Targets were drawn from **Pillar 2** of the UN Decade of Action to capture the objective and achievable targets for all new roads to be built to a 3-star or better standard for all road users (Target 3), while more than 75% of travels is expected to be on the equivalent of 3-star or better roads for all road users by 2030 (Target 4).



TARGET **3**  
2030

Three green stars and a circular road diagram with four arrows pointing outwards.

**Target 3:** By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



TARGET **4**  
2030

A circular progress indicator showing 75% completion, with a green checkmark and a road winding through a landscape.

**Target 4:** By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.

# UN ROAD SAFETY COLLABORATION TEN-STEP-PLAN

In Feb. 2020, the Project Group of "Safer Roads and Mobility" of the United Nations Road Safety Collaboration (UNRSC) developed Ten-Step Plan for Safer Roads Infrastructure which include the following:

TEN STEP PLAN FOR SAFER ROAD INFRASTRUCTURE	
UNRSTF Priority 1: Gap Analysis	
Step 1	National Safer Road Infrastructure Workshop
Step 2	Road Infrastructure Management Organisational Mapping
Step 3	Review of Current National and State Operational Policies, Standards, Guidelines and Financing Arrangements
Step 4	Develop National Safer Road Infrastructure Strategies and supporting Action Plans



TEN STEP PLAN FOR SAFER ROAD INFRASTRUCTURE	
UNRSTF Priority 2: National Standards & Training	
Step 5	Development of National Road Design Standards in accordance with the UN Global Road Safety Performance Targets
Step 6	Development of National Training, Accreditation and Certification Standards and Institutional Capacity
UNRSTF Priority 3: Infrastructure Safety Management	
Step 7	Establish and/or enhance a National Road Assessment Programme (e.g. BrazilRAP, ChinaRAP, IndiaRAP, ThaiRAP, SARAP – South Africa)
Step 8	Immediate Road Design Assessments and Road Safety Audits that elevate the safety for all road users to a 3-star or better standard in support of UN Target 3
Step 9	Strengthen National Capacity for Infrastructure Road Safety Construction Quality, Data Management, Performance Tracking, Monitoring and evaluation
Step 10	Establish an effective communications programme that celebrates safer roads



# INTERNATIONAL ROAD ASSESSMENT PROGRAMME (iRAP)

Road Assessment Programme (RAP) is a deliberate effort by concerned authorities to reduce road traffic casualties by improving the safety of road infrastructure.

RAP measures focus on improvement of the roads for vulnerable road users such as pedestrians, two and three wheeler vehicles, etc.

iRAP came into being in 2006 as an umbrella body to already existing regional Road Assessment Programmes in Europe, America and Australia.

iRAP is therefore, the global body with its component / affiliate bodies like AusRAP, EuroRAP and USRAP.



iRAP measures the level of safety of roads using a methodology referred to as

## Star Rating



# INTERNATIONAL ROAD ASSESSMENT PROGRAMME (iRAP)



iRAP's Star Rating Methodology provides a simple and objective measure of the level of safety which is 'built-in' to the road for vehicle occupants, motorcyclists, bicyclists and pedestrians. A 1-star road is the least safe and a 5-star road is the safest. iRAP work on a global scale and are moving to save lives through 3-star or better road infrastructure for all road users

Targets 3 and 4 as related to the SDGs on Road Safety are very much in tandem with the Ten-Step Plan. To achieve the above targets, relevant road authorities need to work together, partner and collaborate with organizations involved in making the roads safe at local and international levels.

# Establishing the Nigerian RAP

Locally owned and coordinated, self-sustaining national and regional RAPs are encouraged to maximise collaboration and coordination, strategic infrastructure investment, 3-star or better policy setting, and importantly, safer road upgrades to save lives. Nigeria being a member country of the UN needs to have her own Road Assessment Program that is based on global best practices hence, the need to collaborate with iRAP to achieve this objective.

Upon the creation of the nRAP, Nigeria will become an affiliate of the African Regional body when it is eventually established.

The purpose of this meeting therefore is to secure the buy-in of stakeholders for program leadership, coordination, upgrade management leadership and communication to establish Nigeria Road Assessment Program (nRAP).

# PURPOSE OF THE STAKEHOLDERS MEETING

nRAP will comprise stakeholders from various road development agencies and policy organs such as Federal Road Safety Corps (FRSC), Federal Ministry of Works and Housing (FMoW&H), Federal Roads Maintenance Agency (FERMA), Roads Sector Development Teams (RSDT), Nigeria Building and Road Research Institute (NBRRI), Nigerian Institution of Highways and Transportation Engineers (NIHTE), Road construction Consultants, state ministries of works and transport as well as the works and transport departments at local government level.

# SCOPE OF WORK (3 PHASES)

## PHASE 1 - TRAINING AND CAPACITY BUILDING

Build local capacity by undertaking Training and Accreditation on the iRAP protocols for up to 30 participants.



This will enable road development agencies and their key technical stakeholders in Nigeria be fully equipped to undertake road safety assessments in Nigeria for the purpose of continuous improvement of Nigerian roads in the long term.

# SCOPE OF WORK (3 PHASES)

## PHASE 1 - TRAINING AND CAPACITY BUILDING

- The proposed training and capacity building in phase 1 will include access to online iRAP webinars and Star Ratings Essentials webinar classes, plus three live training workshops online.
- Participants in this training will be encouraged to apply for accreditation by iRAP thus, ensuring the availability of qualified personnel to take on future nRAP.



## SCOPE OF WORK (3 PHASES)- cont'd

The scope of works in Phases 2 and 3 will be agreed upon at the completion of Phase 1.

### PHASE 2 - ASSESSMENT OF 1,529KM ROAD NETWORK

A total length of 1,529km of roads will be assessed in this phase. FRSC has already identified these roads which happen to be the World Bank Safe Corridor roads. The details of the roads schedule are shown below:

ROADS	APPROX. LENGTH	CARRIAGEWAY TYPE	REMARK
Abuja - Kaduna - Kano	401	Dual Carriageway	
Abuja Metropolis	162	Dual carriageway	
Benin - Ifo - Akure - Ilesha	281	Single Carriageway	
Enugu - Abakali - Mfumu	286	Single Carriageway	
Suleja - Lambata - Bida - Mokwa	126	Dual Carriageway	
Tsamiya - Bauchi - Gombe - Biu	273	Single Carriageway	
TOTAL LENGTH	1,529		



# SCOPE OF WORK (3 PHASES) -cont'd

On the selected roads, the following core activities will be carried out:

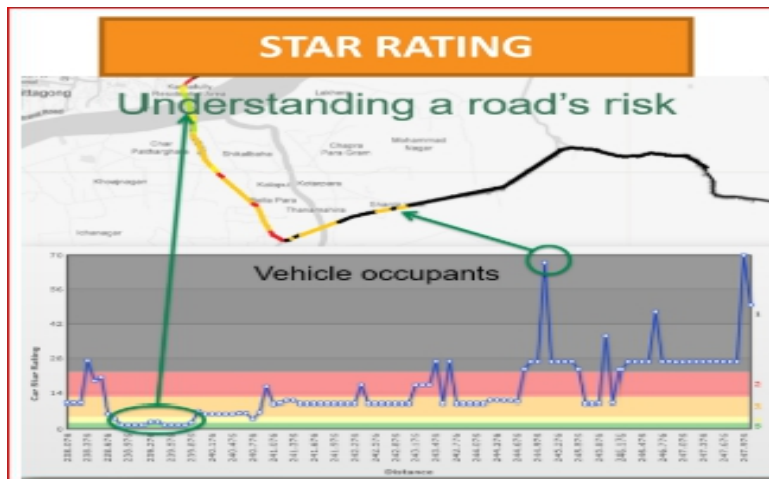
- **Road survey:** surveys of the selected road corridors to record video images and GPS data in accordance with specifications will be done.
- **Road attribute coding:** iRAP will use the road survey data to complete the road attribute coding for the roads defined in the schedule. At least 50 road attributes for each 100 - metre segment of the road will be carried out.



- **Collection of supporting data:** iRAP will work with nRAP to collect, collate and utilise existing supporting data such as traffic volumes, operating speeds, crash data and treatment costs if available in line with data Analysis and Reporting Specification.

# SCOPE OF WORK (3 PHASES)-cont'd

- **Star Rating and Safer Roads Investment Plans (SRIP):** iRAP will perform analyses and prepare reports defined in the Schedule of Roads as specified in the Star Ratings and Investment Plans as well as provide relevant on the job training in SRIP preparation for the selected staff. A draft technical report will be submitted to FRSC. Comments will be received from stakeholders on the draft report and iRAP will prepare a final technical report and training on how to use the results to support policy, planning, design and implementation



- **Star Rating for Designs:** available design documents will be used to undertake an nRAP assessment of the proposed designs for sections of road corridors currently under design, generate Star Ratings and Safer Roads Investment Plan to allow further road safety countermeasures to be considered within final designs.

- **Quality Assurance:** nRAP will undertake quality reviews of the road survey, road attribute coding, supporting data, upload file, Star Rating and Safer Roads Investment and provide relevant on the job training on quality assurance process to the staff.

- **Training Programme:** iRAP will ensure that on the job training is provided for the key staff nominated by the stakeholders to take on the roles in nRAP for each stage of the project listed above.

- **Implementation support:** nRAP will provide technical assistance, support and advice on how to use the results obtained in this project to support policy, planning, design and implementation of road safety upgrades across the network. nRAP will be available to help answer on-going queries and efforts to include project outcomes into existing and future government plans and policies.

# SCOPE OF WORK (3 PHASES)-cont'd

## PHASE 3 - NigeriaRAP

In this phase 3 element, iRAP will provide information to help Nigeria complete the setting up and international recognition of nRAP. It will provide support to set up initial meetings and establish a steering group as well as signing of any MOUs and License Agreements, implementation support, Star Rating for Designs, technical advice, setting up a routine national assessment procedure and enhanced communications.





## Programme Lead:

- The Programme Lead is **FRSC** and will be expected to provide leadership, governance and coordinate the national programme.
- The programme leader will commit to promoting the vision of iRAP for a world free of high-risk roads and ensuring national activity is undertaken to iRAP standard. FRSC will convene Steering Committees or equivalent to ensure all key policy, funding, technical, implementation and communication activities are well coordinated nationally and benefit from the experience of other countries around the world. Issues related to partner engagement, policy setting, outcome measurement and global coordination are typically managed by the programme lead- leadership.

**Technical Governance Lead:** The organizations (FRSC and NBRRI) will build the in-depth knowledge and expertise on the iRAP protocols, research, evidence-base, models and software. Technical Working Groups will be convened to ensure that knowledge is shared across all stakeholders, and local research and expertise can contribute to the global network of technical experts. Issues related to before and after monitoring, model improvements, training and quality assurance are typically managed by the Technical Governance Lead.

## ROLES OF STAKEHOLDERS (cont...)

**Road Upgrade Management Lead:** A life is not saved until a road is upgraded and the star rating is improved. The Road Upgrade Management Lead will be FMW&H and FERMA. The FMW&H will secure and manage the investment needed to implement the infrastructure upgrades and speed management initiatives that will maximize lives saved across the network.

They will ensure the right level of funding is allocated to road projects that improve safety, that existing projects meet relevant star rating targets that project designs meet expectations, and construction quality is monitored.

They will convene and or integrate iRAP inputs into Financing and Project Level Working Groups to facilitate safer road upgrades. Issues related to design standards, industry training and quality assurance are typically managed by the Road Upgrade Management Lead.

**Stakeholder Communications Lead:** Celebrating success is a key element of every iRAP programme. The risk maps and star ratings provide readily accessible, transparent and globally recognized standards that can support a positive communications plan. This may involve identifying the need for investment at the political and public level and sharing the results of that investment.

Communication may occur at the national level linked to policy targets and network performance all the way through to an individual project where a Minister, Road Authority, design team and automobile club representative may 'ribbon-cut' a new 3,4 or 5-star road.

They will convene a Communications Working Group as needed to ensure all stakeholders are well informed of planned activity and the needs of all partners are met.

Issues related to brand management (in accordance with iRAP guidelines), media and community relations, and partner communications are typically managed by the Stakeholder Communications Lead.



## CONCLUSION

Nigeria being a member of the UN and having acceded to six Conventions and Agreements of Road safety should be committed towards achieving the twelve global performance targets of the SDGs agreed by the United Nations member countries. Prominent among these targets are 3 and 4. One of the steps required is to develop a locally owned RAP in the country.

## CONCLUSION (Cont'd)

We can achieve this by being guided and trained by any of the countries that have adopted iRAP for many years with tangible and intangible results.

Commitment and support is required from all stakeholders for the iRAP initiative so that we may have a seamless establishment of nRAP in our country.

# THANK YOU

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0700 - CALL - FRSC  
0700 - 2255 - 3772**

**080 7769 0362**