

Establishing a National RAP, Training and Enhancing Institutional Capacity

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International Road Assessment Program (iRAP)

National Workshop for Safer Road Infrastructure

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International Road Federation
Fédération Routière Internationale
Federación Internacional de Carreteras





**DECADE
OF
ACTION**

Overview

- **The Tanzania 10-Step Plan**
- Establishing TanRAP
 - Examples of RAPs
 - Priority roads for assessment
 - Discussion questions
- Training and Accreditation
 - iRAP training and accreditation
 - Road Safety Audit training
 - Road safety engineering training
 - Discussion questions
- Evaluation

The TANZANIA ten-Step Plan

- **100% Local ownership: For Tanzanians, By Tanzanians**
- **Led by local experts. Internationals are there to share their knowledge & Expertise**
- **CoE through a research organization to allow for innovation and enhancement of models. Support from International CoEs and iRAP Community**
- **Training and capacity Building at the core of the project implementation phase ensuring Target 3 and 4 achieved**
- **Accreditation system for professionalism and Quality Assurance**
- **Establishment of a self governing TANRAP to ensure effective coordination, continuous improvement and long term sustainability**
- **Embedding Road Safety in learning institutions and Road Development Agencies making this the norm for all road projects – Sustainability / Targets for Safe Road Infrastructure**
- **Improving Standards and Guidelines for Effective Road Safety Engineering**



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Why a Tanzania RAP program

- A RAP is a collaboration of infrastructure safety partners
- Objective: Create safe roads (in line with UN Targets 3 and 4 -or local equivalents)
- Purpose is to support:
 - Coordination between road infrastructure safety partners
 - Development of capability to perform RAP assessments
 - Implementation of RAP assessments on existing roads, road designs and improved roads
 - Planning, financing and implementation of infrastructure safety improvements
 - Research and development
 - Constructive communications to promote safe road infrastructure and celebrate success

General RAP Ecosystem

Flexible to suit each country's context

- ✓ Set policy (eg roads achieve 3-stars + by 2030)
- ✓ Update specs/standards to achieve targets
- ✓ Set star rating targets for all projects
- ✓ Use RAP data to support policy, standards and projects
- ✓ Perform special assessments
- ✓ Key staff take training and get accredited

- ✓ Complete RAP technical training and accreditation
 - ✓ Respond to tenders / calls for proposals
 - ✓ Perform RAP assessments

- ✓ Host RAP Steering Committee
- ✓ Playing a lead in coordination between partners
- ✓ Organise meetings, working groups and events

- ✓ Specification of star rating targets in projects
 - ✓ Support for capacity building
 - ✓ Financing demonstration projects and upgrades

- ✓ Certification training courses for Continuing Professional Development (CPD) credits
 - ✓ Member outreach
- ✓ Collaboration on safety initiatives



- ✓ RAP Centre of Excellence (CoE)
- ✓ RAP technical and management training
- ✓ RAP accreditation
- ✓ Quality assurance reviews of assessments
- ✓ Education (undergraduate and post-grad)
- ✓ Research (eg local crash factors)

- ✓ Grant national license to RAP coordinating organisation
- ✓ Knowledge and technical support for RAP Steering Comm
- ✓ Capacity building to support RAP CoE
- ✓ Technical assistance in delivery of projects
- ✓ Linkages with international RAP partners



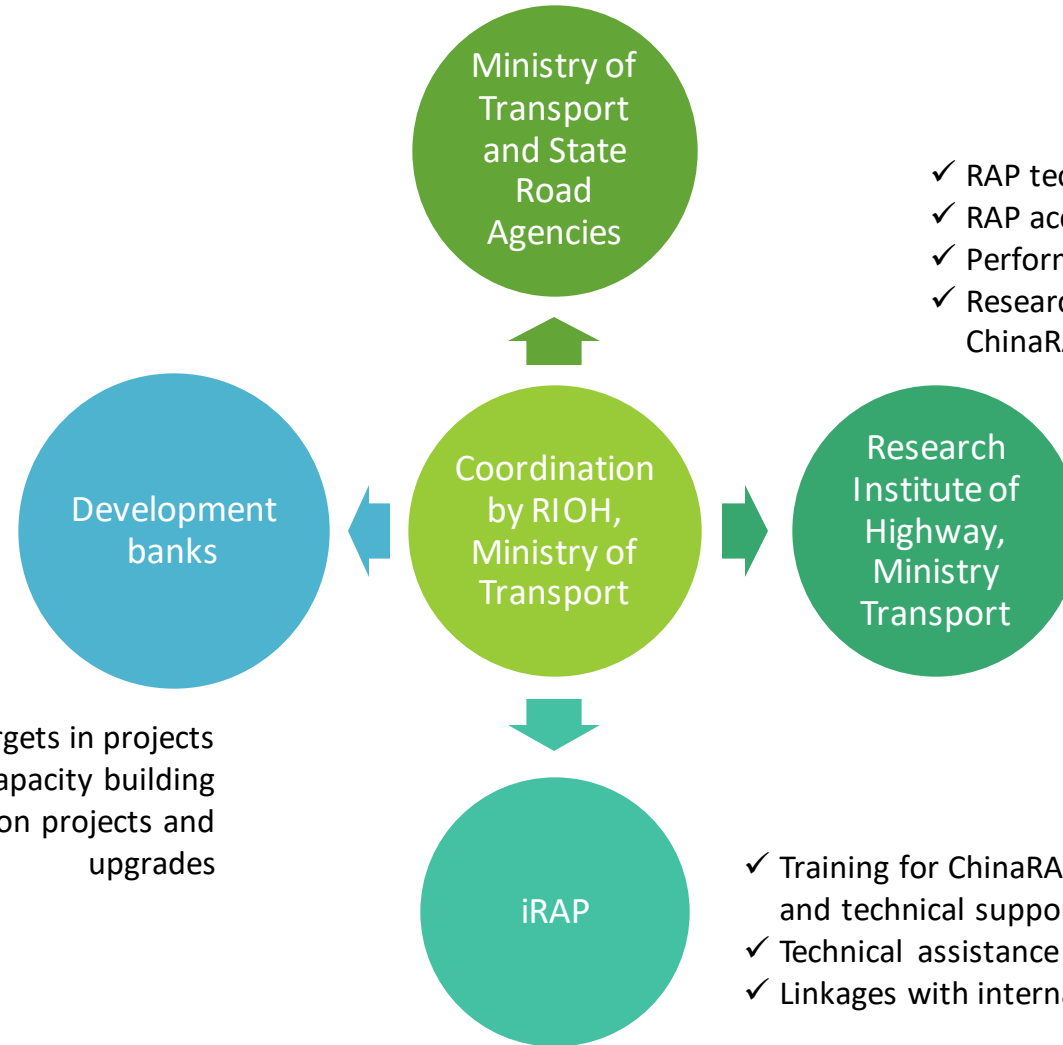
In collaboration with:



- ✓ Established Highway Safety to Cherish Life national program
- ✓ Specified that ChinaRAP is an official method for risk assessments
- ✓ Update road standards to achieve safer outcomes
- ✓ Assess roads and implement safety countermeasures

- 250,000km star rated
- 100,000km upgraded
- US\$5+ billion invested in safety
- 2,000 people trained

- ✓ Specification of star rating targets in projects
 - ✓ Support for capacity building
 - ✓ Financing demonstration projects and upgrades



- ✓ RAP technical and management training
- ✓ RAP accreditation
- ✓ Perform RAP assessments
- ✓ Research (eg local crash factors for local ChinaRAP model)

- ✓ Training for ChinaRAP team and knowledge and technical support
- ✓ Technical assistance in delivery of projects
- ✓ Linkages with international RAP partners

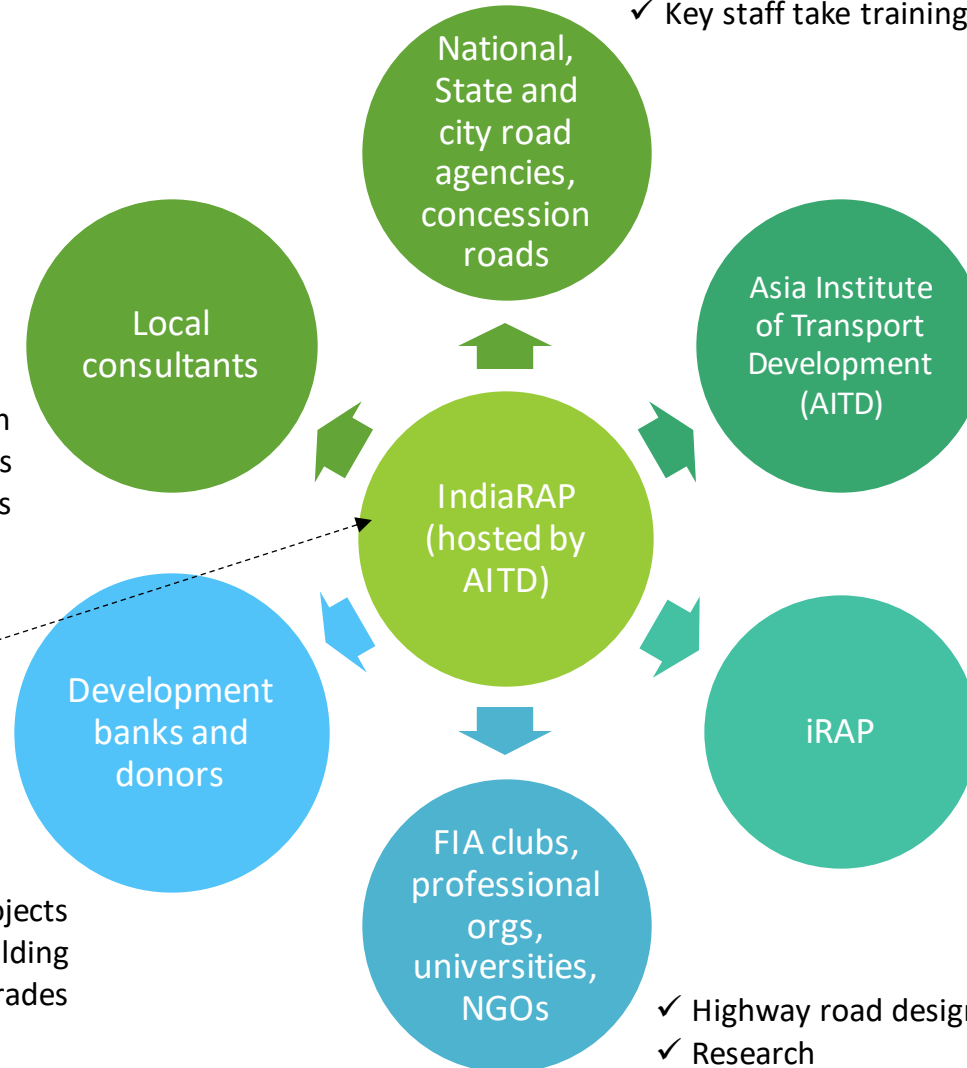
- 21,000km star rated
- 3,000km upgraded
- 3,700 people trained
- \$5.5 bn of investment made safer

- ✓ Perform IndiaRAP assessments
- ✓ Set star rating targets for projects
- ✓ Implementation of safe demonstration corridors and safety countermeasures
- ✓ Key staff take training

- ✓ Complete RAP technical training and accreditation
 - ✓ Respond to tenders / calls for proposals
 - ✓ Perform IndiaRAP assessments

- ✓ Playing a lead in coordination between partners
- ✓ Organises meetings, working groups and events

- ✓ Specification of star rating targets in projects
 - ✓ Support for capacity building
- ✓ Financing demonstration projects and upgrades



- ✓ Provide IndiaRAP technical and management training
- ✓ IndiaRAP accreditation
- ✓ Performing IndiaRAP assessments
- ✓ Quality assurance reviews of IndiaRAP assessments by consultants

- ✓ Grant national license to AITD
- ✓ Training and knowledge and technical support AITD
- ✓ Technical assistance in delivery of AITD projects
- ✓ Linkages with international RAP partners

- ✓ Highway road design standards
- ✓ Research
- ✓ Collaboration on safety initiatives



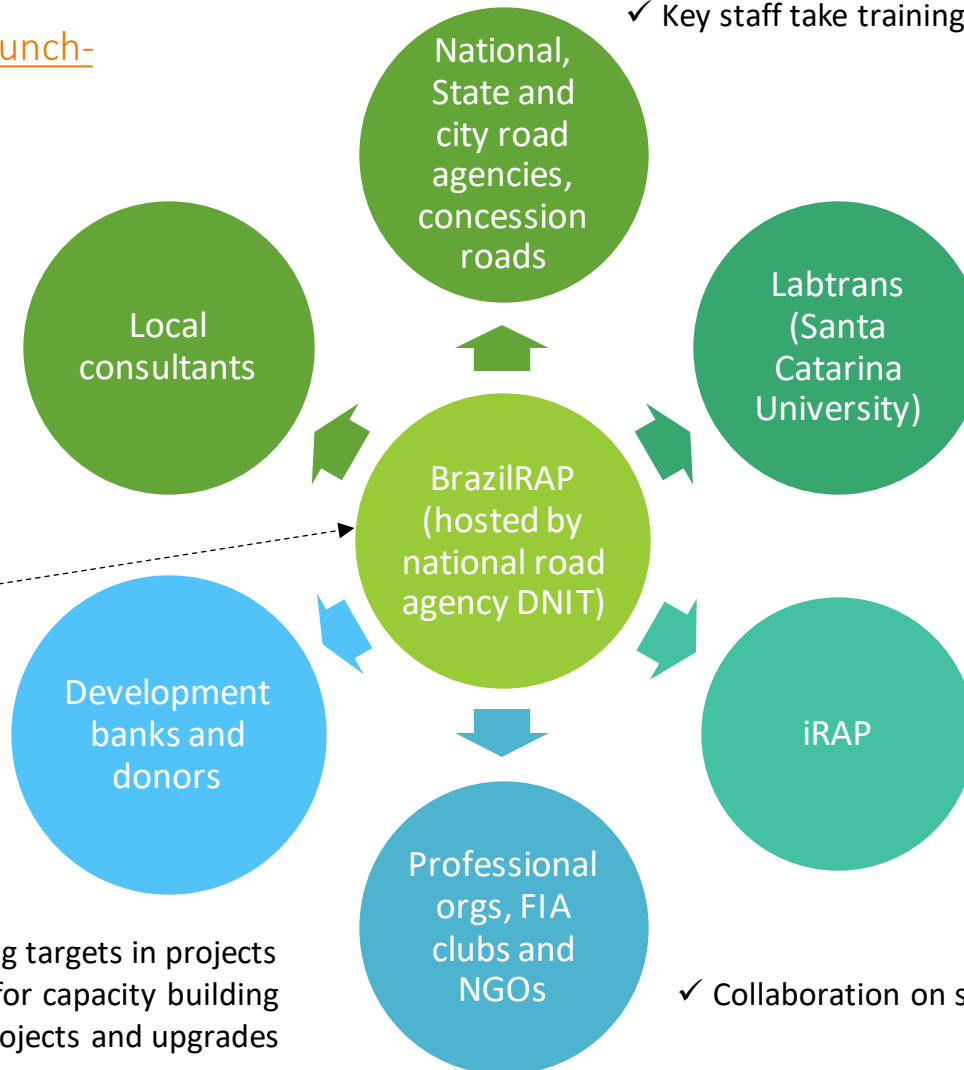
<https://www.irap.org/2019/11/dnit-and-irap-launch-brazilrap-programme-to-address-road-safety/>

- 31,000km star rated
- 1,500 people trained
- \$6.5 bn of investment made safer

- ✓ Complete RAP technical training and accreditation
- ✓ Respond to tenders / calls for proposals
- ✓ Perform BrazilRAP assessments

- ✓ Playing a lead in coordination between partners
- ✓ Organises meetings, working groups and events

- ✓ Specification of star rating targets in projects
- ✓ Support for capacity building
- ✓ Financing demonstration projects and upgrades



- ✓ Perform BrazilRAP assessments
- ✓ Set star rating targets for projects
- ✓ Implementation of safe demonstration corridors and safety countermeasures
- ✓ Key staff take training and accreditation

- ✓ BrazilRAP CoE
- ✓ Provide BrazilRAP technical and management training
- ✓ Quality assurance reviews of BrazilRAP assessments by consultants
- ✓ Research

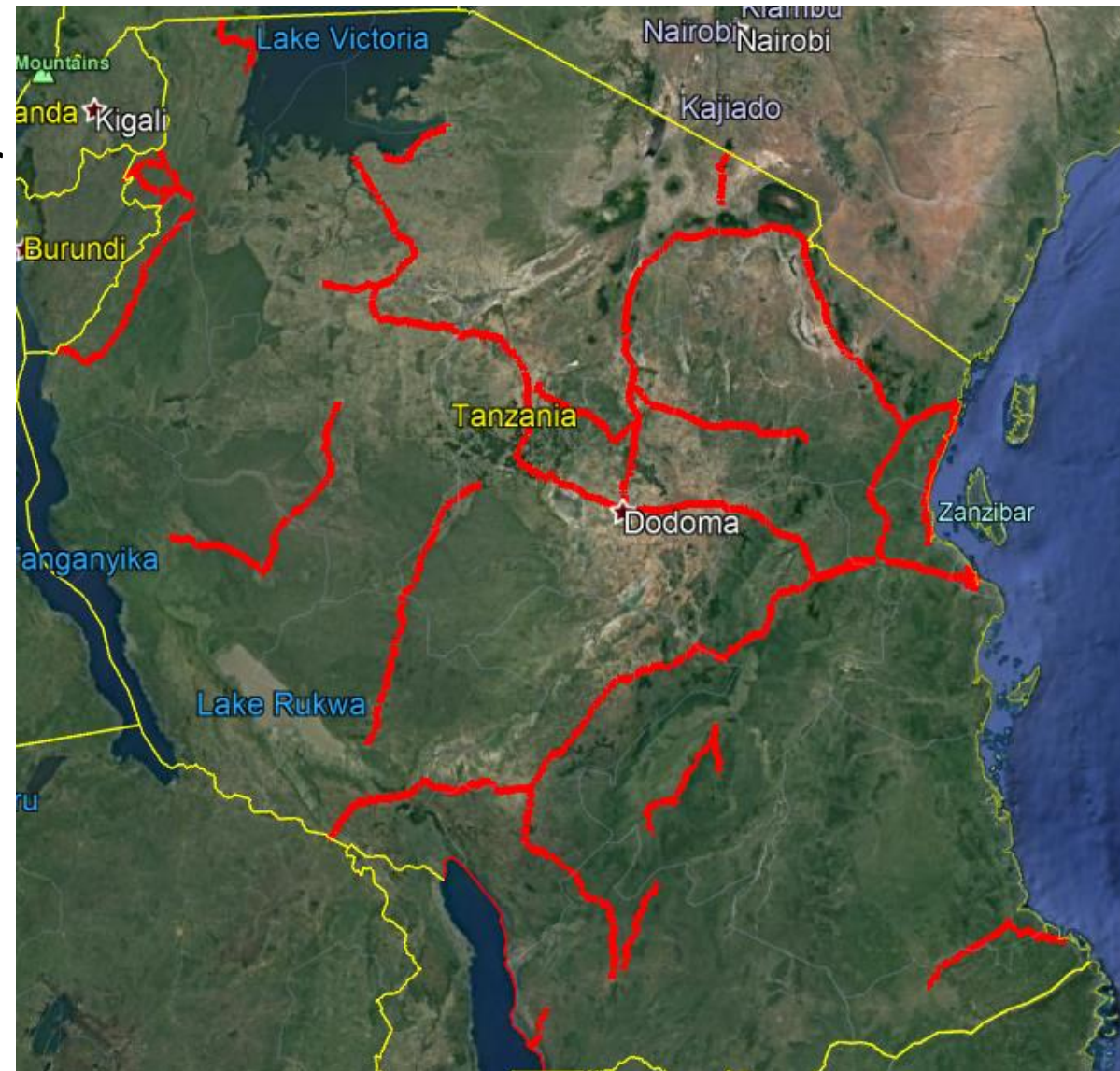
- ✓ Grant national license to DNIT
- ✓ Training and knowledge and technical support partners
- ✓ Technical assistance in delivery projects
- ✓ Linkages with international RAP partners

- ✓ Collaboration on safety initiatives

Priority roads

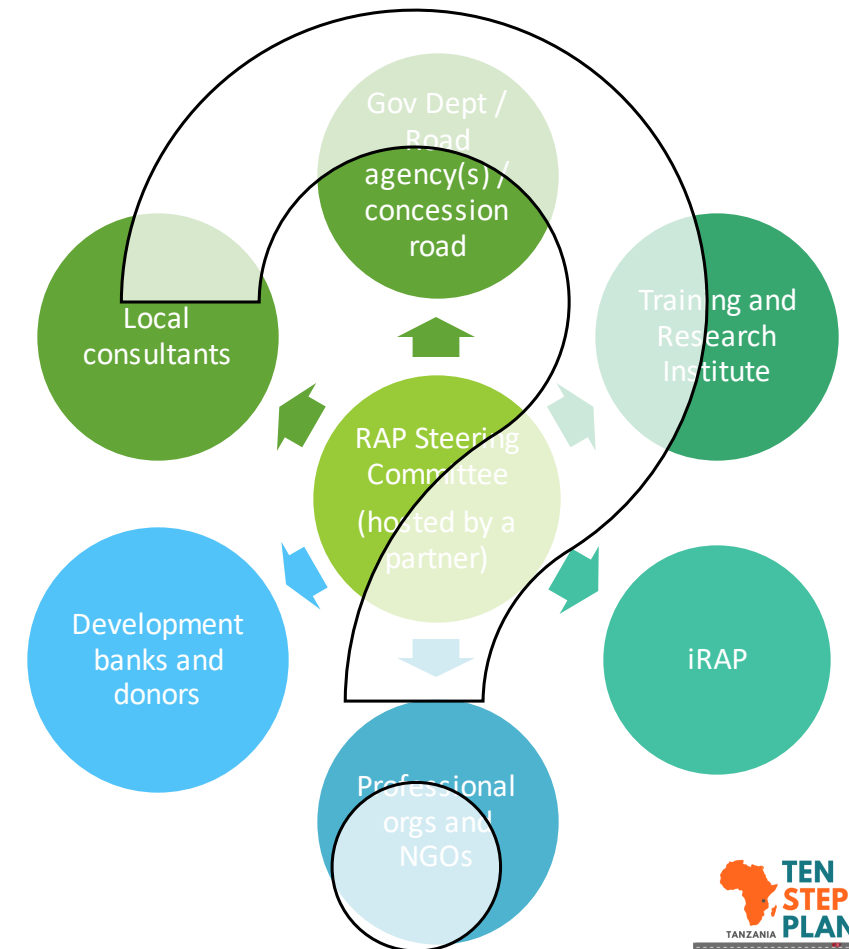
- Roads identified by the World Bank for assessment:
 - i. Lusahunga – Rusumo;
 - ii. Mtwara – Mingoyo – Masasi;
 - iii. Njombe – Songea; and
 - iv. Iringa – Msembe (Goes to Ruaha National Park).
 - v. Korongwe – Same; and
 - vi. Arusha – Minjingu

- Any others that should be assessed as part of the 10 steps project?
 - i. Development funds already identified
 - ii. Designs available for SR4D to improve further
 - iii. Planned projects for next FY Budget



TanzaniaRAP – discussion questions

- Which structure would work best for Tanzania? China, India or Brazil? Or something different?
- Which organisations should be involved and what role could they play?
- What would the immediate priorities be for the establishment of TanzaniaRAP and the anticipated timelines for the TanRAP?
- What are the development road projects that should be assessed now?





**BUILDING CAPACITY,
EMPOWERING PROFESSIONALS**



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Road Safety Infrastructure Management Tools/Methods

	New Roads	Existing Roads
Proactive approaches	<ul style="list-style-type: none"> Road Safety Impact Assessment Road Safety Audit Star Rating (iRAP) – New Roads & Schemes 	<ul style="list-style-type: none"> Maintenance Inspections Star Rating (iRAP) – Existing Roads Road Safety Inspection
Reactive approaches		<ul style="list-style-type: none"> Blackspot Analysis and Treatment Route/Corridor Analysis and Treatment Network/Area Analysis and Treatment Road Safety Assessment

iRAP Training and Accreditation Pathway

Training courses are delivered face-to-face or online. To be eligible for accreditation, the course should be delivered by an approved trainer / training organisation.



Accredited practitioners (and their company) are published on the iRAP website, able to promote their status using the iRAP Accredited logo and undertake projects. Practitioners also benefit from being a part of the iRAP accreditation community.



iRAP Accreditation attracts Annual renewals based on an assessment of performance and compliance with Code of Conduct and client feedback. Additional training and testing may be necessary to keep up with updates.



iRAP Interim accreditation may be awarded upon successful completion of training and testing and agreement to the iRAP Code of Conduct. Accreditation is awarded to individuals. Companies nominate a lead accredited practitioner.

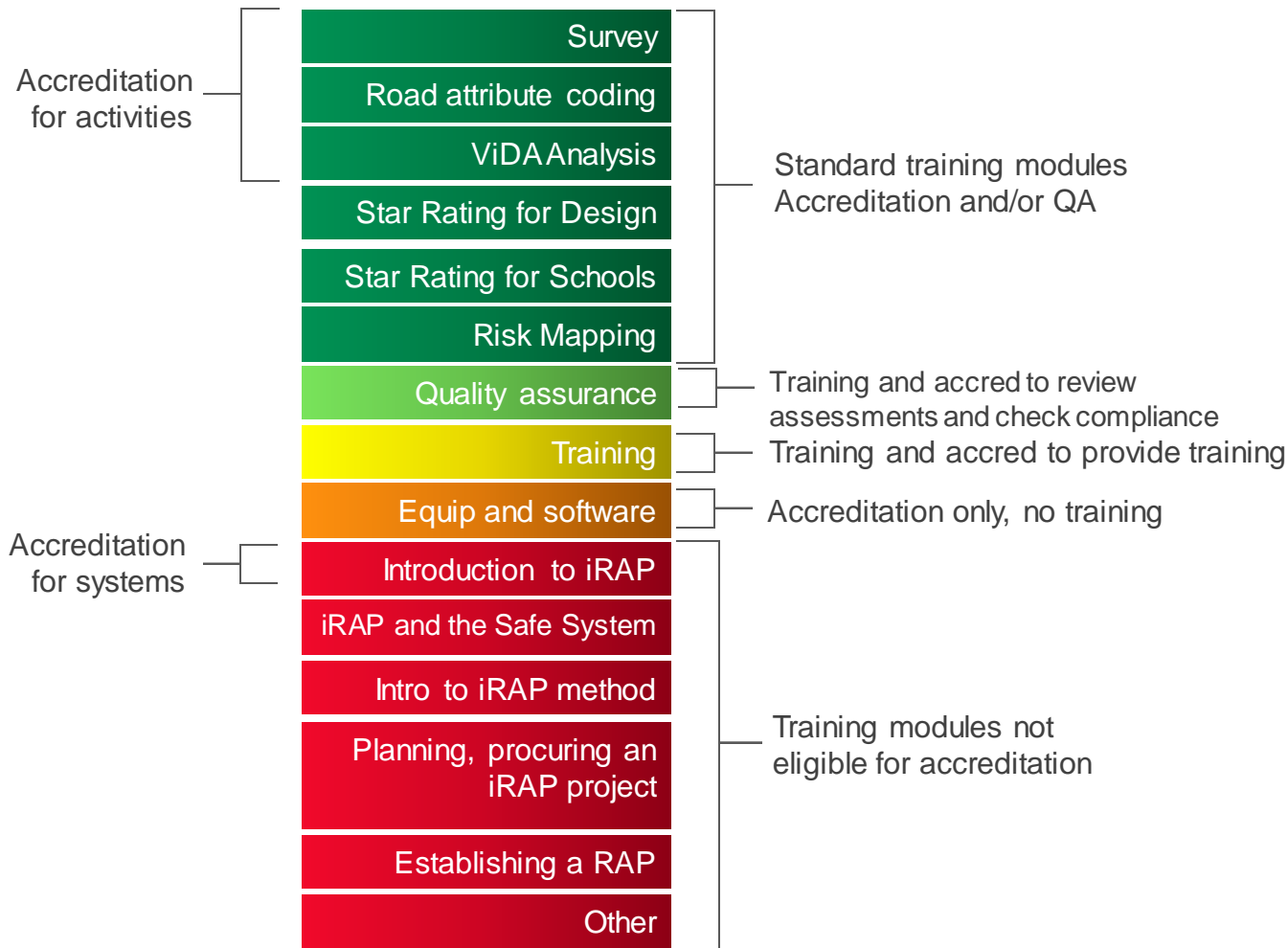


After 1 year, full iRAP accreditation may be awarded based on an assessment of performance, compliance with Code of Conduct, and client feedback.



Train-the-trainer to support long term sustainability

TanRAP training and accreditation



- Technical:
 - How to perform Star Rating and Investment Plan assessments
 - How to perform crash rate risk-mapping
 - Accreditation for:
 - Inspection systems
 - Individuals: Survey, Coding and Analysis and Reporting
- Management:
 - Establishing TanRAP
 - Planning RAP projects
 - Making use of RAP data in planning
 - Setting performance targets
- Practical experience
 - Leading RAP Assessment projects
 - Performing RAP assessments of existing roads and designs

Road Safety Auditors Training

RSAs are only as good as the Auditors themselves. Therefore it is necessary to ensure that Auditors have the necessary skills and experience.

Aim: provide participants with practical information on how to conduct a road safety audit.

Audience: to qualify for the course, candidates need to be experienced in not only RSA but also in the investigation of road traffic crashes and road safety engineering measures (normally a minimum of 5 years of experience is required)

Format: a wide range of lectures, workshops and an intensive practical hands-on training delivered by experts of international reputation.

Upon completion of the course, participants will be able to:

- Review the Road Safety Situation in their Respective Countries;
- Discuss Road Safety Audit (RSA) Concepts;
- Identify and Explain Steps for Conducting RSA;
- Perform RSA as a Member of a Team;
- Explain the Way Forward in Addressing RSA Related Issues in their Areas of Jurisdiction

Road Safety Engineering Training

Despite the niche role a Road Safety Engineer holds, there has been a lack of any specific formal qualification which the practitioner can undertake to demonstrate his/her experience and knowledge.

Aim: provide comprehensive guidance on how ensure road development projects prioritise safety for all road users and provide a robust introduction to the fundamental principles of good road safety engineering and auditing based on a Safe System Approach.

Audience: Road engineers, designers and planners.

Topics: Road Safety Engineering Basic Principles, Collision Data; Analysis and Scheme Identification; Risk Assessment; Highway design and Traffic Engineering; Speed Management; Economics and Funding; Monitoring & Evaluation;

Consideration of including this in university degrees

Establishing a national training and accreditation scheme – discussion questions

- What are the ongoing training needs - Who needs to take training?
- What organisation is best placed to be the lead trainer and accreditation manager?
- How could accreditation work for TanRAP, RSA and Road Safety Engineering?
- Can road infrastructure safety be included in university undergraduate degrees?





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Evaluation Framework

Primary research questions:

1. How effective is the Ten Steps project in building road safety knowledge and skills of people involved in the delivery of World Bank projects in Tanzania?
2. Does the Ten Steps project lead to more effective embedding of safety in World Bank projects thereby improving the safety performance of those projects in Tanzania?

Evaluation components:

- Basic check of delivery of activities
- Knowledge and perceptions evaluation
- Road project evaluation
- Adequacy of Institutional arrangements
- level of investment in road infrastructure safety

Data Sources:

- Questionnaires
- Tracking Surveys
- Course tests and evaluations
- In-depth interviews
- RAP assessment results
- RSA outcomes
- Crash data

ASANTE KWA MUDA WAKO

Natarajia kufanya kazi nanyi nyote

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