

# Activities of ITS Arab in the Middle East & North Africa








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**Zeina Nazer – Secretary General**

# ITS-Arab Introduction

-  Not-for-Profit (Public/Private) Association
-  Endorsed by the Arab League and the GCC
-  Board of Directors consist of a representative from each country
-  Managed by the Executive Committee
-  Funded primarily through Membership Subscriptions, Services and Sponsors.

# ITS Organizations Worldwide



# ITS Vision – What do we want to achieve?

- 🌿 Major reduction in road collisions
- 🌿 Increase effective road capacity
- 🌿 Improve travel time (empowering the public)
- 🌿 Improve public transport safety and efficiency
- 🌿 Help achieve reduction of vehicle emissions



# Safety Drivers – Key facts



## The potential for progress

Road traffic injuries can be prevented. A number of countries, mainly high-income countries, have made significant progress over the last few decades in reducing their road traffic death rates. But more can be done to reduce these rates further.

## Now is the time to act

Road traffic injuries are predicted to become the fifth leading cause of death by 2030, resulting in 2.4 million deaths a year. This projected ranking would be the result of an increase in road traffic deaths and reductions in deaths due to other health conditions.

# Who is Driving the ITS Vision

## Public Sector Policies

- Safety & Security
- Congestion, Sustainability & Environment
- e-Government (Operational Efficiency)

## Private Sector Competition & Profits

- Technology development/trend
- Operational efficiency

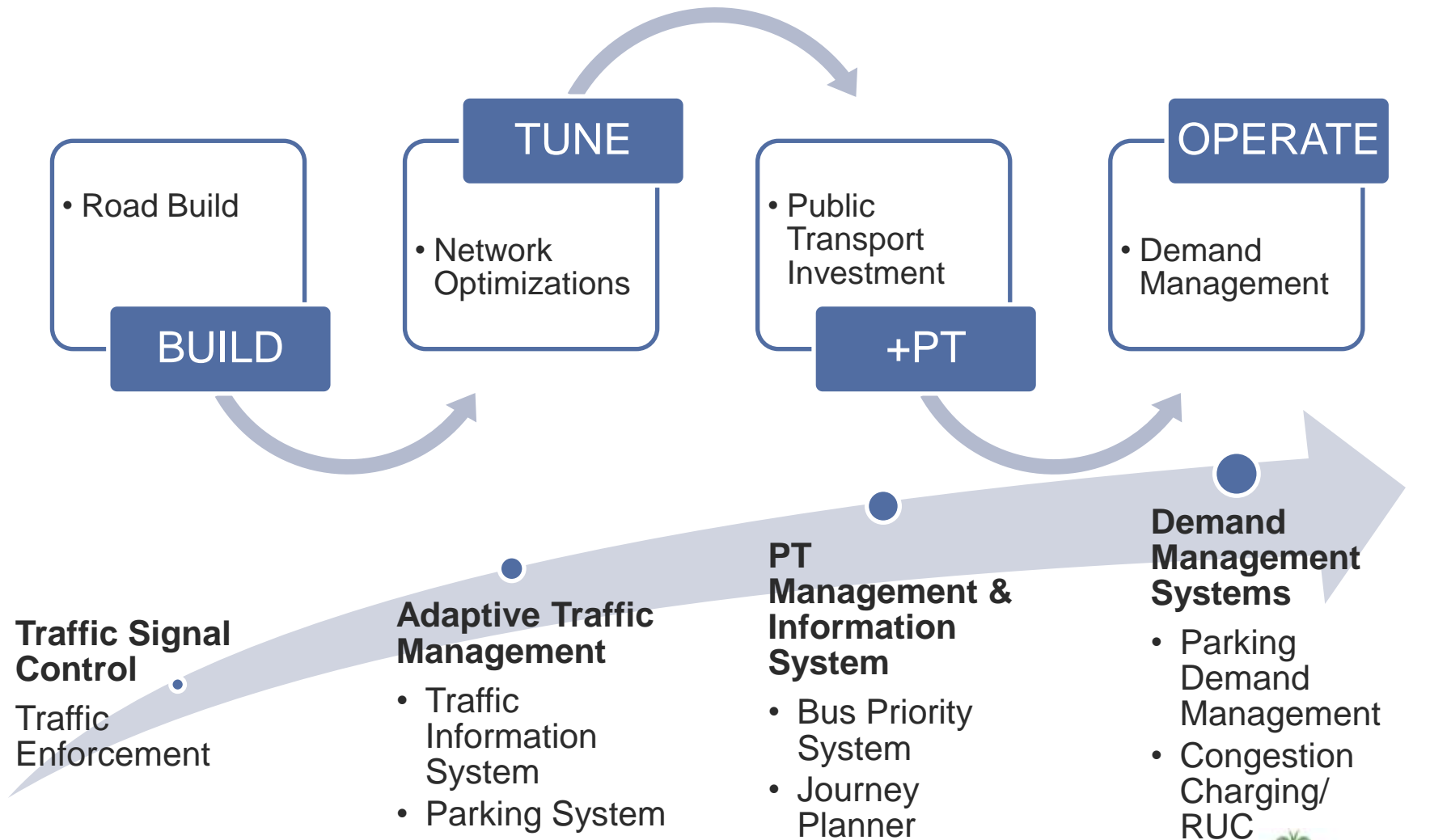
## ITS Research & Studies

- Regional Master Plans
- Meet deployment policies
- Economical development

## Telecommunications Operators

- Mobile applications to drive data bandwidth usage

# Strategic Direction – from ‘Road Builder’ to ‘Transport Operation’



# ITS Architecture - Example

## Traffic Management & Information Center



Incident & Congestion Detection

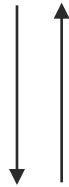


Field Equipment



Onboard PC

Incident Detection,  
Traffic Situation,  
Events & Road Works



Incident Reporting  
Emergency Vehicle Route

Emergency Vehicles



Incident Details,  
Route Info,  
Post-Incident Info








Field Report



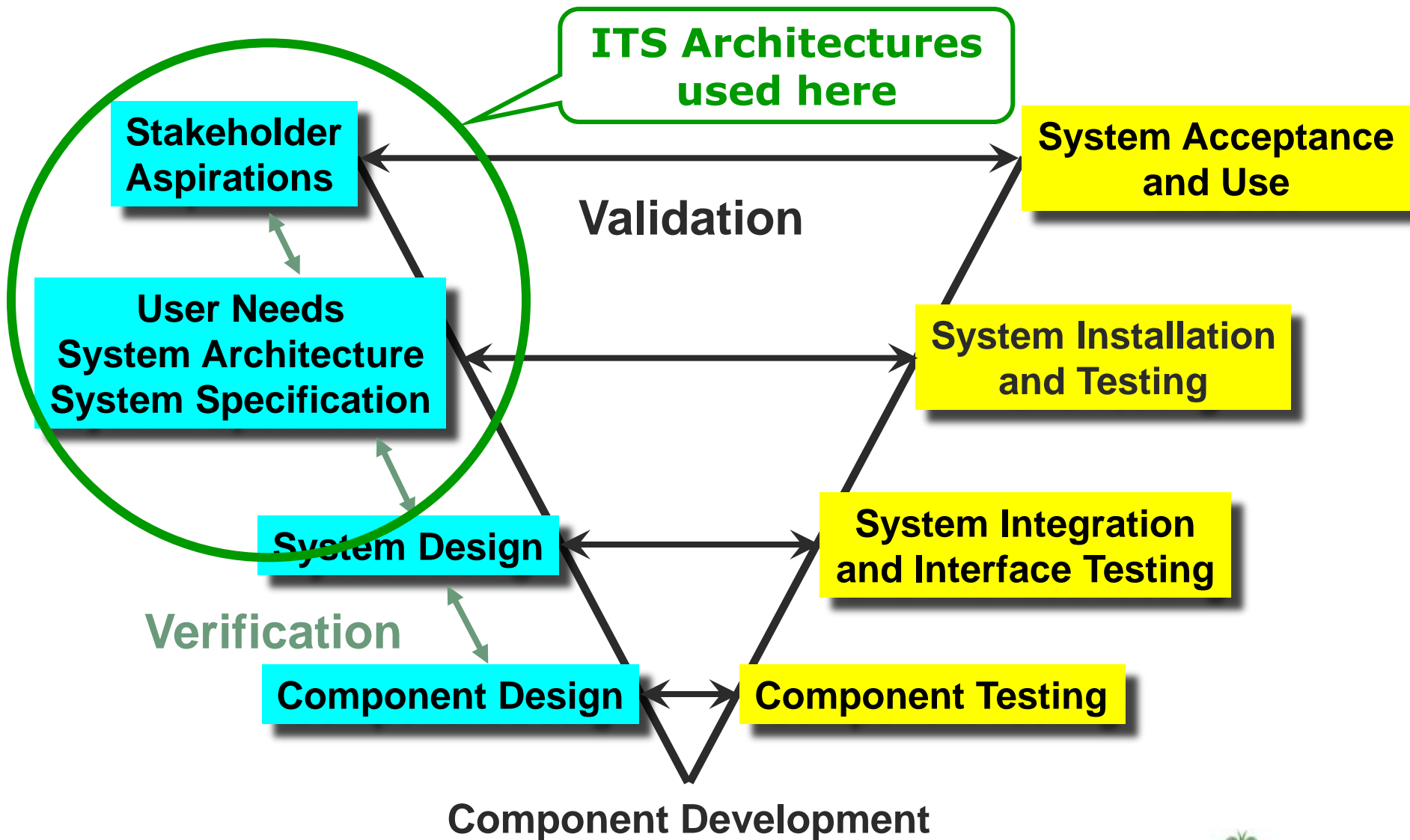
Emergency Response Center



# The Role of ITS Architecture – Plan what you want


-  Helps plan from requirements to deployments
-  Provides an overall perspective of the planned ITS deployments
-  Necessary for ITS deployment plans
-  Reduces integration costs
-  Provides the starting point for producing technical specifications

# Systems Engineering V Model - Example




# Organizational Design

Required to achieve efficient and effective departments focused on objectives

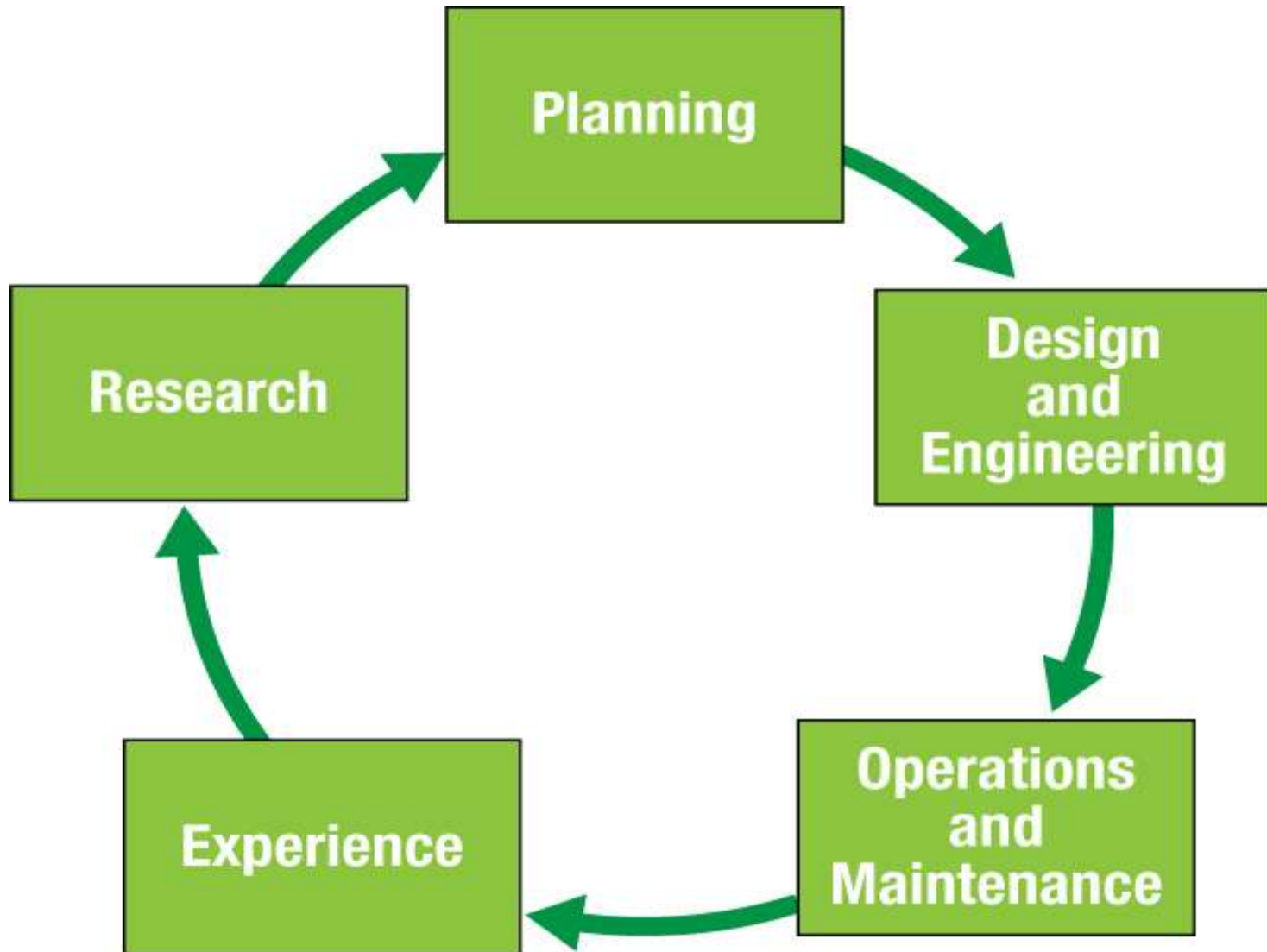
 Develop a flexible organisational framework to meet the requirements of stakeholders and their different scales of needs

- Clarify roles and responsibilities

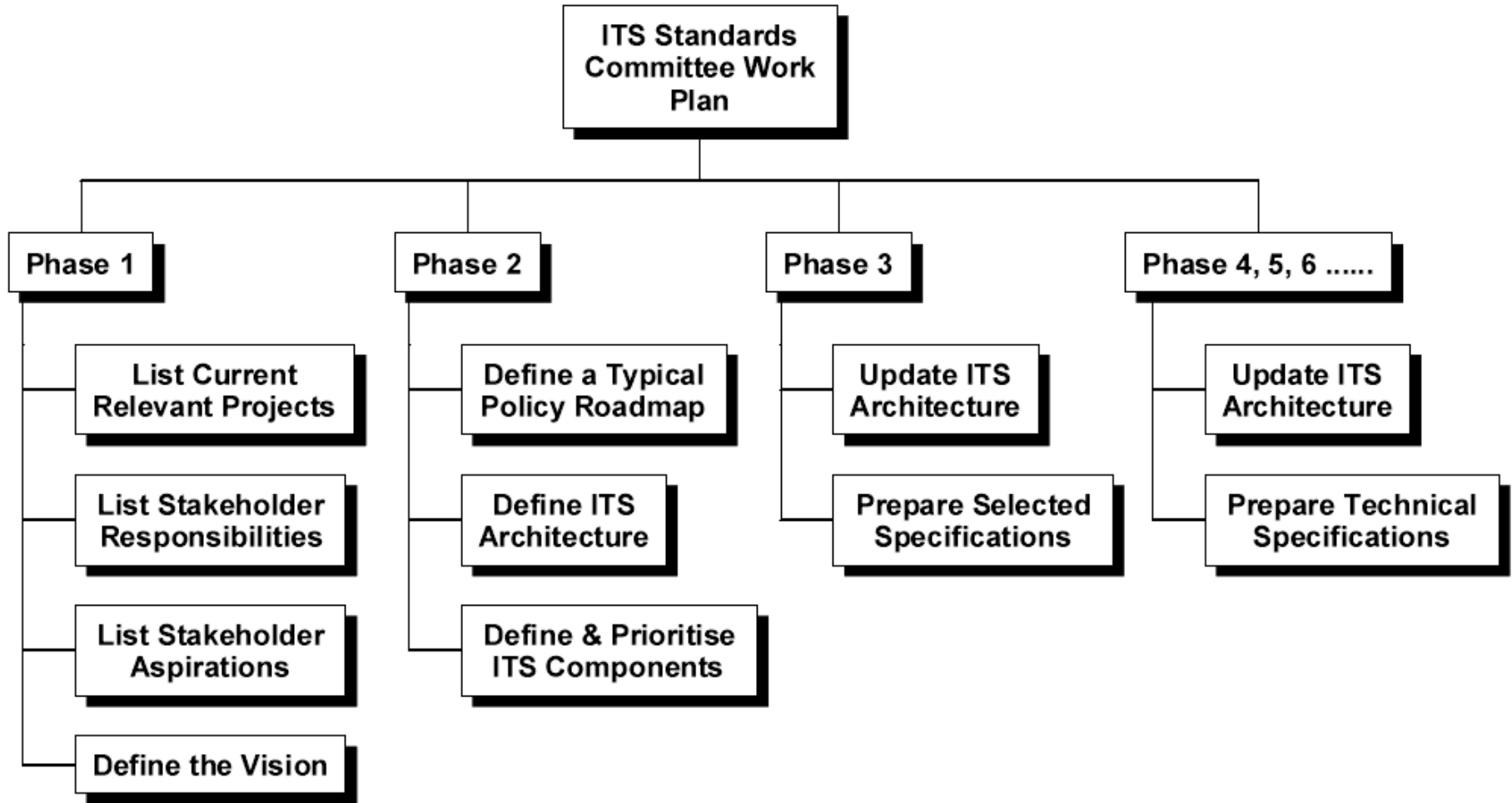
 Develop an organizational process to achieve cost effective and organised priorities and aims for now and for the future

- Effectively fulfill responsibilities of a relevant traffic related department

# Traffic Engineering – Continuous Process



# ITS-Arab Activities – Continuous Process



# ITS-Arab Current Activities

## Develop Clear Path Forward

- ▶ ITS Architecture
- ▶ ITS Roadmap
- ▶ ITS Guidelines, Standards etc.



## Dual Strategy Approach

- ▶ Increase ITS awareness
- ▶ Embed ITS within the Infrastructure Design Standards



- ▶ Workshops, Seminars and Conferences – Local & International
- ▶ Promoting international experiences - International Visits
- ▶ Promoting ITS at the Transportation Master Plan level – Local
- ▶ ITS Architecture Working Group – International
- ▶ ITS Standards Committee - Local

# Summary – Growing ITS Projects Pipeline

## Middle East Market Trend

- Growing ITS Investment – Large Scale Projects
- Growing dedicated ITS Studies by all Stakeholders
- Growing recognition for integrated Public Transport Infrastructure.





## Short Term Project - examples

- Automatic Traffic Violation Enforcements
- Real-time Traffic Monitoring and dissemination
- Fully Adaptive Urban Traffic Management Systems
- Real-time Parking Management and Guidance systems
- Real-time public Transport Management and Information Systems

## Long Term Projects – examples

- Security and Traffic Violation integration and analysis
- Multimodal real-time journey planner and navigation
- Congestion Charging/ Road User Charging (RUC)

# Summary – Technology Market Trend

-  Integrated real-time modeling based systems (Traffic congestion, Floods, Events etc)
-  Integrated real-time data sharing with specialised applications
-  Cloud-based/hosted ITS solutions for rapid and flexible deployments.
-  Driverless/Autonomous Vehicles



**Thank you IRF**