

**development of  
infrastructure to support the  
ICT sector**

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# agenda

**home** the next phases of Broadband Mauritius

trends and indicators

the telco landscape of tomorrow

**business** resilient economy

risks for the IT-enabled services sector

initiatives of MT for business continuity



# the next phases of Broadband Mauritius

trends and indicators



# world trend in telecoms

4 260 000 000

Mobile users

1 734 000 000

Fixed Internet users

600 000 000

Mobile Internet users

400 000 000

facebook users

10% growth in broadband penetration in a nation  
contributes to 1.3% growth in GDP ..... *World Bank*



and for Mauritius,

growth of fixed and mobile  
broadband services

are keeping pace with  
world trends...



# trend in telecommunication for Mauritius

1 000 000  
Mobile users

350 000  
Fixed Lines

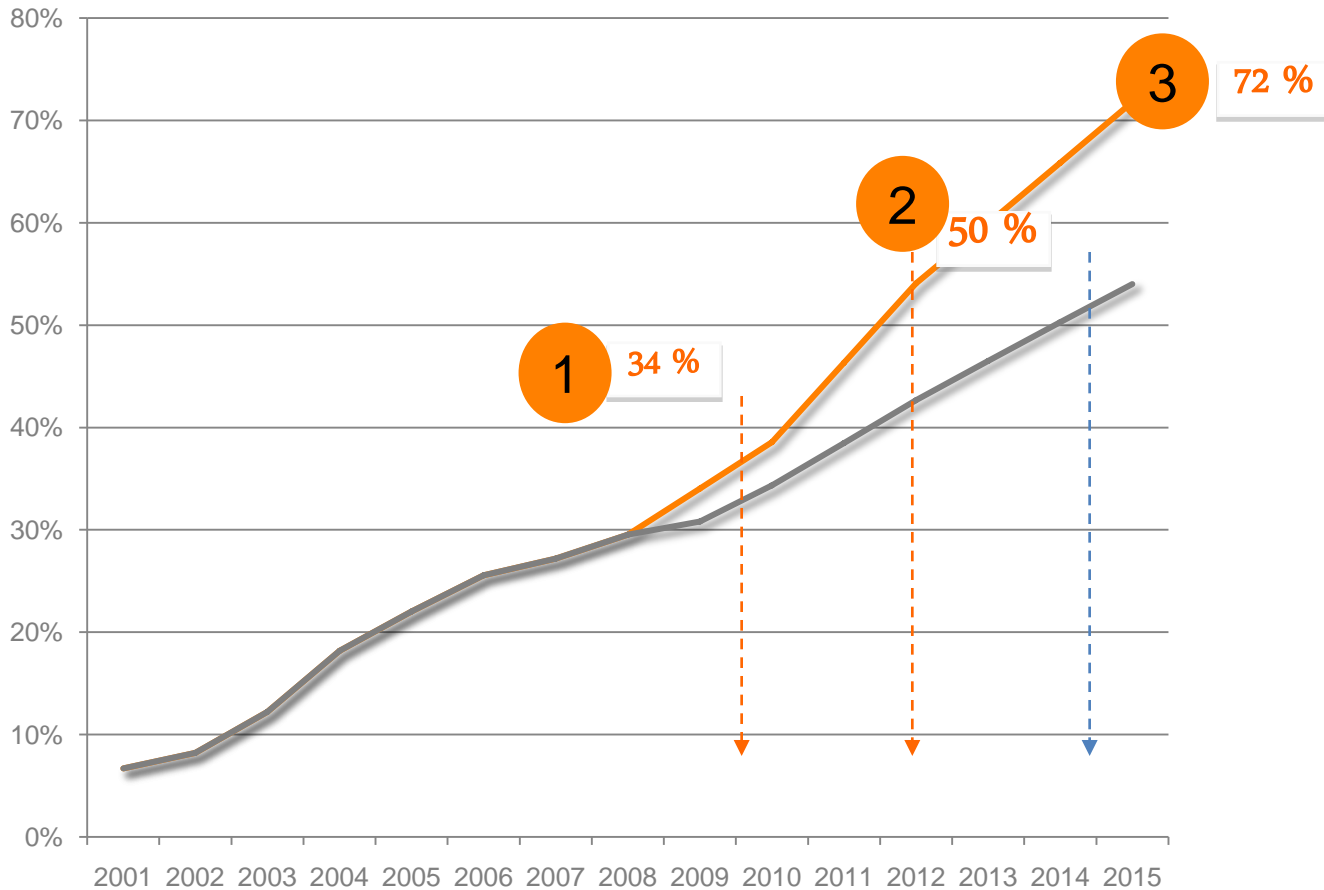
100 000  
Mobile Internet users

80 000  
Fixed Broadband users

3 Gbps Internet bandwidth out of Mauritius growing at 600 Mbps every 8 months



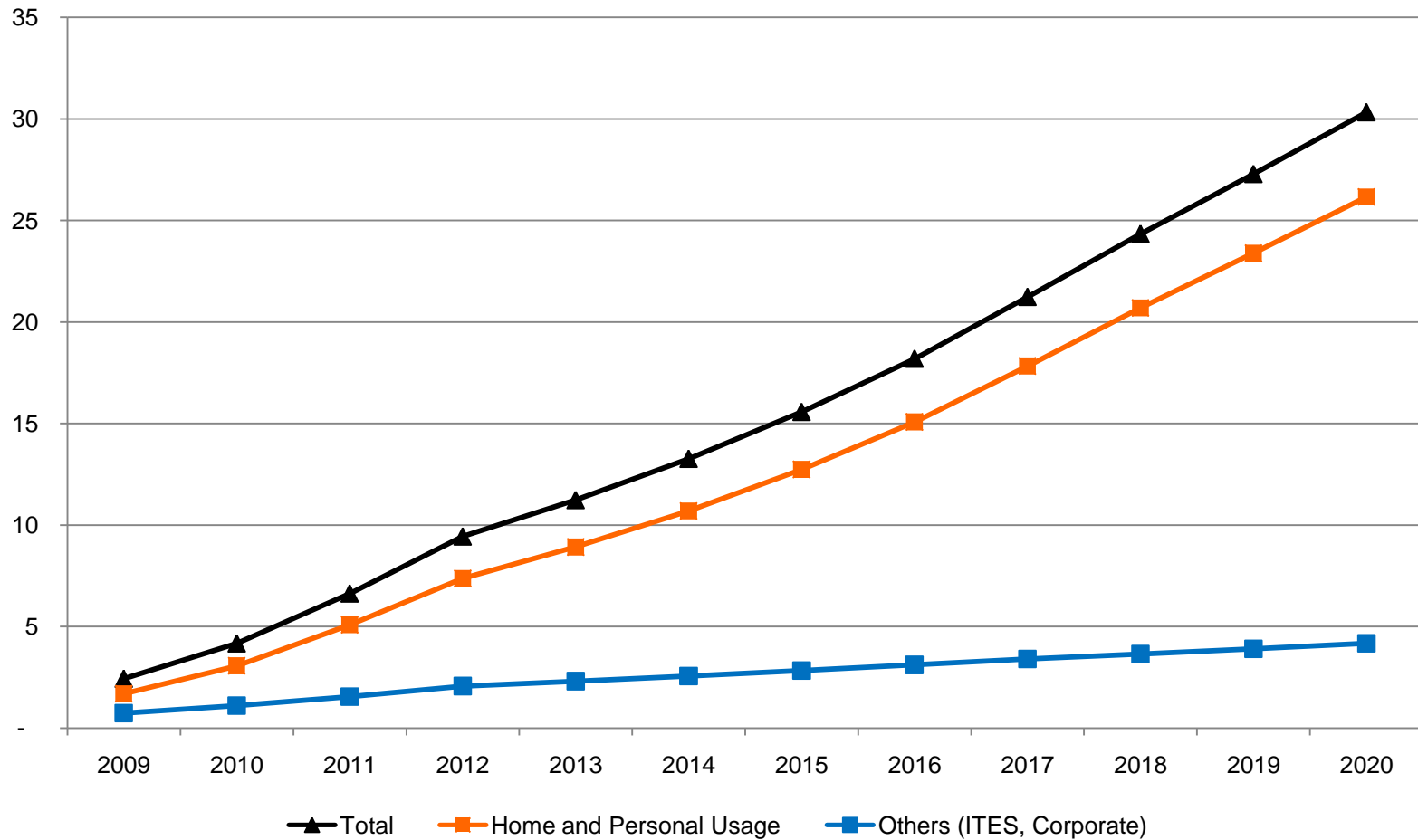
# Broadband Mauritius : Fixed & Mobile Internet connections



50% of Mauritians will be **connected** to the Internet by 2012



# International Bandwidth Usage Forecast (Gbps)



# Technology Drivers

- Smartphones with applications /widgets



- HDTV on Mobile phones



- Personalized IPTV - Catchup / WebTV

- From Web 2.0 (Social Network / You Tube /etc) to Web 3.0 (personalized web interface)



- Cloud computing (Google / Apple strategy)

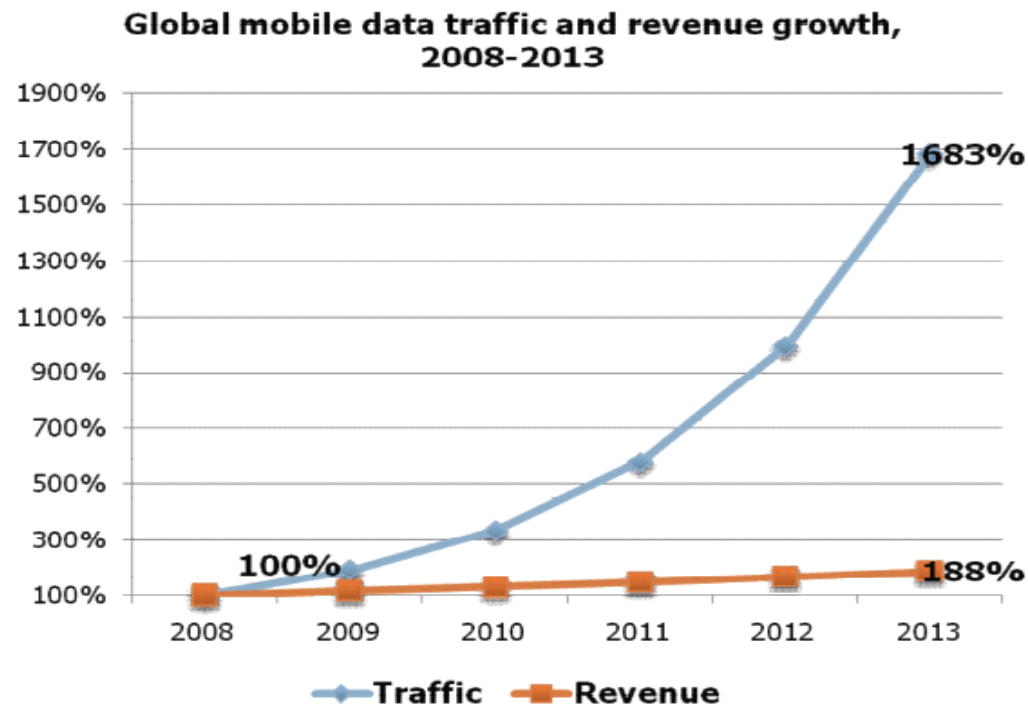


- Machine to machine applications



# Challenges faced by telecom operators

- Network Saturation : AT&T had to install wifi hotspots as interim measure to offload its data network due to iphone success story.
- Margin depletion from exponential mobile data usage cost but flat revenue pattern

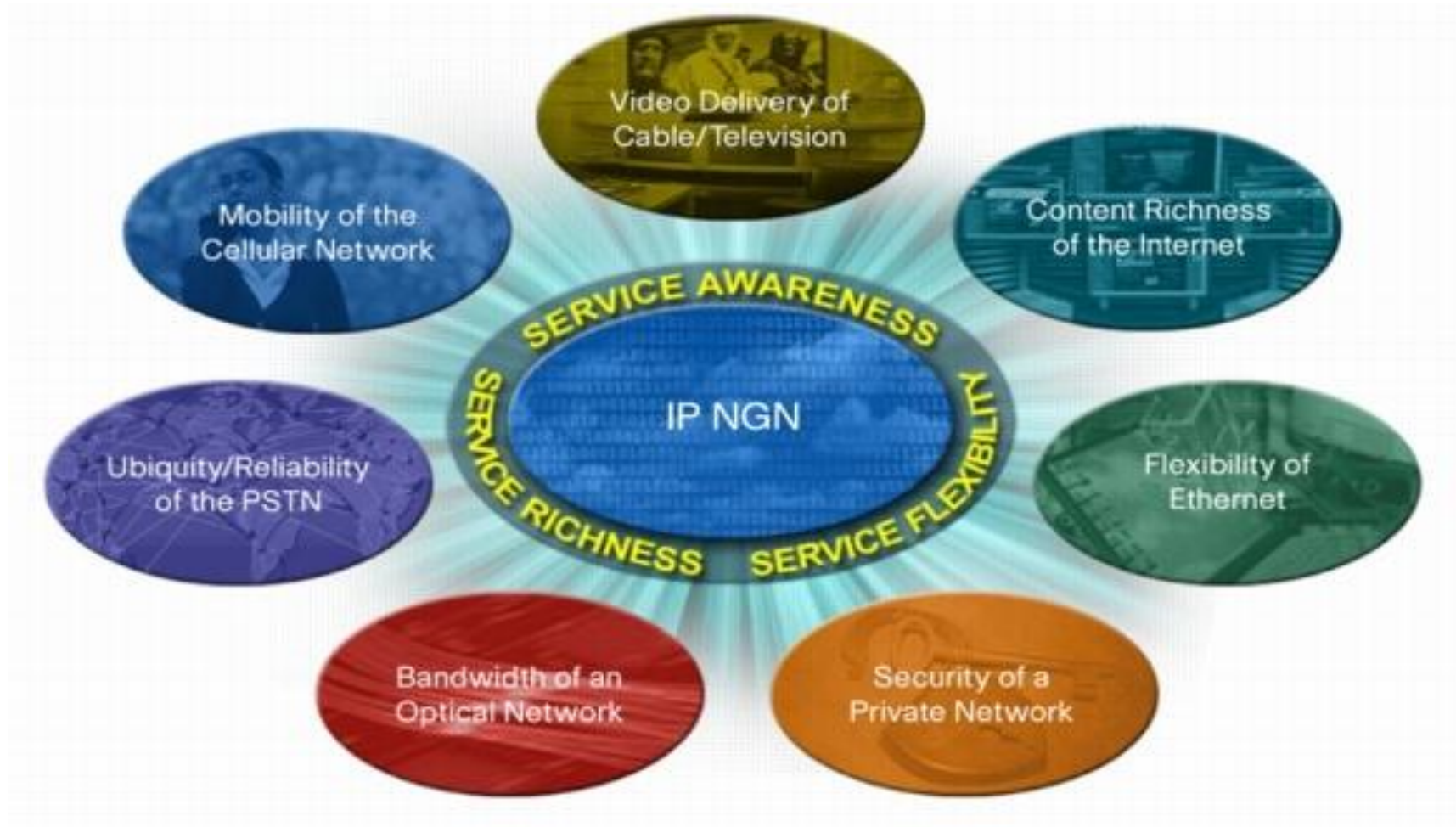


What technology ?

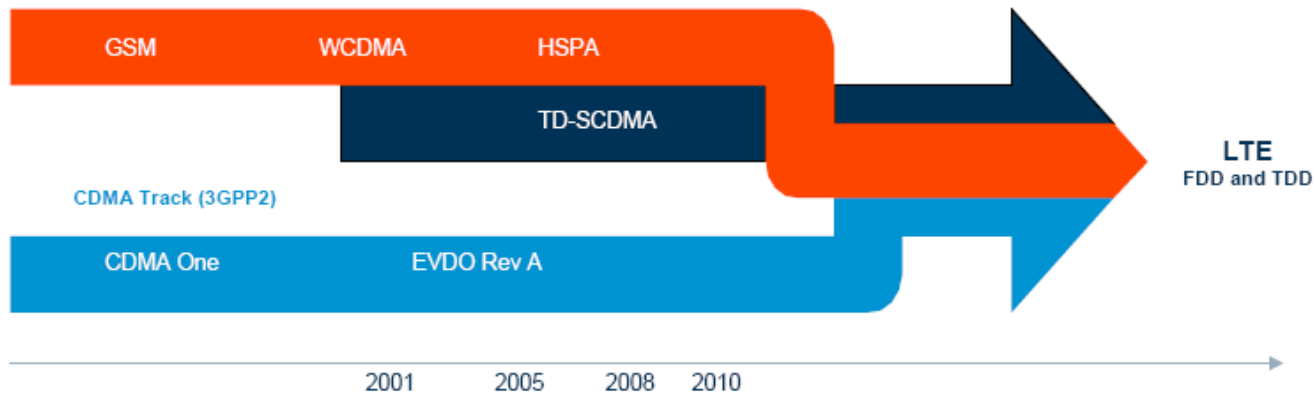
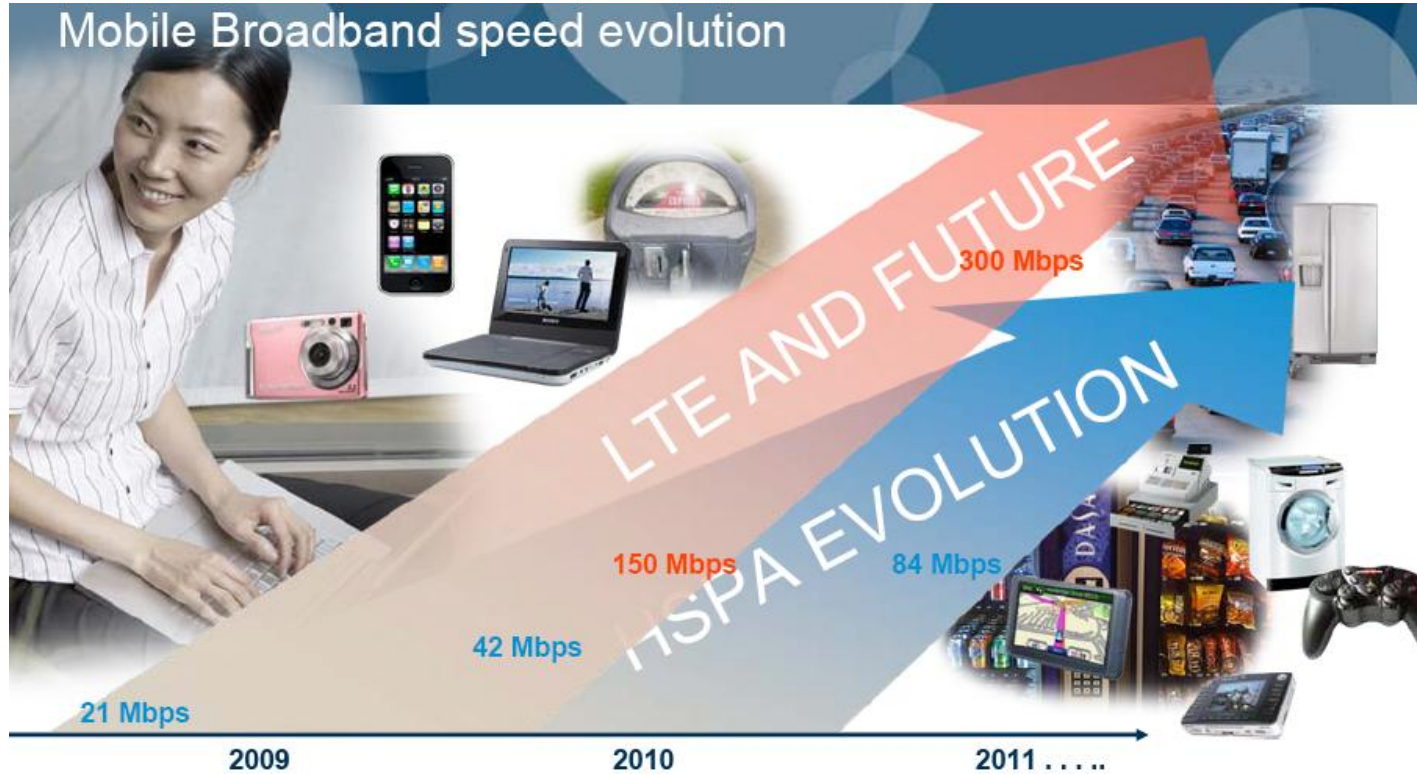
the telco landscape of tomorrow



# next generation networks (NGN)

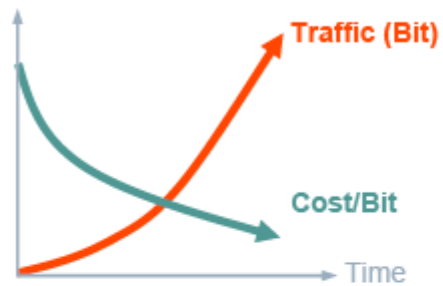


# Long Term Evolution (LTE)



# LTE or 4G network

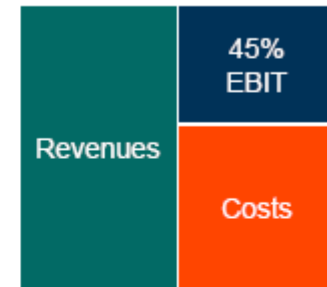
## Business case challenge



## Eco-system



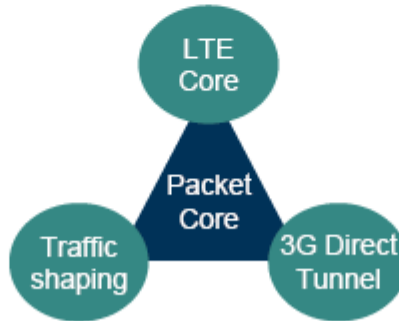
## Good profit margin



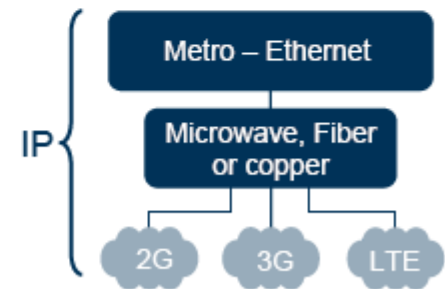
Evo RAN



Efficient RAN evolution



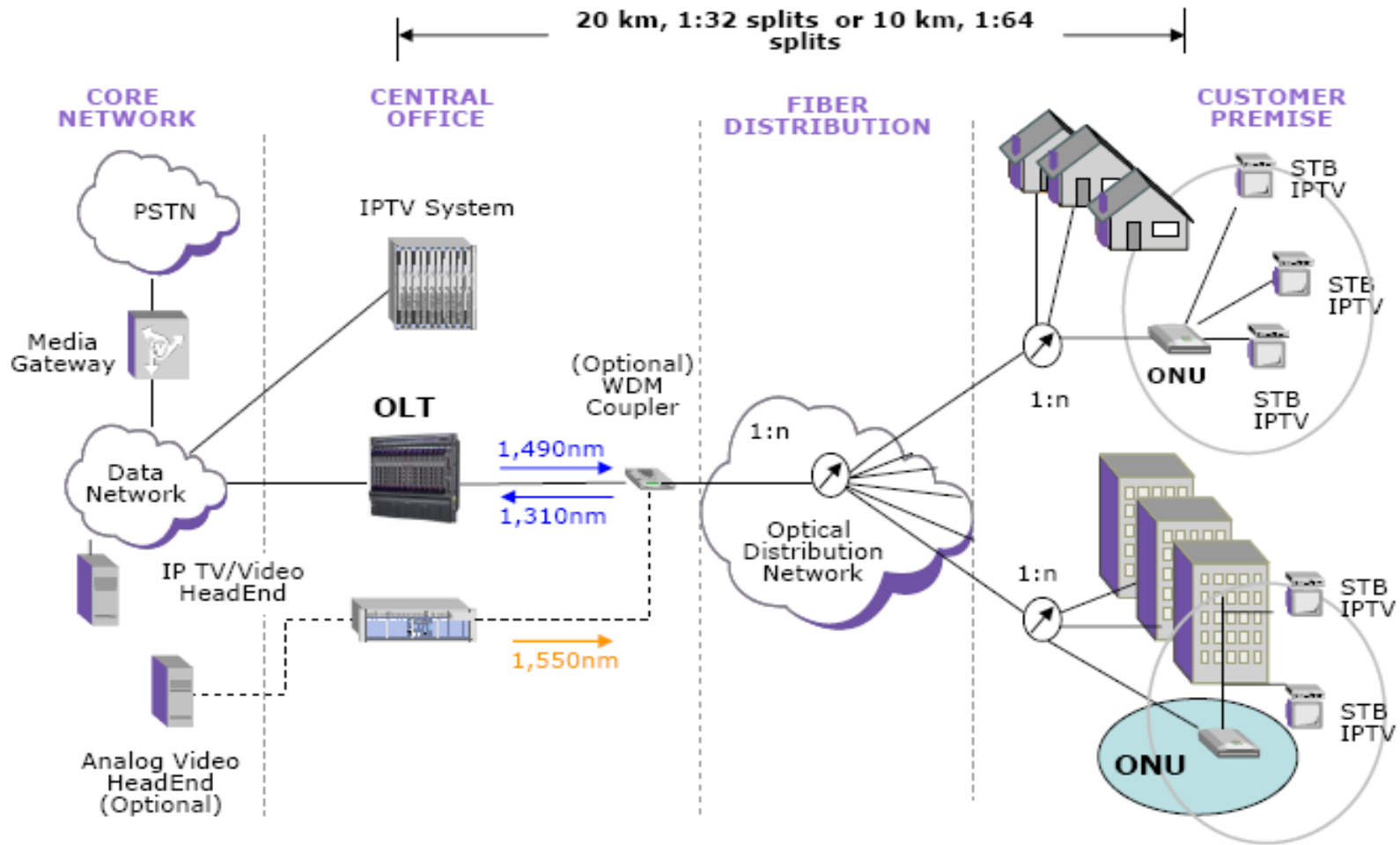
Enhanced Packet Core



High capacity mobile backhaul



# fiber to the home (FTTH)



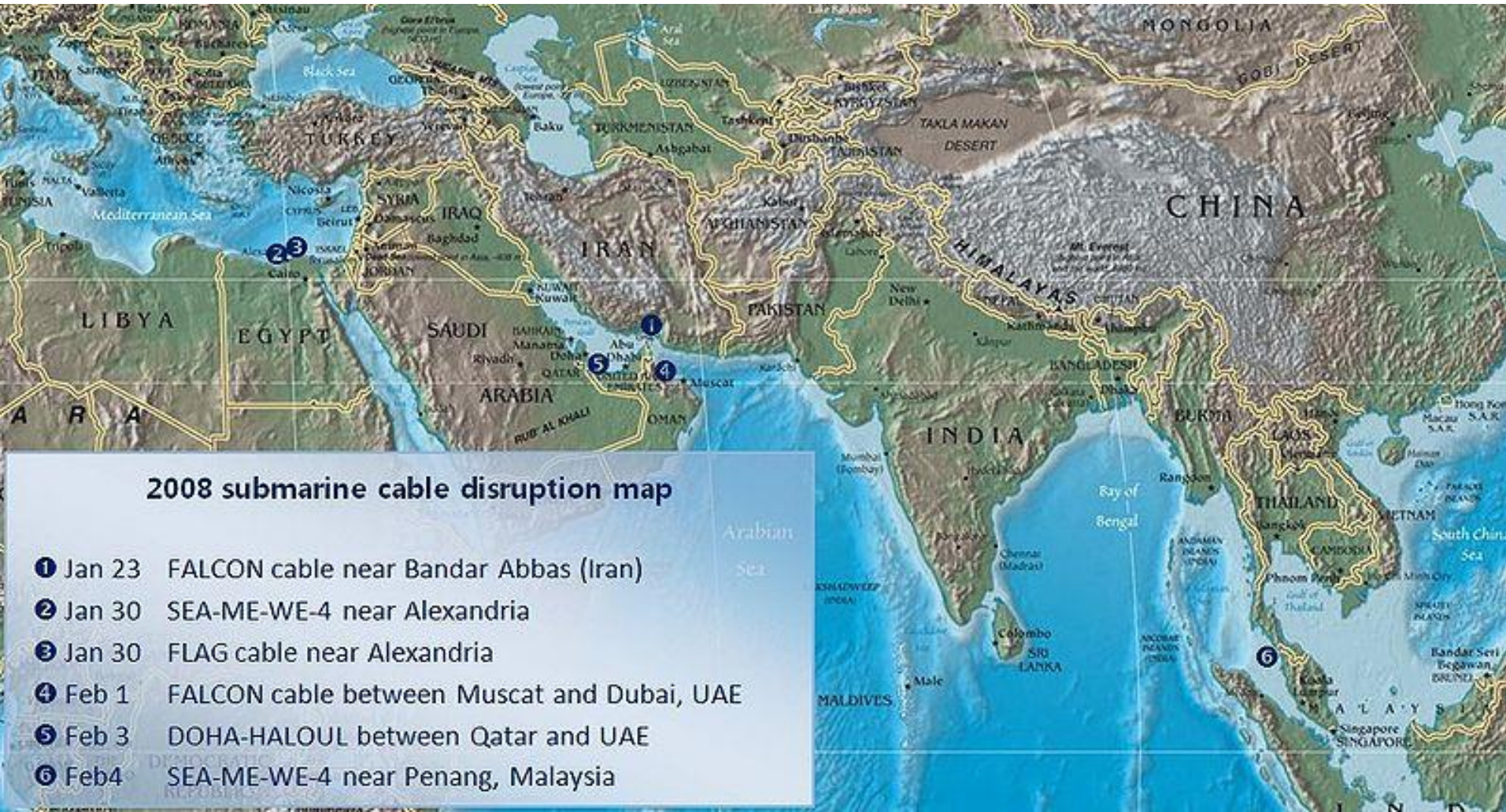
business segment:  
resilient economy



supporting the IT Enabled  
services

# risks for the IT enabled services sector : international connectivity isolation

Jan/Feb 2008: SMW4/FALCON/FLAG  
Middle East and Asia severely affected



# Recent outages on cable systems

## Jun 2005: SMW3

- cable cut off the coast of Karachi
- communication between Pakistan and RoW severely affected for around two weeks
- call centre business severely affected

## Dec 2006: SMW3/FLAG/ACPN/CUCN

- several cables affected by the Hengchun Earthquake in Taiwan  
Taiwan, Hong Kong, China, Philippines and others severely affected (loss of 40%-70% capacity) for several weeks

## Dec 2008: SMW3/SMW4/FLAG

- multiple cable cut in the Mediterranean (possible causes: bad weather or ship's anchor)
- 75% of traffic between ME /ASIA and Rest of World affected
- repairs completed in 12 days



# Service outage in Reunion island

Jan 2005:

Service outage in Reunion due to cable failure near Cape Town

- all non-restorable traffic out of service for around 1 month
- **no impact in Mauritius** since all our IPLC services are provided on **restorable bearers** only

## Cyclone effects in Reunion



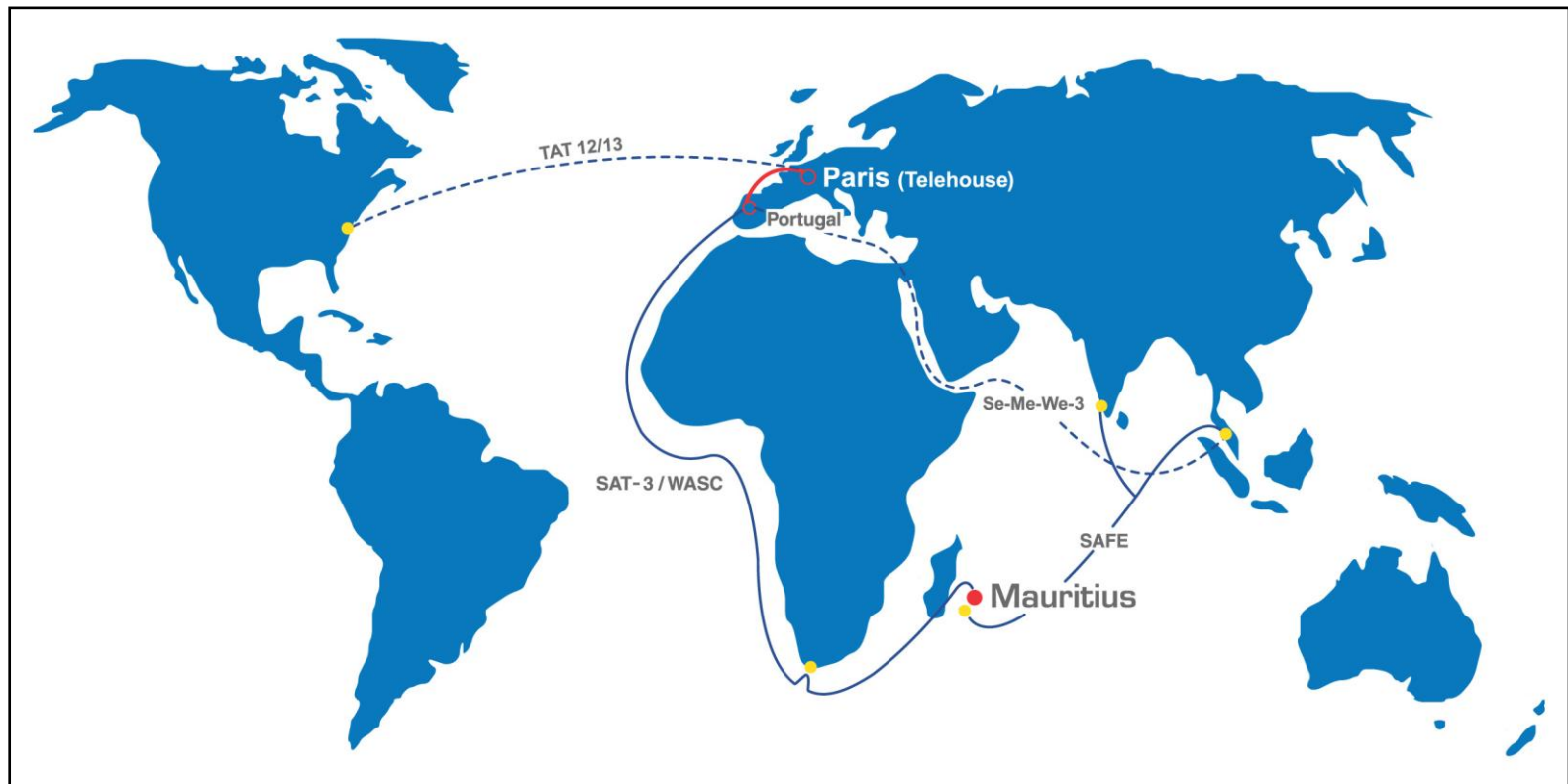
# resilient economy

## Business continuity Initiatives of MT



# Existing Disaster Recovery

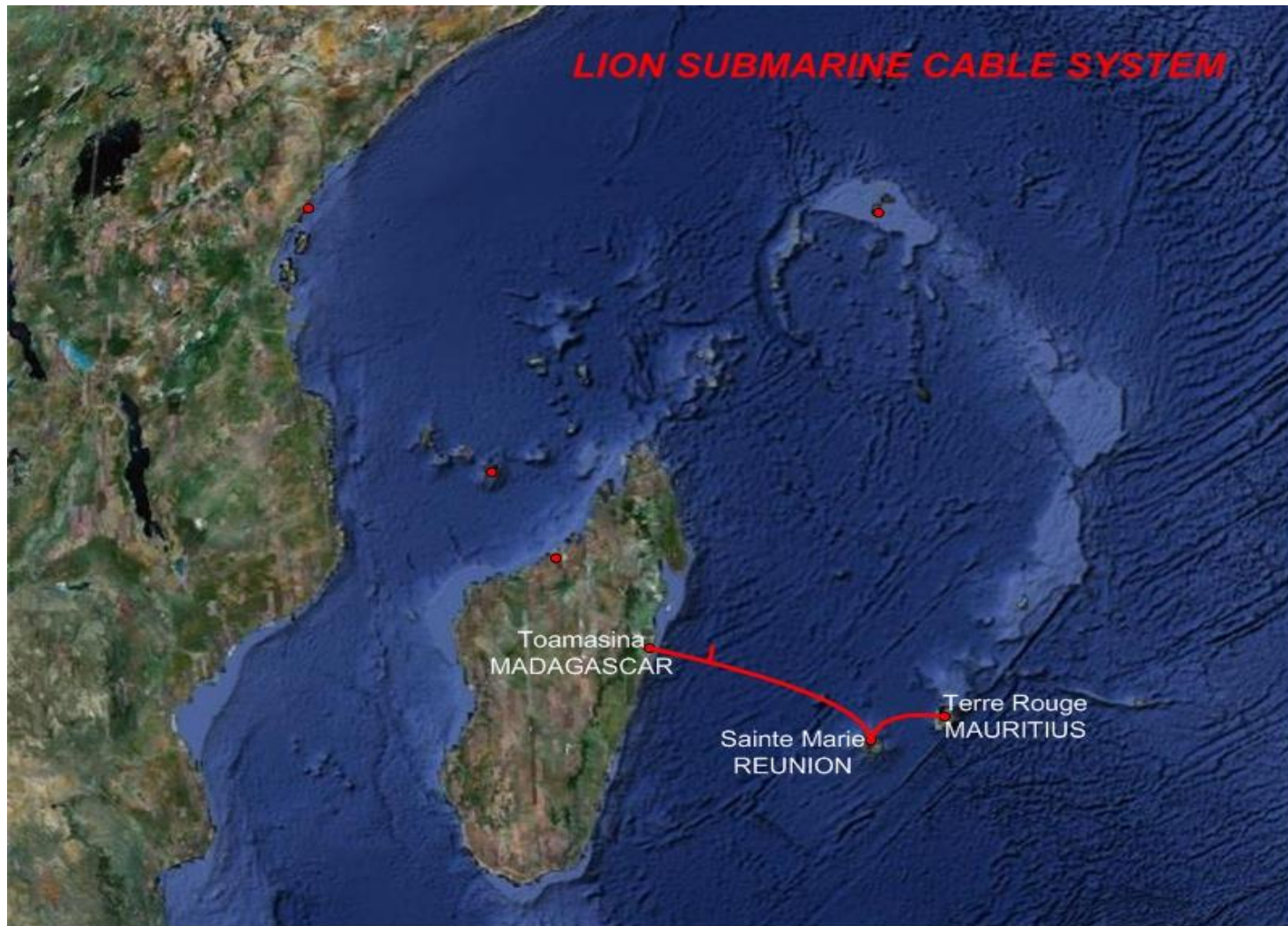
## Dual Restoration Path



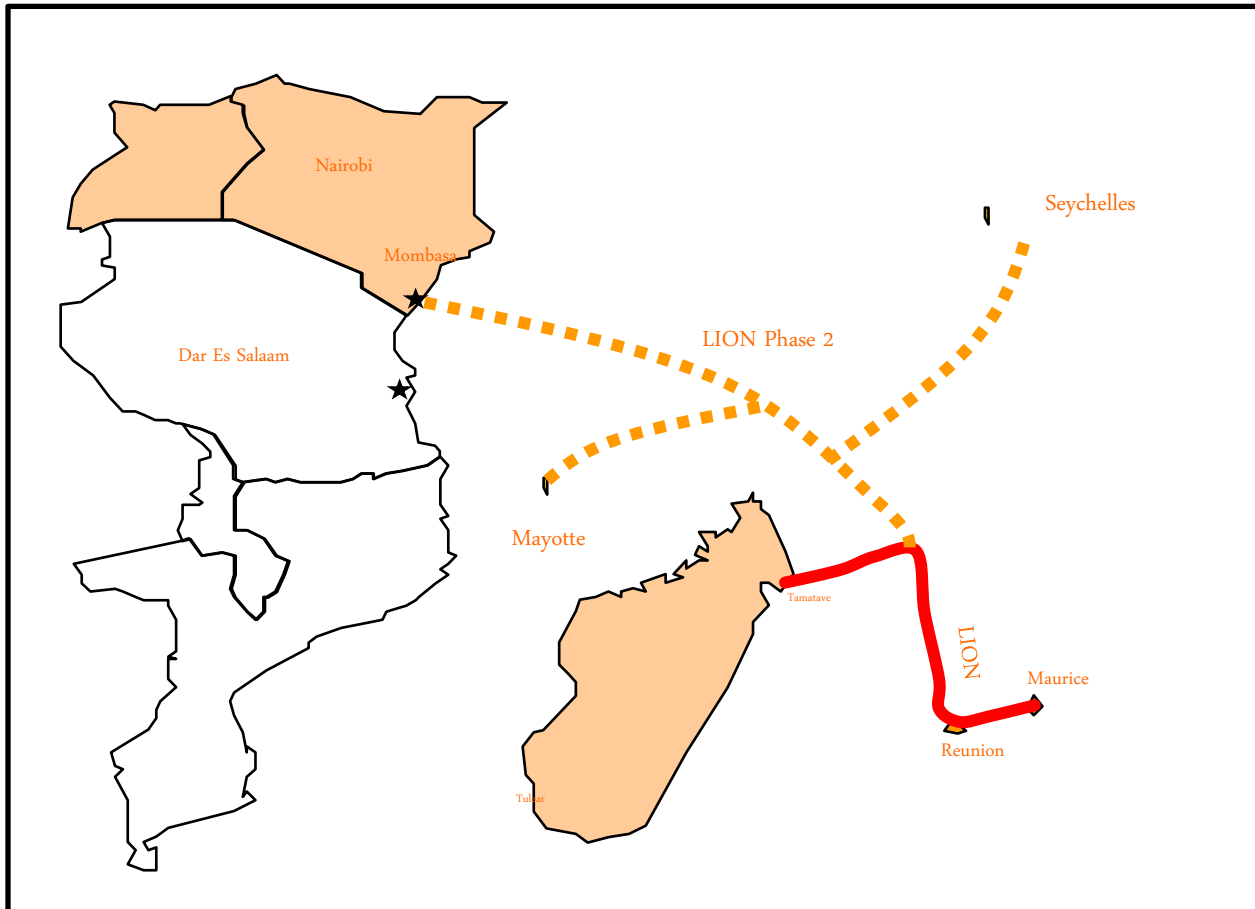
Dual restoration path - Towards East and West on one alternative cable system (SMW3)



# LION Cable – Making us SAFER



# Additional resiliency – a third path out of Mauritius



## LION 2

The cable will be extended to East Coast of Africa for onward connectivity to Europe and Asia



# Additional Capacity - other investments



**thank you**

**together we can do more**

