

**Signaling Transfer Point (STP) Integration
Project for creating a Global Footprint**



Agenda

Background

Transition Coverage

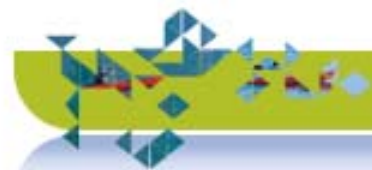
Challenges

Approach

Implementation

Benefits

Conclusion



Background

Tata Communications offers signaling and roaming services like

- Wireless Global Roaming (WGR)
- Signaling Connection Control Part transit (SCCP transit)
- Managed Roaming Services (MRS)
- SMS translation

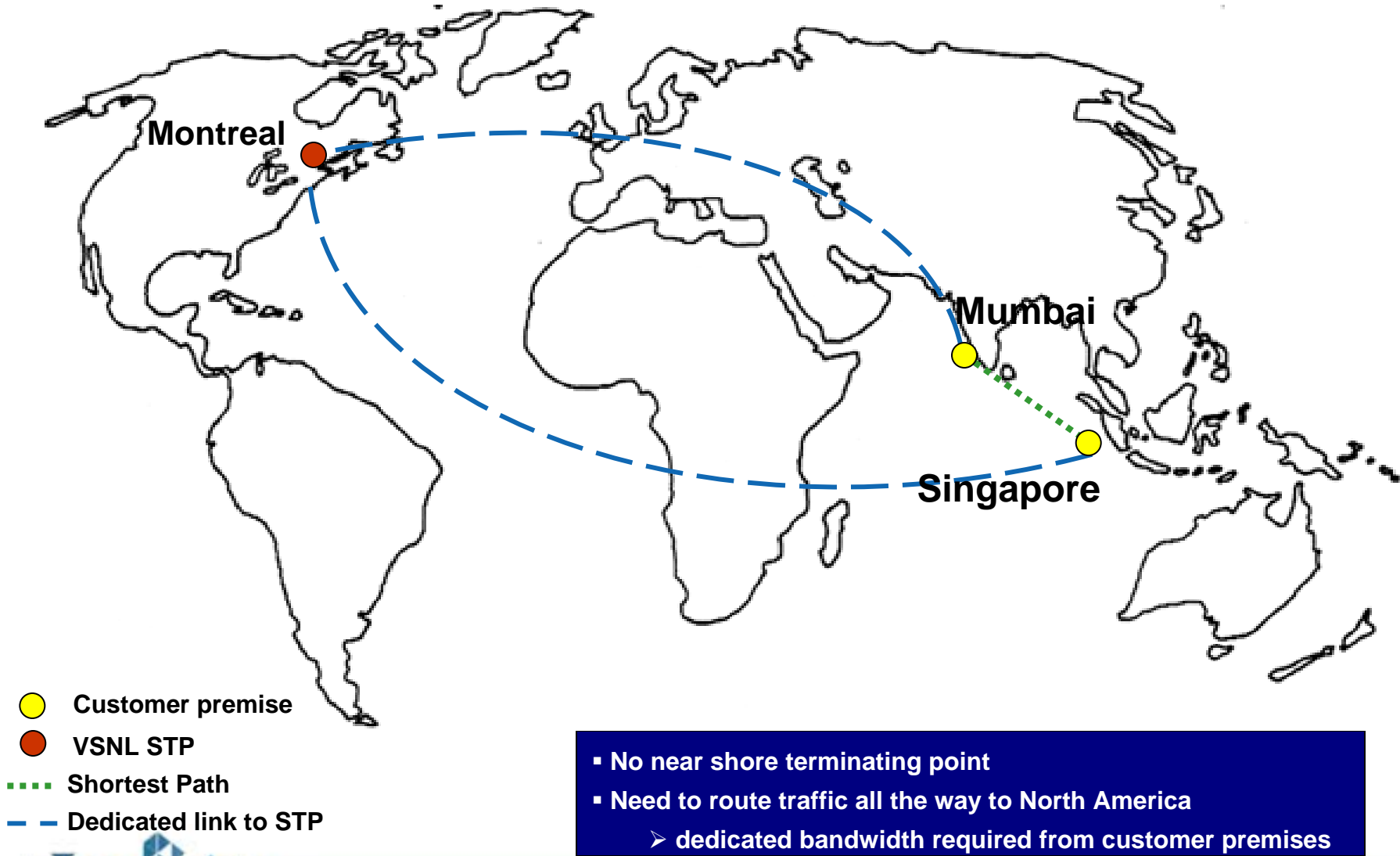
Services were offered from North America, hence needed

- routing of entire traffic to North America and back
- dedicated capacity from customer premise to North America
- high transmission costs

This led to

- customers' reluctance to opt for the high cost services
- large opex in providing complementary services to key customers

Background

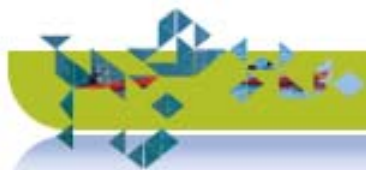


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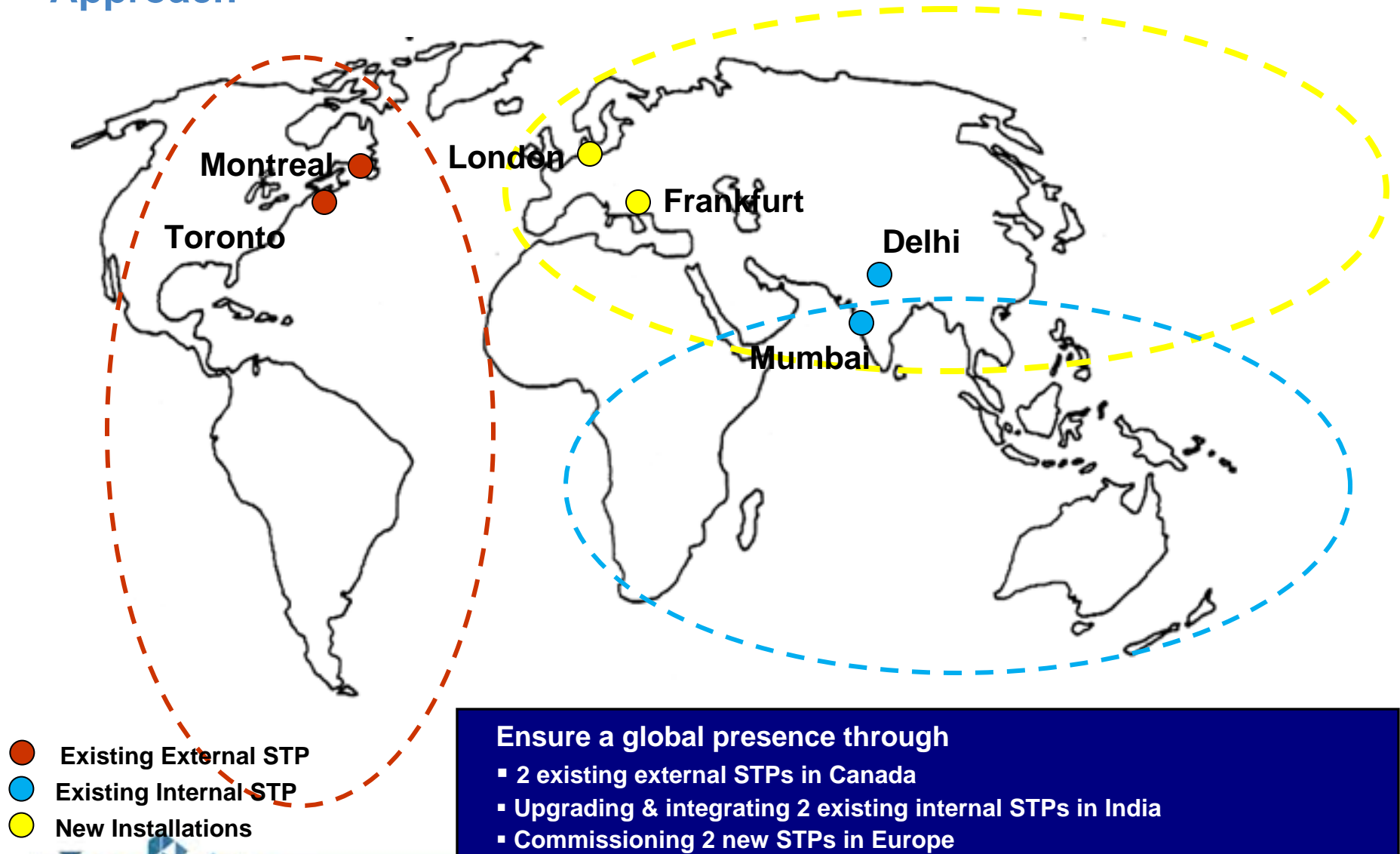
The need of the day was to

- Become a global player with local presence across the world
- Meet the demands of an increasing customer base
- Cater to the needs of customers working across different time zones
- Provide better SLAs and have better response time

To fulfill these, Tata Communications Transformation Services commissioned the STP Integration project



Approach



Implementation

Phase I

Apr 2007 – Jul 2007

- **Extend dedicated capacity between Indian STPs and Asian PoPs**



Phase II

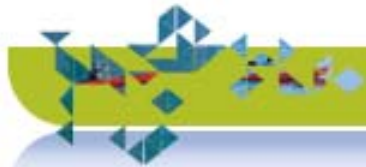
Aug 2007 – Nov 2007

- **Deploy and Integrate systems & tools for Indian STPs**

Challenges



Solutions



Benefits



Capacity, Revenue & Traffic increase

- Estimated 50% growth in traffic by June 2008
- Estimated 30% incremental revenue
- Network optimization due to re-engineering



Enhanced Capability

- **New features installed**
 - Enhanced Global Title Translation (GTT), origin based routing etc
- **Better network visibility**
 - Business Support Systems & tools
- **Monitoring & Billing System available locally**

20% reduction in
Transmission cost



Opex Reduction

Conclusion

Need for global presence led to STP Integration project

**Phase 1 –
Extend
connectivity to
Asian PoPs**



**Phase 2 –
Deploy and
Integrate
systems &
tools for STP
integration**



Opex Decrease

Capacity Increase

Enhanced Network

Revenue Increase

TATA COMMUNICATIONS
TRANSFORMATION SERVICES

Thank You



Annexure



Services Offered

Wireless Global Roaming: Designed for wireless carriers who want to offer their customers the option of roaming to and from North America. This service translates different numbering plans and performs signal conversion between ANSI and ITU standards seamlessly, permitting customers to place or receive mobile calls and Short Messages (SMS) when they travel internationally

Signaling Connection Control Part transit: Designed for ITU and ANSI wireless carriers who want to use signaling network to transport their roaming and SMS signaling traffic. This service provides transport and Global Title Translation based on ITU E.164, E.212 and E.214 numbering plan formats. The signaling is specific to roamers, and also to subscribers sending inter-network Short Messages (SMS)

Managed Roaming Service: This service provides the home network with the ability to preferentially select the network for their subscribers when they out-roam. This results in directing out-roaming subscribers onto partner or preferred networks where advantageous roaming agreements have been established. Significant cost savings for the home network can be achieved through the use of preferred versus random network assignment

SMS translation: Provides the GSM and CDMA operators a way to exchange SMS over signalling interface directly, without going via 3rd parties. Messages (SRI-FOR-SM & REPORT-SM-DELIVERY-STATUS) also transit via WNP platform (Atrium) to solve portability when required (+1 Destination). Apart from these major services TCTS supports Local Number Portability (LNP)

