



Northern Corridor Transport Observatory

Baseline Survey Study Corridor Performance Monitoring

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- ❑ Corridor Performance Monitoring
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Background

- Northern Corridor Programs and activities
 - Encouraging cost effective services by the major transport service providers through PI
- Inefficiencies along the Northern Corridor
 - Slow speed, long transit times and long turnaround of vehicles and transport equipment
- Stakeholders expectations
 - Efficient mechanism for exchanging information and Monitoring performance
- Development Partners Coordination
 - Monitoring Regional Transport and Trade Implementation Project

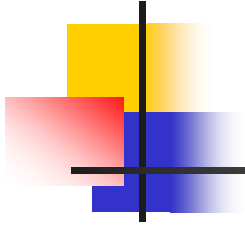


Corridor Monitoring performance



Background

- The diagnosis and monitoring aspects are cutting across all the TTCA programs, and a series of indicators has been adopted to monitor the performances of the corridor and the impact of the TTCA programs
- Main function of the indicators:
 - Diagnosis instrument
 - Monitoring changes in performances
- The data collection and analysis mechanisms are what is known as the Transport Observatories



Baseline Survey on Key Non Physical Barriers

Methodology and Lessons Learnt



Baseline Survey Study

- **Study Objectives**

- Establishment of practicable transit traffic monitoring
- Better understanding of the priority needs

- **Scope of Work and Outline**

- Defined survey outputs (Total time delays from all causes and time delays disaggregated by cause, location, date, and time of day)
- Defined parameters of reports to capture (direction of travel, “nationality” of vehicle, and type of cargo)
- Calculate the required size of the sample journeys to be surveyed so that they are Statistically valid.
- Set up a database or spread sheet in the offices of the Secretariat in Mombasa, and inputting data etc...



Baseline Survey Study

- Field Data Collection
 - **Distribution of data collection forms**
 - Sample selected
 - Dissemination workshop
 - **Response on data collection**
 - Drivers as key players
 - General non response by transport firms
 - 124 questionnaires completed



Baseline Survey Study

- Analysis of Findings
 - Port transit time
 - Transit time per route
 - Journey time
 - Transit time per border post
 - Cause of delays (Kenya, Uganda, Rwanda)
 - Average total delay



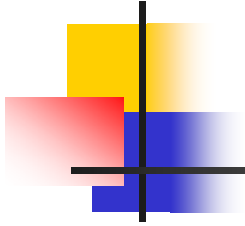
Baseline Survey Study

- Lessons Learnt
 - Effective “Buy In” by relevant stakeholders
 - Sampling statistically valid
 - Survey confirmed drivers are key to data collection
 - One month planned for data collection was too ambitious



Baseline Survey Study

- Recommendations
 - TTCA Secretariat have to set up a continuous Monitoring of delays through an agreed mechanism with Transporters Association
 - Consultation with the Transporters on the design Field Survey Instrument
 - Multi-user database for Survey on NPB available through TTCA Website
 - TTCA to develop a comprehensive Corridor Performance Indicators in addition to the Baseline Survey



Corridor Performance Monitoring/ Transport Observatory

Lessons Learnt



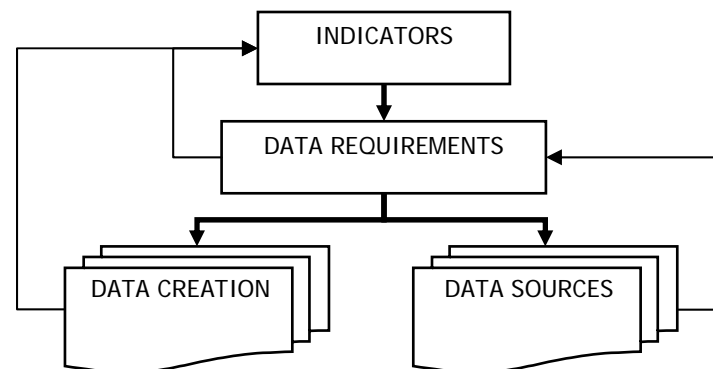
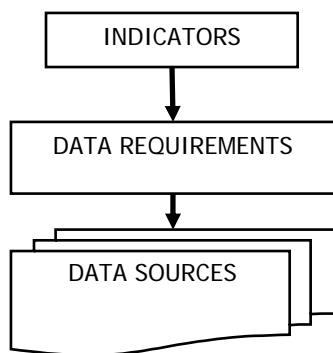
NC Transport Observatory

- Framework
 - Which indicators?
- Data sources
 - Existing computerized information
 - Dedicated surveys where information is inadequate or missing

NC Transport Observatory

■ Methodology

- Mode of production of Indicators
- Determining the requirements in terms of data,
- Identify and collect the required data.





NC Transport Observatory

- Global performance is measured by the total transit time (from offloaded from ship up to delivery)
- Total transit time is made up of a succession of individual steps implying either:
 - physical moves
 - documentation process
 - combination of both

Port	Transit country	Border	Destination country
↕	↔	↕↔	↕↔
Document	Physical	Combination	Combination



NC Transport Observatory

- Computerized Data
 - To develop indicators enabling in-depth analysis implies access to large amount of data
 - Initial survey designed to identify sources of relevant data among all operators:
 - Port authorities
 - Customs
 - Transport operators (road, rail, ICDs, Clearing and forwarding agents, ...)



NC Transport Observatory

- Port Data

- For containerized cargo delivered by road, the details of information available through SAP enables the monitoring of process and delays:
 - Between discharge and billing
 - Between billing and gate process
 - All the individual steps of the Gate Process (booking, arrival truck, docs processed, actual exit)



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- Revenue Authorities
 - Revenue Authorities in the region have computerized their Customs operations:
 - SIMBA for Kenya
 - ASYCUDA++ for Uganda, Tanzania, Rwanda and Burundi
 - Eastern part of DRC still manual



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- During field trips, available data and processes have been assessed for all countries
- Relevant data has been requested and received from Kenya, Uganda and Rwanda
- Burundi and DR Congo provide limited data



NC Transport Observatory

■ Road Survey

- The methodology developed for road transport observatories has its limits, and part of the exercise was to attempt to refine the approach
- The general idea is identical: capture information on delays by requesting drivers to fill a trip form
- Implementation differs: definition of the trip, commitment at management and driver level, validation of the data, partners

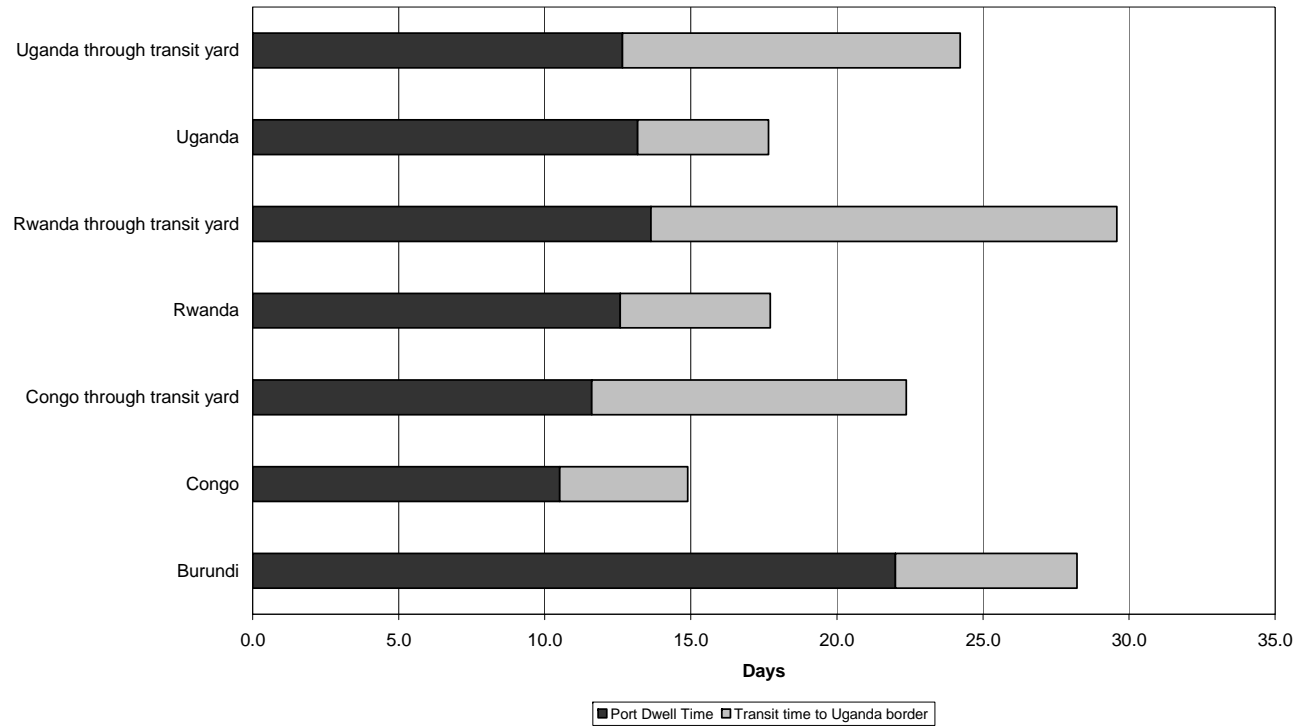


Some Study Results:

- Not surprisingly, border crossing and terminal times are the main delays by duration
- The following results are based on a limited sample, with some methodological problems, from two different sets:
 - Company trip sheets (not detailing delays but containing relevant information)
 - Road delays survey forms

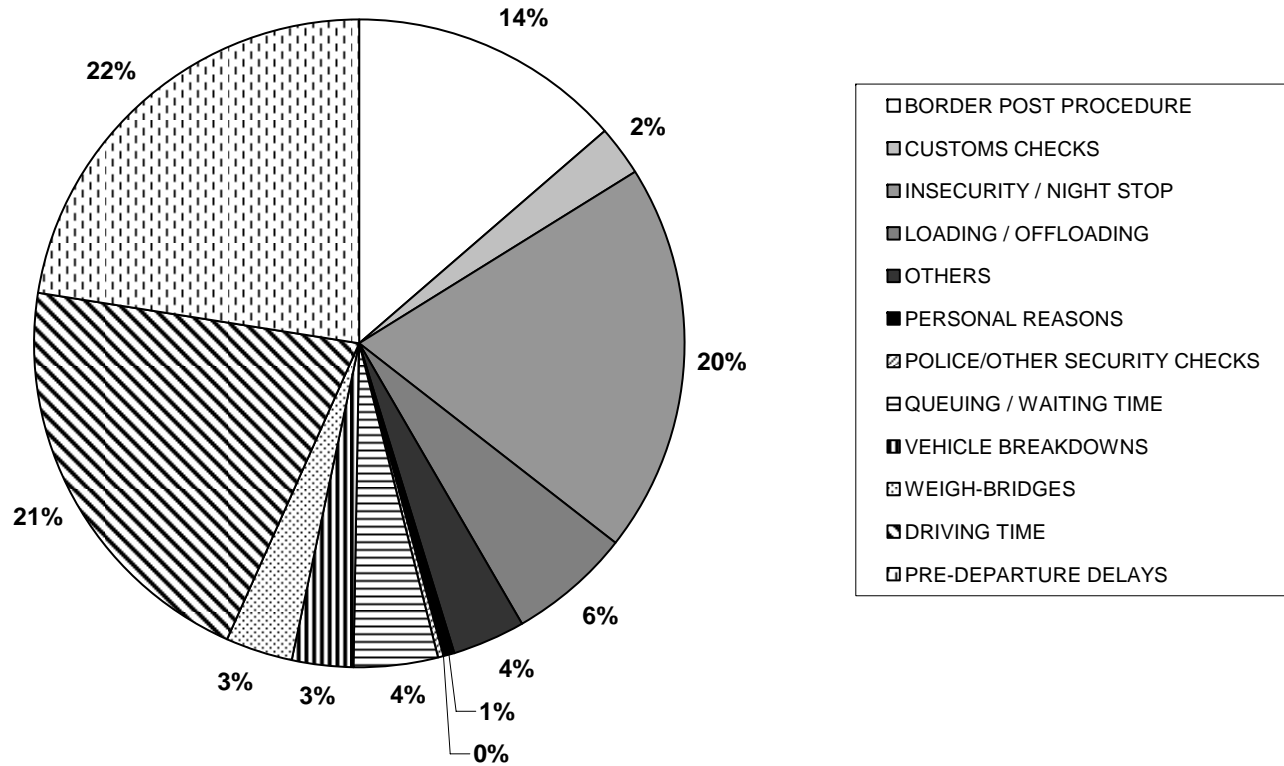
Impact on transit time

Impact of passage through transit yard in Mombasa



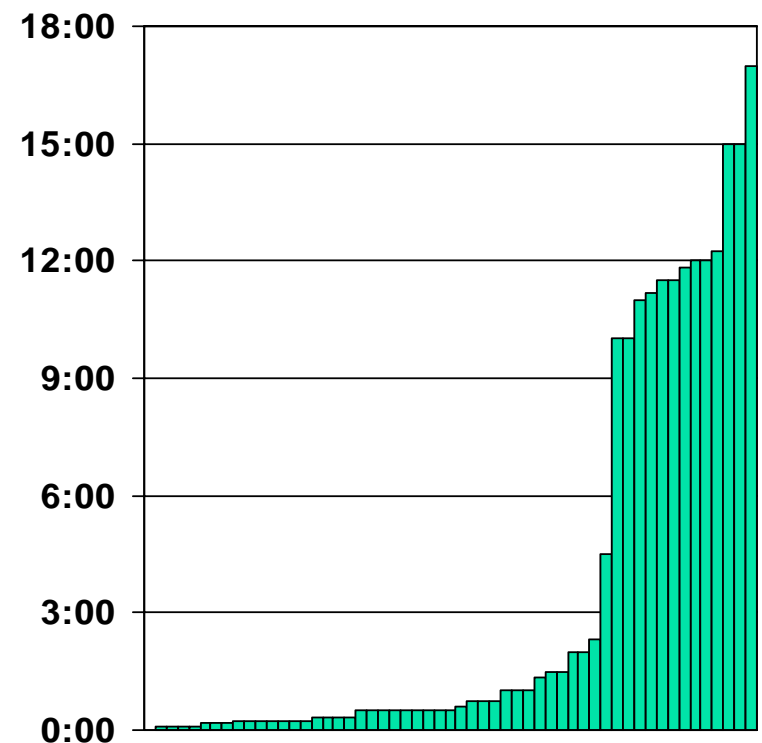
Decomposition of round trip time

Decomposition of Round trip time Mombasa Jinja (8.2 days)



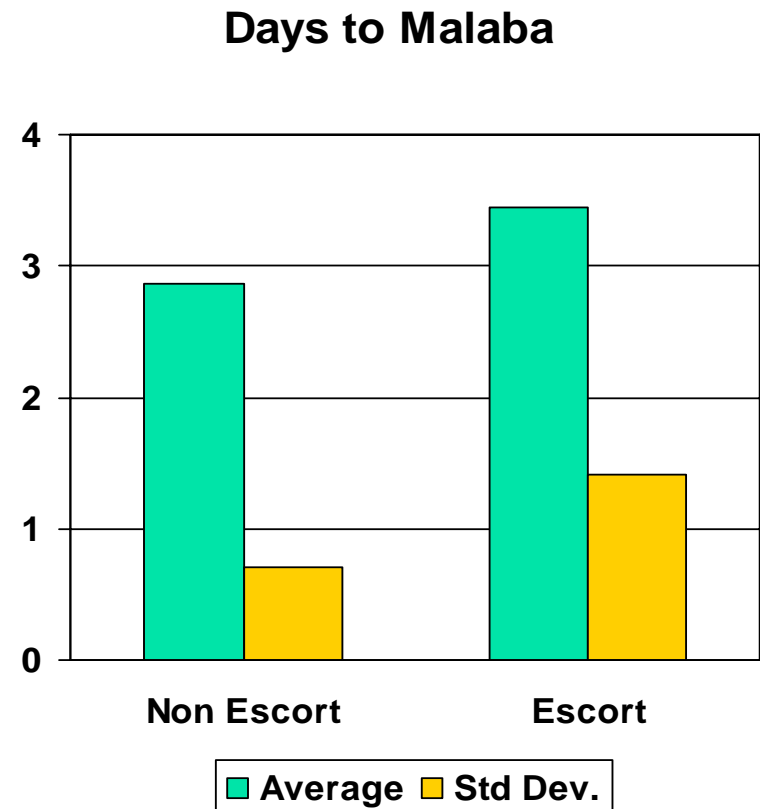
Weighbridges

- Drivers recorded stops at weighbridges in half of the trips
- Drivers stopped only in Kenya
- Half of the stops are less than 30mn
- Around $\frac{1}{4}$ of the stops are combined with night stop



Escort

- Out of 36 trips to Uganda, one third was subject to escort (others being tankers and steel products)
- On average, the trip between Mombasa and Malaba was longer by half a day for trucks subject to escort, but also less predictable





Lessons Learnt

- Road Survey
 - The involvement of the Transport Associations is necessary:
 - It will provide the necessary justification for the use of the indicators by the industry itself, to support its own positions
 - It will help in reaching additional companies



Lessons Learnt

- Some companies declined to show further interest and were ignored in order to focus only on more promising companies
- Number of partners limited but in extension after an initial presentation during KTA seminar
- Several series or trial and errors on the revision of the survey form



Lessons Learnt

- Computerized Data
 - In order to produce indicators, what is needed for the transport observatories is to know the time at which selected positions are reached and left or status are achieved by the consignments transported
 - This is close enough to cargo tracking requirements, in which the position / status / time of consignments are captured

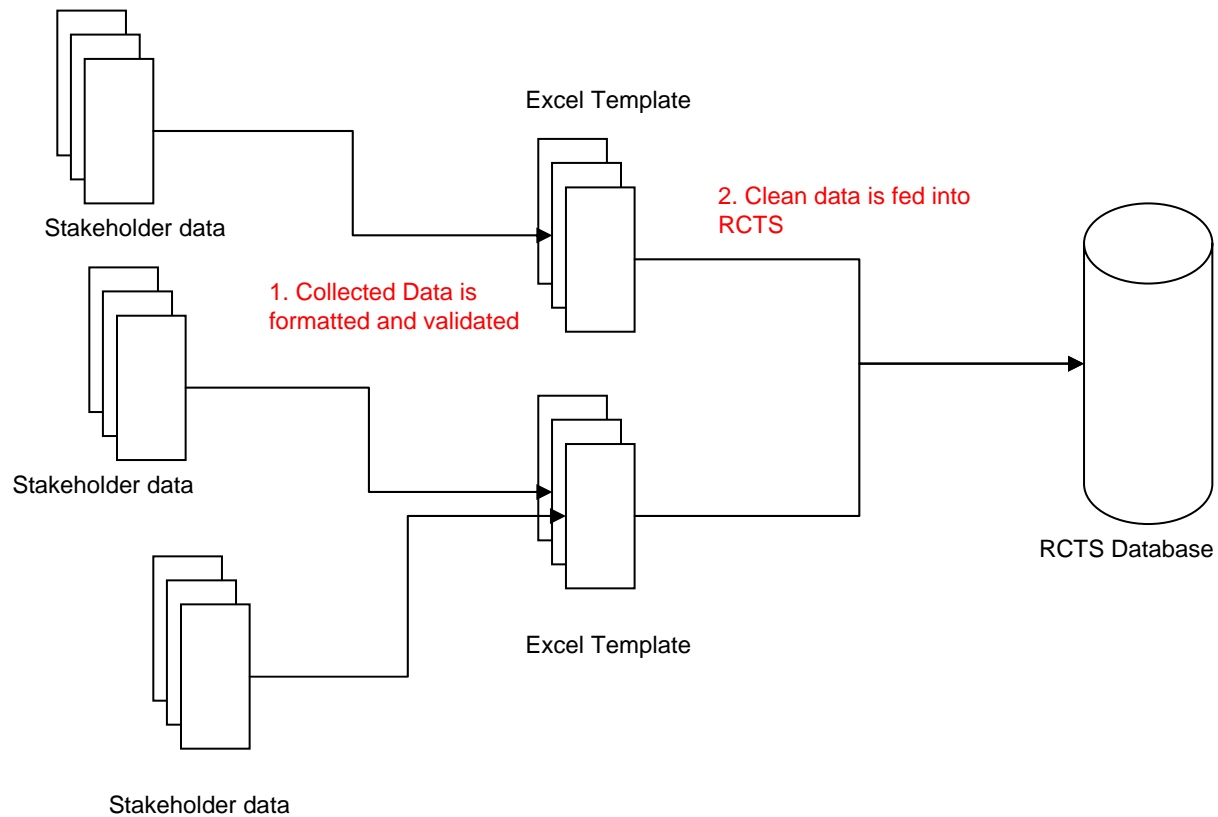


Lessons Learnt

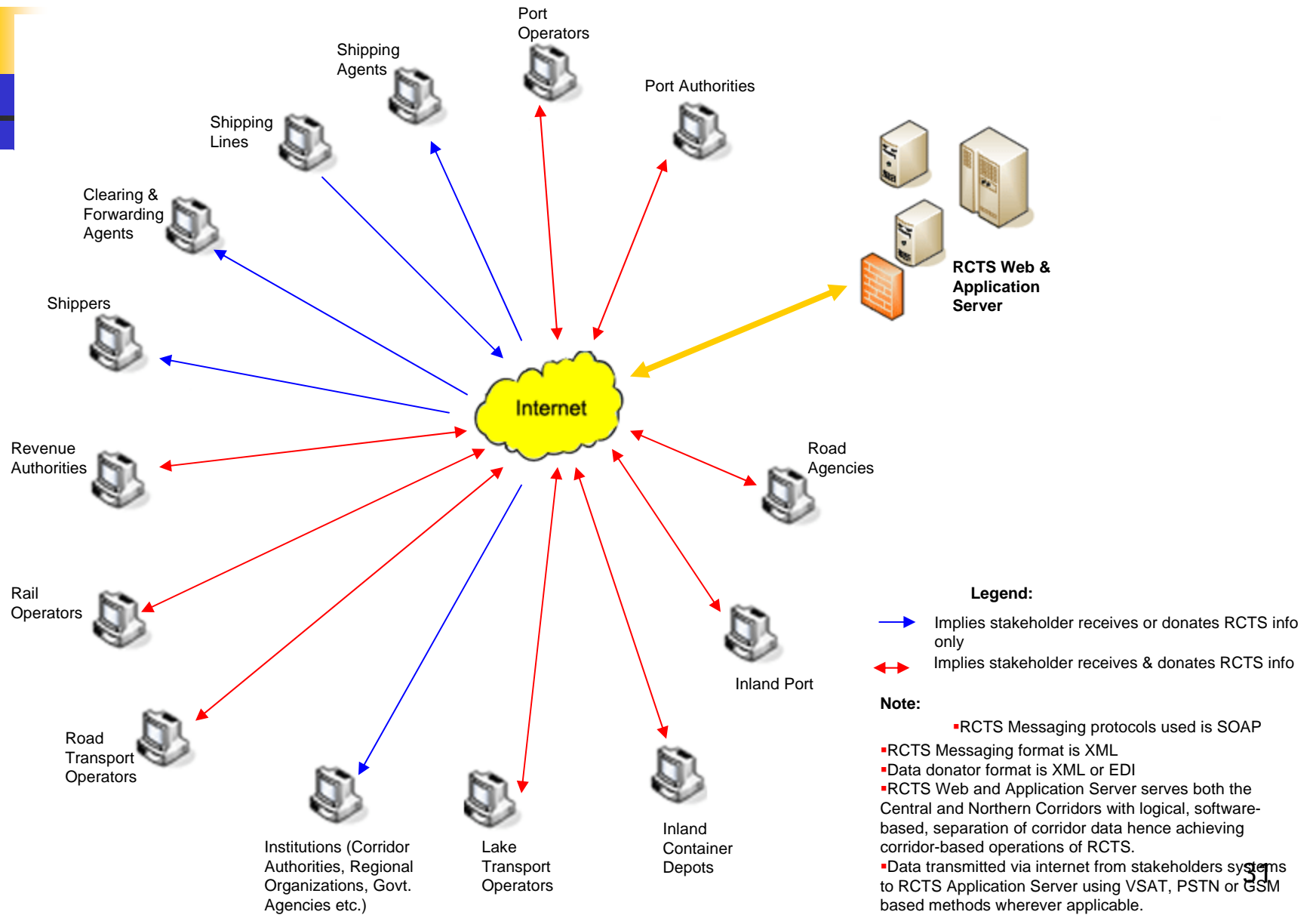
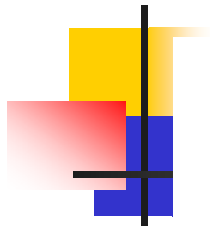
- Due to the railways concession process the availability of rail data was problematic
- Existing computerized systems contain information, but actual format of data is complex
- Better option seems to use data donated to RCTS
- URC reports discontinued

Lessons Learnt

■ Overview on RCTS



HIGH-LEVEL REGIONAL CARGO TRACKING SYSTEM (RCTS) ARCHITECTURE





Lessons Learnt

- Relevance of the RCTS
 - Due to the similarities between the two concerns at raw data level, there is sense in taking advantage of the synergies between the transport observatories and the RCTS
 - This is already the case as the data requirements expressed to KPA and KRA are addressing both needs



Lessons Learnt

- The data derived from RCTS, even expanded by Transport Observatories, will still require additional information (sequence of events and locations) through additional surveys
- Conversely, data from RCTS will enable calibration and validation of the data provided by the surveys



Lessons Learnt

- Relying on the drivers is a concern:
 - Existing trip sheets are not always adequately filled, so even less willingness to fill additional forms
 - May be perceived as control
 - Different understanding of the causes and approach to stops



Lessons Learnt

- The quality of the response is an issue:
 - In a first series of trip sheet, out of around 100 sheets, only a little more than half were sufficiently filled to enable treatment
 - In a second series of trip sheets, out of 70 forms, 40% were sufficiently filled to enable treatment



Challenges facing the CPM

- Field Data Collection and Stakeholders Consultation
 - Methodology approach have to be agreed among all Stakeholders
 - A baseline on freight rates and transport cost to be carried out in order to facilitate the Monitoring of Transports cost
 - Large consultation on Indicators “benchmark” defined with concerned Stakeholders is a prerequisite



Challenges facing the CPM

- Major service providers have to embrace ICT in order to improve their service delivery.
- Development of IT infrastructure to support data transfer and exchange
- Website have to facilitate dissemination and exchange of information among key stakeholders



Conclusion

- The Corridor Performance Monitoring cannot be useful tools without
 - Effective and Integrity Data Collection
 - Critical analysis
 - Wide distribution of the report generated
- On regular basis, need to update the benchmark in order to cope with the Corridor Performance situation



Thank you for Your Attention.
