



# Railway Market & Service Analysis

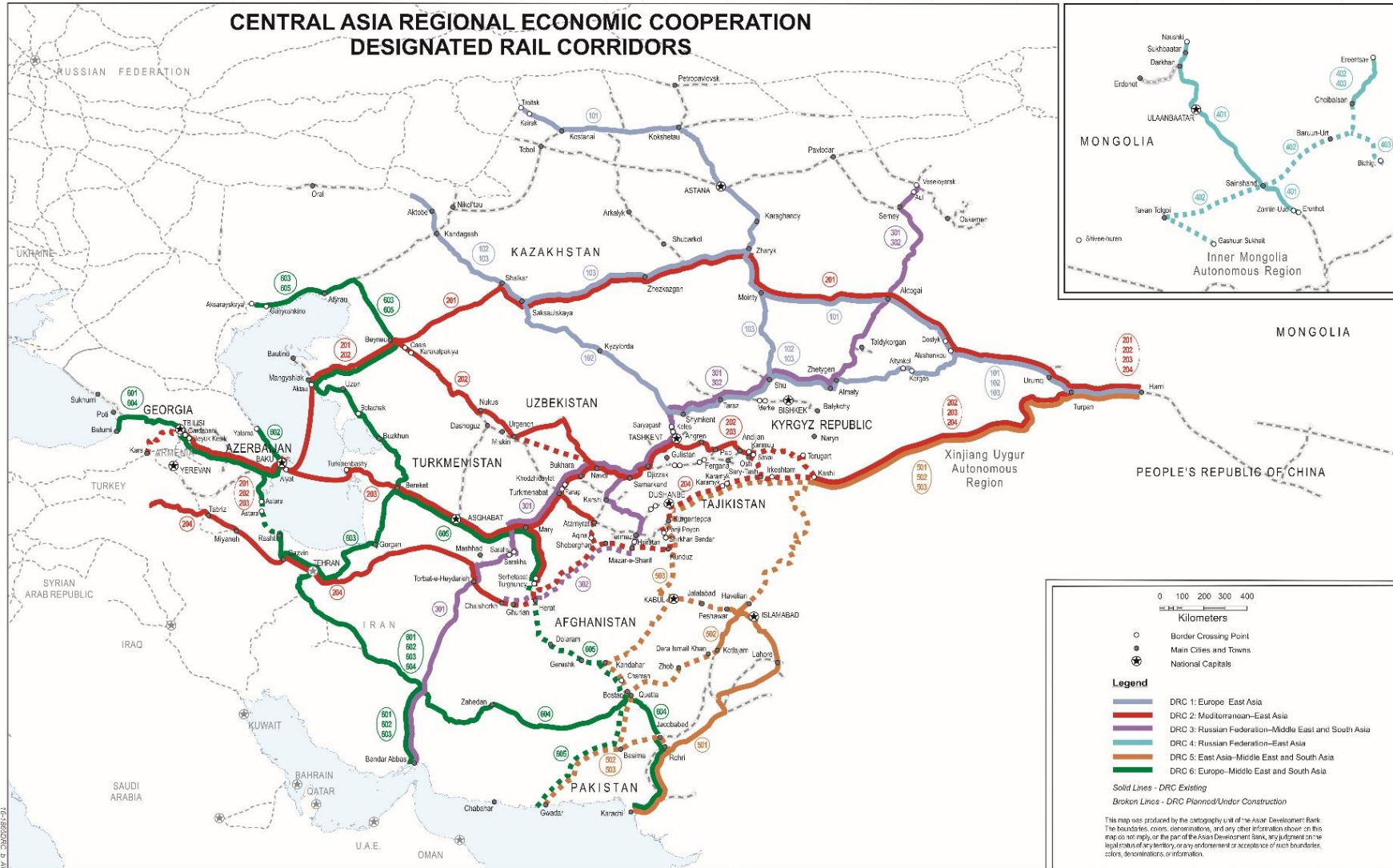
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Third Railway Working Group Meeting, Tbilisi

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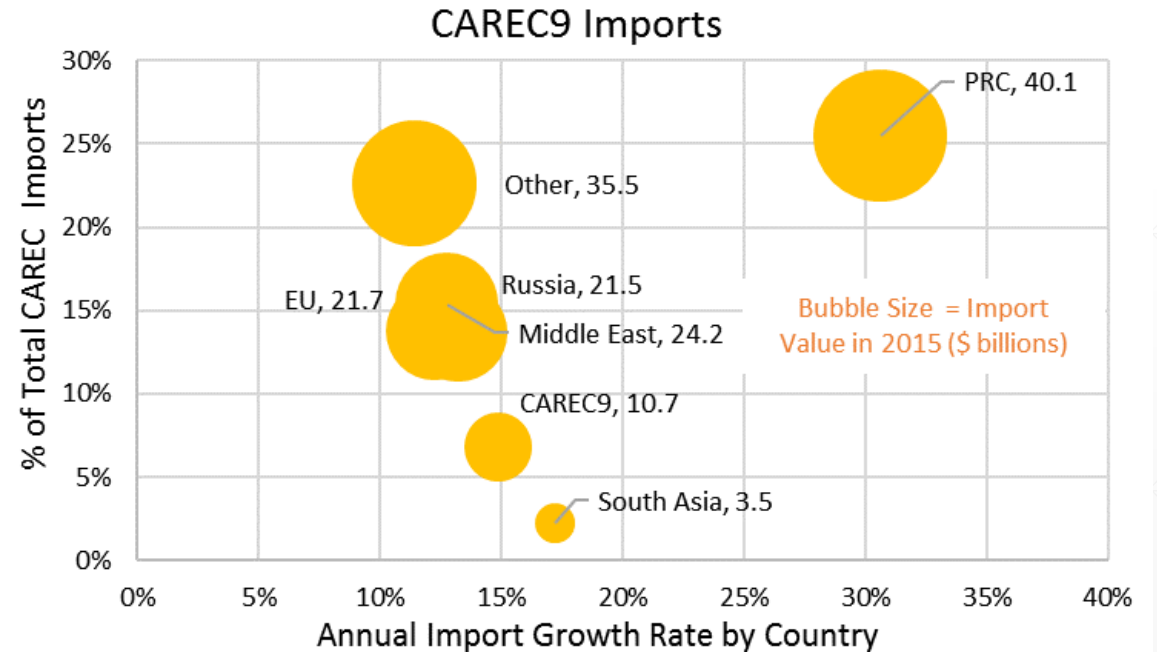
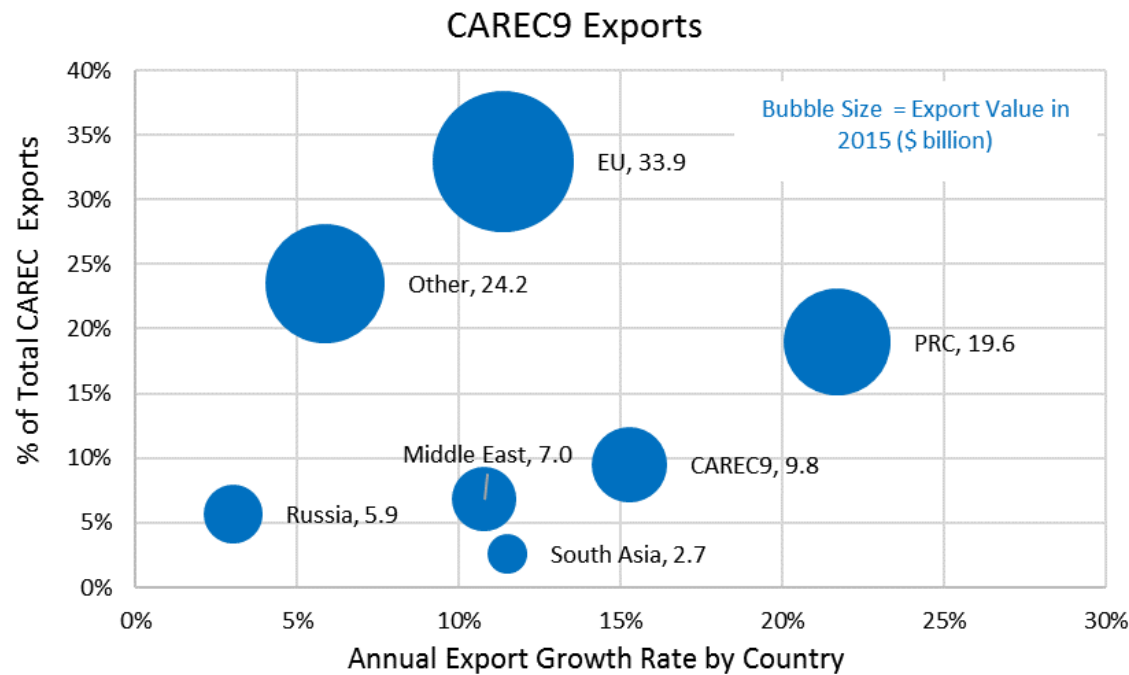
- Market Analysis
- Railway Market Factors
  - Price
  - Transit time and frequency
  - Security
  - Accessibility
  - Reliability
- Final Considerations

# CAREC rail corridors extend across Central Asia

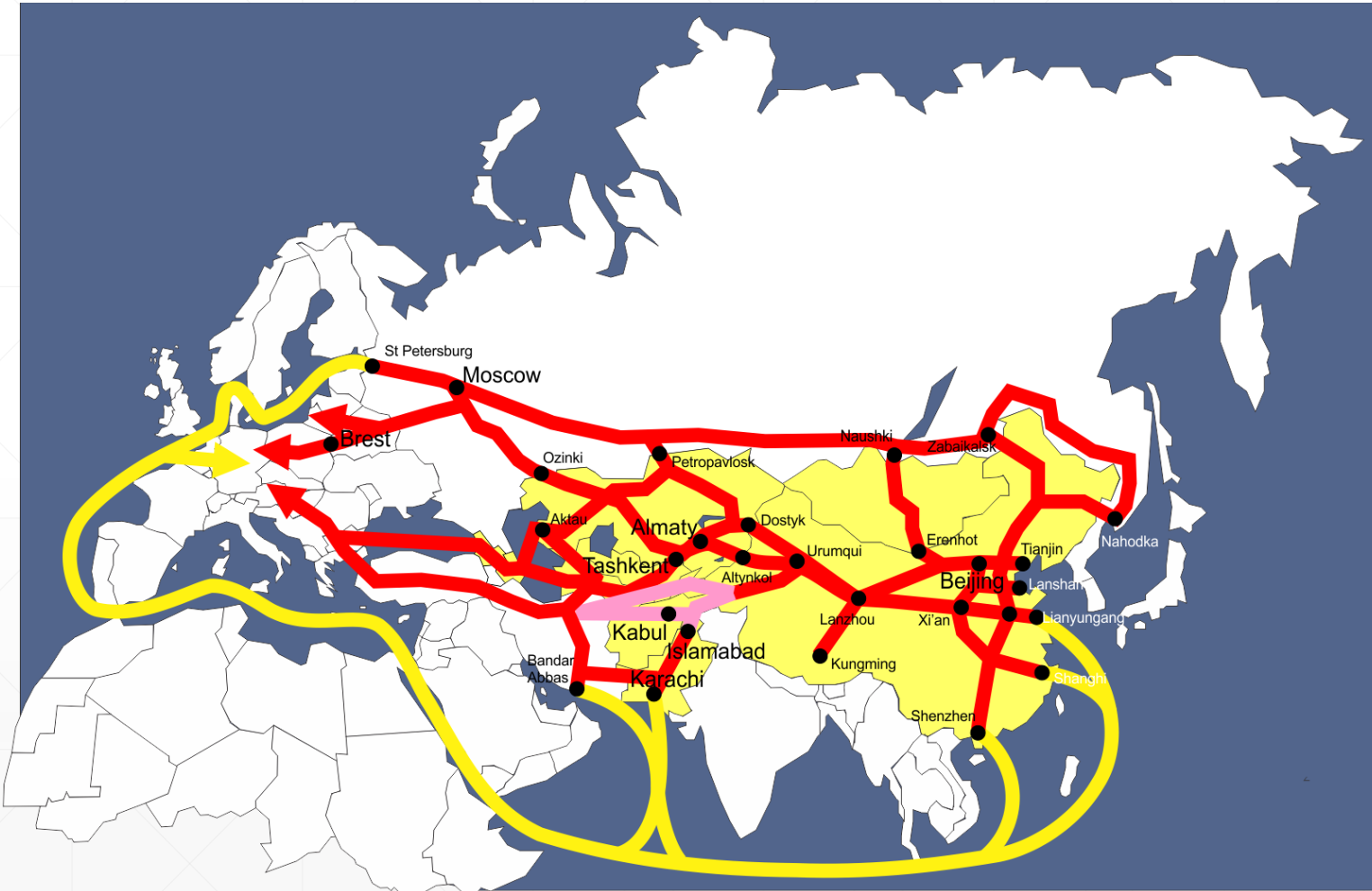


# CAREC corridors carry import, export, transit and domestic traffic

- Trade with PRC is fastest growing;
- Trade with EU is second largest;
- But this includes only import/export traffic, excludes transit and domestic traffic
- Import, export and transit traffic is a large proportion of CAREC9 railway traffic



# A CAREC-wide Market-Mode Choice Study is Needed



- In addition to land and sea routes, valuable traffic also moves by air
- In a modal-choice study of freight traffic between Europe and PRC new fast rail routes took more traffic from air than from sea
- This was high-value traffic where transit time was as important as transport costs
- Traffic thru and among CAREC countries can also move by road transport
- The question is what determines how which traffic moves

## **But, mode-choice analyses require a great deal of time, effort, and data**

- The analysis might be simplified somewhat with corridor specific analysis
- Supplement with market surveys to determine customer needs and preferences
- Railways can take other steps to analyze markets and determine investment priorities, particularly with domestic and import/export flow analysis
  - For railways where CAREC traffic is not as important, traditional bottom-up industry by industry analyses can be more effective
  - International CAREC traffic can be estimated based upon specific traffic types to be addressed – such as bulk oil, or coal

**Recent customer surveys for container traffic show some of the major issues to be addressed**

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# Customers must make complex mode and route decisions, many factors determine their choices

- Transport price is an important factor, but not just the rail tariffs
  - Transport prices include drayage, delivery, storage, lift-charges, duties and fees, in addition to the cost of long-haul transport
  - Getting to a price is very important – no surprises
- Transit time and frequency are more important for valuable goods (electronics, auto-parts, some fashions, machinery) with the time most important for very high-value goods
- Security is important, especially for high-value goods
  - Security includes “shipment protection” and may include insurance (another cost)
  - Security also includes knowledge – progress tracing, current location, status, expected movements
  - A Security Plan and a back-up plan are important for high-value goods
- Risk, not the same as “security”, is also a concern. Risk increases as the number of different railways, transporters, and handlings involved, increases – delays, equipment supply, security uncertainty, accountability

# Other important factors in mode/route choice

- Reliability is important but not as important as frequency and transit time – some long-distance multi-country trains move only once a month – but the risks related to multiple interchanges are concerning
- Equipment supply – important within CIS markets because of chronic equipment shortages; critical for movements with change in gauge
- Accountability is an important consideration related to both security and risk assessments
  - Who arranges and is responsible for the entire movement? Can we rely on the pricing provided?
  - Who will provide information on delays, location?
  - Who takes responsibility for loss and damage?
- **For many shippers, the complexity of multi-national rail movements represents a significant amount of uncertainty and expense**
  - In multi-country movements, price, transit time, frequency, equipment supply, accountability, reliability are all much more complicated and require significant management skill and time –
  - These are skills and time that many shippers may not have



# What can CAREC railways do to attract more traffic

- Integrate services across railways and various transport participants
- Enter into multi-railway agreements on prices, service schedules and frequency, equipment supply and charges, accountability, security
- Work with 3<sup>rd</sup> party logistics providers to assemble service packages
  - This is now somewhat common for international container movements
  - Expand these capabilities to include other traffic and equipment types and routes extending service capabilities
- Develop specialized terminals
- Develop arrangements to minimize delays and costs at borders
- Ensure adequate equipment supplies

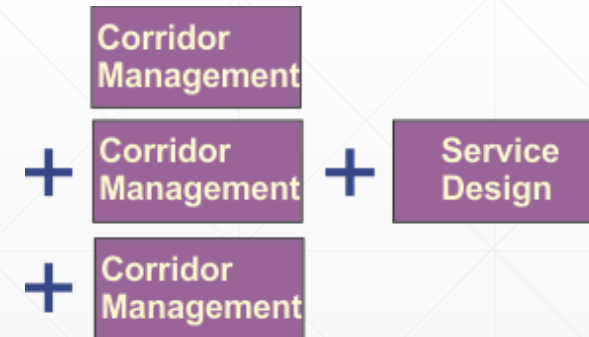
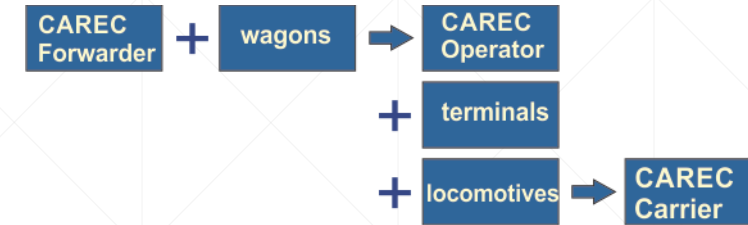
# What can CAREC railways do to attract more traffic?

## Simplify all aspects of transport via rail

- Develop single point of contact service providers . . . forwarders, wagon operators, terminal operators, 3<sup>rd</sup> party logistics joint ventures
  - This single-point-of-contact should be an integrated logistics provider who takes responsibility for the entire movement, or at least the rail portion of the movement
  - Can be corridor specific, commodity specific, or route-specific entity - it is not necessarily a single CAREC wide entity
  - Develops an acceptable movement security plan as a part of its integrated services
  - Coordinate movements through customs, gauge changes, railway interchanges
  - Provide a single “multi-railway” price, or a single movement price (including drayage, lifts, intermediate handlings, wagon lease/movement charges, etc.), depending on the client’s needs
  - Is fully accountable for all activities it is contracted to provide – works with shippers, other logistics providers, and with the involved railways to reduce risks, coordinate equipment supplies, handle movement information for tracing/tracking, and handles all loss & damage issues

# What can CAREC railways do to attract more traffic

- Create common CAREC rail operators – with appropriate rolling stock
  - The Rail/wagon operator could focus on CAREC-wide movements or on specific corridors, commodities or traffic types, or on specific routes
  - Operators acquire wagons appropriate to its market focus
  - Operators work with the single-point-of-contact entities (and may become one) to provide rolling stock and interface with multiple railways involved in the movements
  - Operators or other private entities can operate terminals, purchase locomotives, and perhaps become carriers where permitted
- Develop corridor management plans
  - Operations monitoring units to coordinate international services between railways
  - Service designs for international traffic, integrating with domestic service plans in each CAREC country



# Final Considerations

- What next steps should be taken to better identify and capture freight traffic moving over CAREC corridors?
  - Block train movements between terminals are most efficient, but, intermediate terminals can support many customers, different corridors and traffic that moves only partially on the corridor –
- How can CAREC railways look to integrate other traffic with CAREC corridor traffic
  - Corridor development can support traffic that moves on partial corridor
  - There may be a need for internal corridor terminals to coordinate such movements
- How can CAREC railways build on growing international traffic but incorporate shorter distance and partial corridor flows?
- What is needed to expand corridor specific agreements on pricing, development investments, and financing?

**What other steps are needed to shift more traffic to rail transport?**

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