# Nokia Siemens Networks Executive summary



## Capacity trading market place - Carrier Ethernet business made easy

### The use case example for the capacity trading market place solution

The enterprise customers of an Egyptian service provider have experienced a drop in the quality and service levels when communicating between Egypt and UK. The traffic between Egypt and UK has increased rapidly due to many new enterprise connections. The service provider is looking for a quick resolution of the connectivity problem.

There are several alternative ways for the connection between Egypt and UK. The Frankfurt based Ethernet Exchange operator can help the service provider find the best way of acquiring the required capacity. The actual provisioning of the connection is fast, but the contractual terms and settlements would require advanced system to support speedy business process. This is where Nokia Siemens Networks capacity trading market place adds value.

Nokia Siemens Networks has developed and filed the patent for the capacity trading market place technology for global connectivity market place. Through its open application programming interface (API) capacity trading market place provides with a transparent platform for multi party Carrier Grade Ethernet connectivity trading just like any other commodity such as oil and electricity exchange in the world works.

### The key tasks enabled by the capacity trading market place

#### 1. Service request and route selection

The service provider logs into the capacity trading market place portal, selects the connection end points and connection parameters such as bandwidth, connection time and service levels before sending the request to the market place. Thereafter, the capacity trading market place automatically processes the alternative routes between Egypt and UK according to the already set quality parameters and the costs. Moreover, it provides the options to the service provider for decision making and contractual agreements.

#### 2. Trading and SLA reports

The capacity trading market place provides the Egyptian service provider, who is placing a request with the trading history, for example, on the Service Level Agreements (SLA) and their fulfillment levels for the final decision making. It also provides the service provider with the SLA reports after the connections has been terminated. In case of SLA violation, the price of the specific connection will be reduced according to the contractual terms.

#### 3. Publishing on the capacity trading market place

Operators can publish individual connection 'legs' on the capacity trading market place. Publishing is done through the API from the Business Support System of the operator or Graphical User Interface of the capacity trading market place. While publishing, the connectivity operator can use their own SLA definitions. The capacity trading market place 'translates' the operator's SLA language to the one used on capacity trading market place. The SLA classes used on the capacity trading market place comprise of features namely, Ultra low latency, Real time communication, large data transfer and Browsing. The minimum trading unit on the capacity trading market place is 1 Mbps for an hour but the capacity can also be sold in larger blocks of 1Gbps, for instance.

#### 4. Providing SLA reports

The participating operator needs to measure the SLA per connection. Every provisioned connection will be measured and reported individually. SLA reporting is done from business support systems (BSS) to capacity trading market place through the API. In the SLA report, the reported capacity information will be aligned with the information format published on the capacity trading market place to ensure correct interpretation of the delivered service level versus the one specified in contractual terms.

#### 5. Billing

The trading parties need to have the financial securities and facilities in place. Clearing house is used to take care of the settlement, which takes place in every 24 hours. If there is no SLA violation, the connection sales price will be deposited in the seller's bank account. The connectivity buyer will be charged per transaction and the connectivity seller will provide security to both the trading parties through the clearing house.

In the near future, we foresee a situation, where transport capacity will be fully utilized (100%). The capacity will be divided into two categories namely constant load and on-demand load. When computing resources become more centralized, the on-demand transport will become the dominant factor in the network load. The transmission network providers need to change the way they operate today, to avoid becoming bottle necks for fast growing cloud computing traffic. The capacity trading market place serves both the retail and the wholesale connectivity business. In retail, there is a high unfulfilled demand in the market for special, short term needs like exhibitions, sports events and other events, where high capacity transport services are needed. In the wholesale business, the capacity trading market place acts as a sales channel for the service providers to buy and sell spare capacity without time consuming and expensive contract negotiation with several parties.

The key success factor for both businesses is the transparency and speed in the business process i.e. how fast the contractual terms and connection can be processed and how reliably the SLA management and the financial settlements can be managed. Nokia Siemens Networks capacity trading market place helps tap the fast growing Ethernet market opportunity.





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