

December 5, 2008

Question & Answers During the Optical Submarine Cable System Business Presentation

Questioner A

Q: Currently, how much surplus capacity is available in optical submarine cable systems in operation today?

A: It is known that global communications traffic is growing at a rate of 1.5 to 1.7 times annually, but submarine cable systems in operation today still have surplus capacity available to meet this demand by upgrading their terrestrial facilities. Moreover, in the case of building new cable systems, the use of WDM (Wavelength Division Multiplexer) technologies, which enables the placement of multiple wavelengths onto a single optical fiber, dramatically enhances the submarine cable system's capability to handle even more traffic. The latest technology in commercial operation enables a single optical fiber to carry 128 wavelengths of 10Gbit/s data, and we are on track to lift this upper limit to approximately 200 wavelengths in the near future.

Q: If the bit rate per wavelength is raised to 40Gbit/s, would that shorten the maximum transmission distance needed? If so, would it be feasible to utilize 40G systems in optical submarine cable systems?

A: The current 40G systems offer a maximum transmission distance of about 1,000 kilometers. This limitation still precludes their use in optical submarine cable systems, where the demand extends to over 10,000-kilometers. With that said, technology development is currently under way to develop and commercialize 40G systems for use in optical submarine cable systems three to four years from now.

Q: How do communications carriers decide when to invest in the next optical submarine cable system?

A: In most cases, carriers typically begin to consider their next investment in a new cable system when actual traffic reaches 50% of their available capacity. Also some carriers will invest to create diverse routes to avoid traffic outage in the event of earthquakes or other disasters, or to simply build redundancy into their networks.

Q: Is it possible to increase the system capacity of existing submarine cable systems?

A: Existing submarine cable systems do have a designed maximum capacity and cannot be unlimitedly increased. However, by utilizing new modulation technologies and narrowing the frequency spacing, we believe we can increase the system capacity by roughly 1.5 times.

Questioner B

Q: You mentioned that you expect the global market for optical submarine cable systems to be generally flat over the next several years. Do you see a similar trend for NEC's business in this field? Furthermore, what are your profit margins like for this business?

A: For fiscal year 2008, we expect sales of around ¥60 billion in total. Our goal, rather than shooting for significant growth, is to aim for a steady annual growth between several and 10 percent.

A: While profit margins differ from project to project, the margins from this business are slightly higher than the average margins for the entire Network Systems business.

Q: How will the acquisition of OCC affect NEC's margins? Are there any amortization expenses for goodwill that arose from this acquisition?

A: In terms of profitability, OCC has been constantly making a slight profit for the last couple of years. We plan to continue managing OCC at least at a breakeven level, after deducting amortization cost for goodwill.

Q: Could you disclose the sales ratio and earnings contributions with regards to the Transmission Equipment, Submarine Cables, and Cable Laying Marine Operations? Also, at which stage of the project implementation do these sales occur?

A: Roughly speaking, the Transmission Equipment, Submarine Cables, and Cable Laying Marine operations each contribute about one third. In terms of earning contributions, this varies from project to project, and is difficult to say.

A: Generally speaking, sales of Transmission Equipment are typically posted when they are shipped, and at the time of a system handover for Cables and Marine operations.

Q: Where is NEC positioned in relation to terrestrial WDM systems in North America?

A: For decades, NEC has kept a very good business relationship with AT&T. We had been for a while a little behind others in stretching out to other telecom carriers, and I think our position in the North American market remains fundamentally unchanged.

Questioner C

Q: When do you expect to record sales from the projects that NEC is currently engaged in?

A: The projects we are engaged in today are "I-ME-WE", "UNITY", "JAKABARE", and "AAG". We plan to conclude the construction and handover the system by 2009 for "JAKABARE," and should be able to wrap-up the remaining three during 2010.

Q: At your manufacturing plant, how do you cope with fluctuations in production demands?

A: Today, our Submarine Repeater manufacturing plant is capable of producing an output of 30 units per month, and we have the necessary facilities and resources on hand to accomplish this.

Q: In February, NEC announced an alliance with Alcatel-Lucent. Are you considering extending this partnership to the optical submarine cable systems area as well?

A: We are strongly open to all possibilities of an alliance in the Submarine Cables sector. As a matter of fact, the Submarine Cables units of Alcatel and NEC have been collaborating with each other since long before the strategic partnership was announced. We have supplied submarine cable systems together as a consortium on one hand, and have provided submarine repeaters and other equipment as sub-contractor on the other hand.

Q: Are there any project orders already on the horizon for beyond 2010?

A: Although I'm not at liberty to discuss specifics, we are involved in a number of major projects, mostly in Asia, where communications traffic is rising.

Questioner D

Q: I have understood that NEC's main competitors are Tyco and Alcatel-Lucent, so in what way does NEC differ from these companies?

A: Projects are awarded based on numerous factors. These factors include, among others, technological capabilities including quality of submarine repeaters, total system price, time to delivery, and relationship with customers, etc., and the current market share reflects the overall results. The high reliability of our equipment is definitely one of NEC's strengths. In fact, not a single undersea repeater that has been installed has failed during the past 30 odd years we have been in this business. Although we compete with both Tyco and Alcatel-Lucent most of the time, we also cooperate with one another whenever issues of production capacity and other matters dictate that we should.

Q: Will upcoming business negotiations be affected by the economic downturn we've seen recently?

A: I suppose there will be some impact, but it will still be some time before these economic effects fully materialize in this sector. The reasons for this are 1. optical submarine cable projects take place over long timeframes, which makes revising such plans midstream difficult, and 2. our main customers are mostly national flag carriers of each country and, at the same time, their respective projects are highly linked with public infrastructure. Going forward, while we don't foresee any major decrease in orders for at least a year, there could be a short-term impact with the yen's recent appreciation.

Q: How much of the total cost to manufacture submarine repeaters is due to the cost of materials?

A: Materials account for roughly 80% of total costs, with personnel and other production costs comprising the rest.

Q: What exactly is "passive-alignment technology," which is reported to enhance productivity?

A: Passive-alignment technology uses photons to enable high-precision splicing of optical fibers. This technology improves productivity while reducing human error since splicing work is done mostly automatically.

Questioner E

Q: What is the total cable length, in kilometers, that NEC/OCC will manufacture during the current fiscal year?

A: Approximately 12,000 kilometers.