

## NEC IR Day 2021 Q&A

### Network Services Business and Global 5G Business

Date/Time: September 16, 2021 13:00-14:00 JST

Location: Livestream broadcast from NEC Headquarters

Presenter: Atsuo Kawamura, Executive Vice President

Accompanied by: Shigeru Okuya, Corporative Executive

#### **Questioner A**

*Q: In reference to the graph of global base station market trends in page five of the presentation material, I understand that 4G will decrease, but I am wondering why the market overall is decreasing? Also, roughly how large of a business scale do you envision for global 5G in the event of full-scale commercialization?*

A: Although the global base station market will experience ups and downs, we believe that it will continue within a range from ¥3.5 to ¥4 trillion. As that continues, it is expected that the Open-RAN market will grow at a compound annual growth rate of more than 35%, so we will advance business with a focus on this domain. Although we will refrain from mentioning specific figures, we think that the target for RU (Radio Units) centered on hardware will be between several billion and upwards of ¥10 billion in a single year per business. Meanwhile, the scale for CU (Central Units) / DU (Distributed Units) centered on software is projected to make up roughly 30% of hardware, so we project a scale between ¥100 million and ¥3-4 billion.

#### **Questioner B**

*Q: With the existing mega vendors stuck in a closed-off environment, is it possible to take on Open-RAN?*

A: There is no guarantee that mega vendors aren't operating on Open-RAN. We think it is possible that they may change their direction to Open-RAN depending on the circumstances. However, if that happens, we believe that some existing markets will be opened, and that we will have an opportunity to participate in markets that were previously closed. For that reason, beginning with wireless base stations, we believe it is necessary to establish a track record within Japan, and gain a competitive edge by establishing a track record internationally as well. Furthermore, advancing development of CU / DU in the upper ranks of Open-RAN will also enable us to connect to the wireless sector of mega vendors, so that

is why we think that it is important to reach the market quickly.

We have previously announced the acquisition of Open-RAN projects with several telecom operators. We believe that approximately 85% of telecom operators want to advance Open-RAN, so we want to establish a firm footprint in the market, and drive the market forward as a leading vendor. Although mega vendors may be reluctant to participate in Open-RAN, based on the diversification of telecom operators' needs and future services, we at NEC would like to advance business with a focus on the Open-RAN market.

*Q: The graph on page five of the presentation material gives the impression that the global base station market will shrink. It appears that in End to End, NEC is targeting accompanying businesses such as SMO (Service Management and Orchestration), but how do you see the global base station business fitting into the overall product strategy?*

A: To begin, we will strive to enter the market from wireless base stations. From there, we will provide various types of value through total solutions matched to customers' needs. Furthermore, because access will further diversify in the base station business as well, we will strive to develop into a multivendor matched to that diversification, and develop an ecosystem. We project that needs for not only hardware but software will greatly increase in the future. By controlling the entire network and providing value to customers, we hope to secure our position, and provide value to customers in a sustainable manner as the leading company in the Open-RAN market. Regarding the upper layer of our product portfolio, Netcracker, which is our fully-consolidated subsidiary, is involved in SMO, while from the lower layer, we hope to steadily build up a track record through RU or CU / DU, thereby advancing on both fronts.

#### **Questioner C**

*Q: Please tell me your vision for a customer strategy. The major telecom operators in each country have already transitioned into mega vendors, and even though the cost benefits are tremendous, in consideration of stable operation, the stance appears to be that they will observe Open-RAN for the time being. On the other hand, as for newly participating telecom operators, although cash flow is tight, and there is a desire to try an approach like Open-RAN, I think they are determining how to try that approach while also surviving as telecom operators. I assume that NEC's targets are the major telecom operators in each country known as mega carriers. From the perspectives of volume and speed, which contributes more to business results—major telecom operators or newly participating telecom operators?*

A: Essentially, the reality is that our current customer target is Tier 1 telecom operators. However, there are several dozen Tier 1 telecom operators in the global market. Among those, we are targeting customers who say they want to advance Open-RAN themselves, and we view Europe, North America, and India as our target markets. On the other hand, it is, without a doubt, difficult to enter areas where there are existing vendors. That being said, when we took a long-term view of Open-RAN, we understood that the ones who are now trying to make the switch in consideration of the potential of developing something into software are customers who are independently advancing the aforementioned Open-RAN. We believe that rapidly producing products that stabilize quality may, depending on circumstances, lead to a situation in which 5G dependent on the unique specifications of existing vendors and 5G in Open-RAN will compete. Therefore, we intend to act quickly while bridging track records and enhancing capabilities. We would like you to understand that it is not that we will exclusively target Tier 1 customers, but rather that many of the customers advancing Open-RAN are in Tier 1.

*Q: Regarding global 5G projects being obtained through commercialization, what you mean is that in the period of approximately the next six months to a year, achieving the results of stable operation will be a critical point for further expansion?*

A: I believe so.

*Q: Among investors who have been observing NEC over the long term, I think there are many whose image of the company is of the past failures in global development, not only in telecom networks but in mobile devices, etc. I would like to know what will be different this time.*

A: Up until now, we have carried out product-focused global development at least in the telecom domain from a technological perspective. New market opportunities for 5G are increasing. I think that there is demand, as interest in Open-RAN is extremely high from perspectives such as telecom infrastructure to break free from vendor lock-in, promote future DX and provide diverse services. SDN and NFV had value as things that could replace existing systems through technology, but they did not align with the needs of the market. As for this Open-RAN, by which I mean 5G, there is new access and new technology to meet demands for diverse telecom infrastructure. Additionally, a large difference this time is that customers are demanding open ecosystems as a means of provided value, which is what the overall 5G market is striving to achieve. As ecosystems have become more open in the world of IT, there has also been a trend toward opening in the world of networks, which NEC perceives as an opportunity for business expansion. We believe that when NEC

assumes a leading position in the global 5G market, it will become a critical point for network business in the long term.

**Questioner D**

*Q: With regard to the target for global 5G revenue of ¥190.0 billion in fiscal 2025, I understand that domestic business may account for approximately 60% of that. As for the operating profit margin target of 10%, that depends on how much the current strategy materializes, but when considering that approximately 30% of that will be software for the international market, and that sales from more than 10 companies will be accumulated, I think that this target may be considerably conservative. Business related to domestic 5G base stations, in particular, is thought to have a high level of profitability, so I assume that the operating profit margin target of 10% can be achieved even without profit contributions from the international business. What kinds of risks were taken into consideration to come up with these figures?*

A: If all goes well, I think we can achieve even higher figures, as you pointed out. However, we set these numerical targets as a framework among companywide operating profit targets after considering risks and contingency within the overall plan. There are aspects in which we are viewing domestic figures conservatively, and we plan to solidly secure profit for the international 5G as well. Going forward, it is projected that investments in domestic networks will not largely increase, so our projection is that 50% or more of the ¥190.0 billion will be international sales.