Q&A at the Communications Systems Business Briefing (online)

Q: Could you share with us details of the background as to why the business performance in the Communications Systems Business improved rapidly in this first half? I thought that whereas some of the achievements have shown up as a result of your steady efforts, there is a temporary boost brought out by your success in making supplies of products return to normal ahead of other companies. How much of this year's situation is underlying strength that will continue into the next year and beyond? How much of it was improved by the favorable trend of the external environment?

A: The situation in the first half of this fiscal year is partly due to the fact that our supplies of products improved considerably before the competitors. As the professional radio system market is dominated by Company A, orders for products are redirected to us when supplies of Company A are suspended. Therefore, our order backlogs have piled up considerably, and all products that we produced are sold. At the same time, about 74% of our Communications Systems Business is for North America, which means that our sales have been partly pushed up by the weaker yen. These two factors have led particularly to our achievements in this fiscal year.

As for sustainability, we have secured a certain level of profit even when excluding the impact of yen depreciation. In U.S. dollar terms, local sales have increased. Although a reason is the supply of products, the main reasons are that demand related to crisis management has risen, and the second wave of replacement of digitization, which started in 2009, is coming. We expect these to continue for the next seven to eight years. We anticipate that the degree of sustainability will be significantly high as we habe been launching new products to strengthen our lineup when demand is strong.

Q: The profit ratio in this fiscal year is shown a little higher, and it is not certain that this trend will continue in the future. However, the profit ratio has clearly improved as a real strength when compared with the average ratio in the last five years. Do I understand this right?

A: Yes. We posted a core operating income rate of 27% or so at the peak during this fiscal year. We initially targeted a core operating income rate of 10% or more for 2023. We are overshooting it comfortably. Down the road, we expect to secure a core operating income rate of about 10 to 15% on average. To this end, we are advancing internal reforms, which is one of the internal factors for growth, as explained on page 25 of the presentation material, including the fixed cost reform. We expect the Communications Systems Business to be a growth engine in the next vision as a business that creates profits in the company group.

Q: Regarding the market share. Has your market share changed or not over the last three to five years? How did the trend change? Is the share expansion sustainable? If your achievements have manifested themselves as a result of the early recovery of the supply system, will your growth settle down to the same pace as market growth once semiconductor shortages calm down and the production and shipments of the competitors return to normal?

A: "Public Safety Market (P25 only)" at the bottom right on page 20 "Our Market Share (all regions in 2021)" in the presentation material shows that our market share is 2%. Our market share has basically been almost unchanged since the acquisition of EF Johnson Technologies, Inc. (EFJT). We explained previously on page 23 regarding the new product VP8000. With the introduction of this product to the market, we were able to win the three major projects even before its launch. This means that our radio systems have been accepted by the market and we have become able to capture medium-sized to large projects. Our target is to elevate the current market share of 2% to 10% or so as our radio systems continue to be further accepted by the market through the launch of this new product. We find the probability of that is high to a certain extent.

In respect of the total number of units in the whole market, demand for replacing radio devices usually comes every five to seven years. Even if users buy their first device, it cannot last for good. It needs to be replaced every five to seven years. Accordingly, we have secured a market share that exceeds a certain level.

We studied the make-up of radio systems of Company A, and we found that the same part was employed by all categories of their radio systems. Maybe, that made the supply of products difficult and eventually let it stop. Although we are aware that our backlogs of orders are something like demand created by the bubble, we are presently receiving more and more orders from dealers that cannot obtain the products of Company A. It is common in this industry that once users change manufacturers, it is hard for them to return to the former manufacturers. In an industry where users will not change their manufacturers unless something occurs, we are kind of lucky. However, we are

certain to keep increasing our market share.

Q: Company B has been ousted from the U.S. market and its market share is declining. I assume that your company and others are gaining some of the market share that Company B is losing, but what has been the transition? According to your previous explanation, your market share had not changed much until 2021. But, should we look at it with the understanding that your company will slightly increase the market share in the future?

A: We see the situation that way. Our market share in the public safety (P25) market is currently 2%. But, our current sales are almost double what they were after we acquired EFJT in 2014. As the amount is small compared with the size of the overall market, it makes little difference in the percentage. Nonetheless, our business in this market has steadily grown, and we think that we can aim for up to a 10% market share. Therefore, the public safety market in North America is a huge growth domain to us, too.

Q: Regarding competition with Company B. I gather that the move to ban the company has been around for some years. I think that the move has existed as a latent theme for some time, but the move has been becoming real recently. Could you share that background with us?

A: Around October or November 2021, the Biden administration approved the policy of not adopting or purchasing products from five Chinese companies for the U.S. market, particularly in the fields of government-related public safety and defense. On November 25, 2022, the Federal Communication Committee (FCC) officially announced that it would implement this. The announcement clearly documented that the FCC would no longer certify the telecom equipment of the aforementioned five Chinese companies. Company B is among them. The FCC announcement includes the description that it can revoke previously granted FCC certifications. Therefore, we added this information at this timing.

Q: You explained that Company B was not engaged in the public sector market in the first place and that the company ran business mainly in the private sector market. I speculate that as you actually proceeded with negotiations concerning private projects, there had been the move that buyers wanted to replace equipment of Company B with yours for fear of the risk of Company B being ousted. Do you feel that orders that the supply cannot catch up with due to the impact of parts shortages now surged and are coming your way?

A: We have not felt that much yet. Customers started holding off on purchasing equipment of Company B after the announcement in 2021. Nonetheless, Company B kept launching new products that were capable of obtaining the FCC certification. We imagine that the announcement of November 25, 2022 has put Company B in a considerably difficult position. Having said that, we are not certain that its situation will lead us to receive orders until we see how the situation unfolds.

Q: This time around, you have not explained a lot about broadband market. I think that you explained that you made a capital contribution to Sonim Technologies, Inc. and Tait International Ltd., saying that this (broadband) domain had the potential for big growth. Could you lay out the progress that you have made so far and your expectations for the future.

A: In the U.S., particularly in the public safety market, approximately 3,000 counties are taking steps in updating their professional radio communications systems for digitization. However, the market will not jump to broadband. A little before, we anticipated that particularly the private sector market would lead a dramatic change to broadband. However, in the actual market, there remain various advantages of existing professional radio systems, and as explained before, these systems have not been replaced with broadband equipment in a rush. The market that our strategy for the future will focus on is a “hybrid solution” that positions broadband as an additional function to professional radio systems. For example, professional radio systems may incorporate functions such as large-volume data communication and image transmission. We foresee that the professional radio system market will not be absorbed by the broadband market in one go and that the two different markets will exist side by side for another ten to twenty years.

Q: As an outlook, there has been speculation that the existing radio system market, which cannot take advantage of features such as push-to-talk and durability, can be replaced with apps for general-

purpose devices including smartphones. Are you aware of this?

A: Certainly. There are various categories of professional radio systems. A wide range from high-end models like ones employed by firefighters, medical emergency service and the police, called high tier, to license-free transceivers used by commercial facilities, bars and others. We think that it is possible that radio systems in the latter category will be replaced with apps for smartphones in the future.

Q: Regarding P25 devices, you explained that the main body (plus necessary accessories) accounted for about 35% of the selling price with the software making up about 65%. Will your sales be recorded again when users update software after having purchased the device? You say that particularly products for the public safety market are highly durable. But do many users purchase your product again when their current one is damaged? Or do lots of users buy competitors' equipment that can communicate with yours?

A: With the pie chart of "Example of a business model for the P25 market" on page 24 of the presentation material, we explained that hardware and software accounted for about 35% and 65% of the selling price of a portable radio device, respectively, as an example. In common with all companies in the industry, software options account for a large percentage of terminal prices in P25 market deals. The percentage can apply to almost all projects in the P25 market. Even in the case where customers replace their equipment, the price of software will be set per unit. So, when they buy a new radio device, the mechanism is to have customers buy hardware and software that cost 35% and 65% respectively, in addition.

In cases of orders related to systems, even if a customer has used our radio system, the customer may buy a device of Company A to replace only a radio device with a new one. Or conversely, if a customer has had a system of Company A, the customer may buy our device. This is because the P25 communication protocol is an open protocol, and each company uses the same one. Currently, our market share is extremely low, so we want to think of having customers change from devices of Company A to those of ours as a strategy.

Q: Could you share with us the features of the noise canceling function? The period and reasons to expand into Formula 1. What outstanding features will you have in your long history? Will it have any cost-competitive features such a low cost when mounting it to devices?

A: The most important aspect of professional radio is to convey voice without fail. A noise canceling function is added to make it possible for a voice to be transmitted even amid any noise. We have learned many types of know-how in the high noise level of Formula 1 races. One of the goals we pursued in our support of Formula 1 is to promote our brand. Other goals are to enhance the noise-cancelling performance of our radio systems, and to strengthen communication confidentiality. Through such activities, we acquired know-how in noise cancellation, and we have mounted that expertise onto our digital radio systems for the private sector market, then onto our P25 radio systems for the public safety market. This function will play a role in significantly differentiating ourselves from the competitors. That is why we presented it as our strength. The noise cancelling function itself is actually mounted by deploying software and a digital sound processor (DSP), it leads to development costs, but there are no large costs other than that.

Q: Why is the U.S. market so large in the first place? I understand that Company X and Company Y provide radio systems for firefighting in Japan. With the communication protocols you are deploying, is there no chance of entering the domestic market? I think that you have brand power in Europe in the business of car navigation systems and other Mobility & Telematics Services Sector (M&T) related products. But you should not expect a business opportunity regarding professional radio systems in Europe. Am I correct?

A: Professional radio systems originated in North America. The U.S. market began by connecting vast areas directly (without relays) in the 60 MHz or the VHF band, which was called low band in those days. That's why North America is the biggest market in the world. As for the digital communication protocol for the public safety market called P25, a mechanism is in place to ensure firefighters, medical emergency service, and the police can communicate in the same protocol, but this is not the case in Japan. Also, that is an open protocol. The market size is about 400 billion yen, but unlike Japan, the technology has been established as a system that makes lateral collaboration possible, and this has made North America the largest market in the world. Europe consists of a variety of

countries, each of which has regional features. In Europe's public safety market, there is a telecommunication standard called Terrestrial Trunked Radio (TETRA), which has declined and has largely been replaced with Long-Term Evolution (LTE). In order for us to gain market share in Europe in the future, there is still a lot of room for taking market share in the private sector market that employs the communication standard, Digital Mobile Radio (DMR). Therefore, we will tackle this market. The same applies to Asia Pacific (APAC). Consequently, we are all dependent on North America in terms of region. Furthermore, we will move to take market share in the DMR market not only in Europe and but also in APAC.
On the other hand, as our market share is still low in the Japanese market, we will focus on this. The Japanese market has long been dominated by several Japanese companies. With the police, firefighters and medical emergency service siloed from each other, the barrier to entry is extremely high. They use different communications protocols. Regrettably, we have not yet had resources to spare for complying with all of them. That is why we have been focused on the North American market, whose size is the biggest in the world. However, since the Japanese market is home to us as a company, we too are considering putting more effort into the public safety market in Japan.