New Breeze

Quarterly of The ITU Association of Japan

Special Feature

The Latest on eSports and Sustainable Development Goals

The Global Rise of eSports and Japan's Increasing Prominence

Local Government Measures Utilizing Content

Formation and Other eSports Activities for Disabled Persons in Gunma Prefecture

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C O N T E N T S

About ITU-AJ

The ITU Association of Japan (ITU-AJ) was founded on September 1, 1971, to
coordinate Japanese activities in the telecommunication and broadcasting sectors
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cooperate in various activities of international organizations such as the ITU and to
disseminate information about them. The Association also aims to help developing
countries by supporting technical assistance, as well as by taking part in general
international cooperation, mainly through the Asia-Pacific Telecommunity (APT),
so as to contribute to the advance of the telecommunications and broadcasting
throughout the world.

The Global Rise of eSports and Japan's Increasing Prominence

Japan esports Union (JeSU)
Hirokazu HAMAMURA

1. The global rise of eSports

The rising world of eSports is advancing beyond all imagination viewed from Japan. The competitive level of players from Japan is not low by global standards and it has not been unusual to see Japanese player in the highest ranks in tournaments hosted by international eSports organizations. However, we cannot yet say that the economic environment supporting players and games in Japan has taken shape.

The global eSports market in 2019 was estimated by Newzoo to be on a scale of 958 million dollars, but was expected to grow by a factor of 11.7 in the following 5 years, to reach 1.62 billion dollars in 2024. As an intermediate figure, it was estimated at 1.084 billion dollars in 2021. To understand the market better, we need to break down this number further. The largest fraction of the market is sponsorships. At 641 million dollars, this represents 59% of the whole market. The next largest part of the market is media rights, accounting for 293 million dollars, or 18%. Sales of related goods and tickets were 66 million dollars, less than 3% of the total. In the major physical sports, 20 to 25% is understood to depend on sponsorship. The fact that the part dependent on sponsorships is greater than the business part indicates that the global eSports market is still developing. eSports can also provide content for broadcast. The number of viewers has also become an important KPI. This trend can be followed using the same data from Newzoo. The global total number of eSports viewers was 397 million in 2019. However, five years later in 2024, this figure was estimated to grow by a factor of about 1.45, to 577 million. Thus, the global eSports market is expected to grow greatly into the future, in both sales and number of customers.

Overseas, eSports is recognized by nations, governments and academic institutions, and is protected in many cases. An example of this is in North America, where the U.S. Citizenship and Immigration Bureau has recognized League of Legends, an archetypical eSports title, as a professional sport. It will now issue athlete visas to players entering from other countries. Robert Morris University in Pennsylvania provides support such as 50% fee exemptions for students recognized as eSports athletes. The University of California, Irvine Campus, has also offered eSports scholarships to eSports players since 2016. The university has also invested approximately 25 million yen to build a dedicated eSports arena facility. In another case, the Philadelphia team in the Over Watch league announced it had invested 50 million dollars to build the Fusion Arena, an eSports arena with a capacity of 3,500 people. GameStop, the most widely recognized game retailer in America, has also announced that they have acquired naming rights for an eSports facility that opened in May, 2019.

eSports is also popular in Europe. Three high schools in Sweden have incorporated eSports into their physical education classes for three hours per week. Public high schools in Norway are also using eSports as electives in physical education. York University in the U.K. has joined with the Electronic Sports League (ESL) to conduct research related to the eSports industry. York University is also giving credits toward degrees to students taking courses in eSports. In 2016, the Ministry of Sport in Russia announced that they would recognize eSports as sports. In the U.K., FIFA opened an ePremium League for eSports tournaments. In France, Team Vitality, which is known as a leading eSports team, raised 20 million Euros of capital. They announced that it was allocated for developing advanced facilities and to strengthen the team.

In South Korea, which is recognized as an eSports Mecca and advanced even within Asia, awareness of eSports is high and initiatives are progressing. At Chung-Ang University in Korea, eSports are used as part of the entrance exams for the Department of Physical Education. The exams test both skills and achievements, and university entrance is determined based on both eSports skills and achievements in past tournaments. Support for eSports by the government is also well developed in Korea. Since 1999, eSports organizations in Korea have received support from the Ministry of Culture, Sports and Tourism. In 2010, a law was enacted to encourage eSports. In 2016, the city of Seoul and the Ministry of Culture, Sports and Tourism jointly built the Seoul eSports Stadium.

Enthusiasm for eSports is also high in China. The number of eSports players in China is already thought to exceed 300 million, and the government is studying ways to cultivate players. The government recognizes eSports player as an occupation, and colleges training players are appearing in regions throughout China.

One KPI measuring the popularity of eSports is prize money. In tournaments hosted by Epic Games using their product, Fortnite, in 2018 and 2019, prizes totaling 100 million dollars were offered. In July 2019, in the final of a tournament held in New York, the winner was a 16-year-old, who received a prize of three million dollars. Professional league play is also popular. In the Overwatch League, with franchise teams based in major cities in America, China, the U.K., and Korea, teams compete in global championships, with support from their local areas. Broadcast rights for these events together with other IP competitions, as released by the publisher, were priced at an astonishing 17 billion yen for a two-year contract.

2. eSports in Japan beginning to gain prominence

Compared to Japan, the global eSports scene is astonishing, with large figures in administration, understanding and support from academia, prize money, broadcast rights and other aspects. In contrast, the eSports market in Japan in 2017, as reported by the Ministry of Internal Affairs and Communications, was not even 400 million yen. However, with the appearance of eSports in an exhibition at the Pyeong Chang Olympics, and the Japan eSports Union (the first of its kind) beginning to issue professional licenses, the eSports scene in Japan is beginning to change. At the Asia Tournament, held as an exhibition match in August 2018, Japanese players and teams were selected in five matches, and sent to East Asia qualifying matches. The "Winning Eleven" players that broke through these qualifying matches accomplished a great achievement and received a gold medal. This great achievement by Japanese players in their first international competition was reported widely in various media. At the end of that same year, "eSports" was selected for a "New and Trending Word" prize. Sales exceeding 4.8 billion yen had been recorded in this market, growing by a factor of 14 over the previous year. As such, it really is appropriate to call 2018 the inaugural year of eSports in Japan.

Enterprise activity in eSports initiatives is also starting to increase. Capcom, which holds the IP for another globally popular eSports game called Street Fighter, began sponsoring a public league in the summer of 2019. It featured three-on-three teams combining beginners, amateurs, and pros battling, and generated much drama before the series ended. For the next series, expanded team competition with franchises in regions throughout Japan was soon announced. Just like with major sports such as baseball and soccer, it was expected that tournaments would attract strong support from local fans in each region. An increasing number of eSports events are also being held by organizations other than the IP holders. Of note are some of the enterprise groups collaborating to hold tournaments. Only a few years ago, it would have been normal to see mainly the names of PC and peripheral device manufacturers at an eSports tournament, but at EVO JAPAN in January 2019, sponsors included companies having nothing to do with eSports, such as NTT DOCOMO, Indeed, Nissin Foods, Nissan, and Hisamitsu Pharmaceutical. The Dwango-sponsored event, Tokaigi ("Battle Meet"), was co-sponsored by Seven-Eleven, Fujitsu, au, Big Globe and others, and the RAGE eSports event held by eSports broadcaster, OPENREC, was co-sponsored by enterprises including Nestle, Kao, PIZZA-LA and Sharp.

There have also been many tournaments for high-school students. In March, 2019, a national high-school eSports championship was held, sponsored by Mainichi Newspapers and PC retailer, Third Wave. In August that year, TV Tokyo and Dentsu held the STAGE: 0 high-school eSports tournament, which concluded in great success. STAGE: 0 was supported by names including Japan Coca Cola and Rohto Pharmaceutical.

In 2019, eSports were also used as a culture program in the National Athletic Meet (called the "Kokutai"), held in Ibaraki. The tournament was called the "Inter-prefecture eSports Championship." This was a Kokutai for a new generation, attended by the new Emperor and Empress. Use of eSports was initiated in Ibaraki prefecture to appeal to the new generation in a resolution by Ibaraki governor, Kazuhiko OOIGAWA. The same tournament was held in Kagoshima the following year and in Mie prefecture in October, 2021. The Kagoshima tournament in 2020 was a great success, with over 85,000 people participating in qualifying rounds.

Activity in regional eSports initiatives also jumped due to this Inter-prefecture eSports Championship. In 2017, there were only about 14 regional eSports organizations bearing the name of a prefecture, but as of October, 2019, this figure had risen to over 60. Many prefectures also have multiple organizations. Support for eSports by other regional administrations has also increased sharply. In Ishikawa prefecture, the city of Kanazawa has included promotion of eSports in its budget. In Fukuoka, the mayor worked actively to invite EVO Japan, an eSports tournament focused on fighting games, to the city. In Tokushima prefecture, the governor made an election promise to promote eSports and was re-elected decisively. The Tokyo Metropolitan has also budgeted to hold eSports festivals for two years in a row. It is undeniable that regional eSports activity has increased, which is a change since 2018, when eSports was appearing as something new in media.

Finally, in 2021 the International Olympic Committee (IOC) decided to hold its own eSports competition, called the Olympic Virtual Series. Sports titles from Japan including Power Pros Baseball and Gran Turismo were entered in the competition and created much excitement. Competitions were also officially announced for the Asia Games to be held in Hangzhou, China, in 2022. The IOC explained that the use of eSports in the Olympics was part of initiatives to strengthen engagement of the younger generation in the Olympic Movement.

3. Why eSports are attracting attention now

The "younger generation" is a phrase often heard in discussion regarding eSports. It is what entices enterprises to support these various tournaments. So, why is it that eSports attracts such strong support from the younger generation? We will attempt to explain using another sport, namely baseball, as an example. Baseball is thought to have been brought to Japan in about 1827, and the number of baseball players, including high-school baseball (formerly middle-school baseball), university competition and municipal baseball, grew greatly after that. However, at that level, baseball consisted of just the players actually using bat and ball. This continued for nearly 60 years. The turning point was the advent of radio broadcasting. High school baseball was broadcast on the radio, and just a few years later, in 1934, a major team from the U.S. came to Japan. Two years after that, in 1936, teams were formed that became precursors to modern pro-baseball in Japan, including the Tokyo Giants, the Osaka Tigers, and the Nagoya Golden Dolphins. Then, after the Second World War, television broadcasting began in 1953. The killer content for television at the time included professional sumo wrestling, pro wrestling, and baseball. However, sumo and pro wrestling naturally centered on

athletes that were very large. At the time, baseball was the only prominent professional sport with young athletes having excellent physical abilities. Five years after television broadcasts began, in 1958, Shigeo NAGASHIMA joined the Giants, and Minoru MURAYAMA joined the Osaka Tigers. Sadaharu OH joined the Giants in 1959. This heralded the golden age of pro-baseball in Japan.

As shown in Figure 1, initially, there were only amateur baseball players, forming level (1). Later, with high-school and university baseball, highly-skilled but non-pro players began to appear. Soon, with radio broadcasting, the number of competitors increased. When professional players began appearing to viewers on television, the number of fans increased rapidly. This was because baseball itself was interesting, but also because players like NAGASHIMA were so cool. These were the non-player baseball fans at level (4) in Figure 1. There is a definite difference between levels (1) to (3) and level (4). Levels (1) to (3) consist of people that actually take bat and ball and play baseball, but level (4) consists of people who watch baseball on television. With level (4), baseball was attracting interest as a spectator sport, and spectators would pay money to enter venues or buy goods. Baseball also grew dramatically with this level, becoming a major business and producing other businesses such as broadcast rights and sponsorships. As such, baseball is a spectator sport that was developed by the medium of television.

So what about eSports? In fact, eSports have developed in almost the same way as baseball. Initially, there were many game fans focused on games such as Dragon Quest and the Mario franchise. Soon, game consoles and PCs connected to the Internet, and video related to the games increased on video sharing sites. Regarding game commentary, one would expect it would only become popular with people able to say interesting things in their commentary, and inevitably popularity would focus on a small number of Internet personalities. But what about the overwhelming number of other players? They also began uploading videos of their own game play, and there were far more of these latter game-play videos than those by commentators. Soon, game-play video became popular on video sharing sites. In fact, the most popular type of content on YouTube, the largest video site, is music, but the next most popular type is game-related video. Nearly half of the live streams on Niconico video are also game related. Twitch and OPENREC are stations dedicated to game video. Thus, it is not an exaggeration to say game video is a major part of video distribution sites.

Many people enjoyed game-play videos, of which there were a huge number. Soon, videos from people with confidence in their skills began to attract more popularity and then competitions began being held at community events, where people could watch these advanced players. Then, seeing the popularity of these events and the ability of internet video to attract viewers, the IP holders began to hold tournaments with prize money, to promote their game IP. The success of these led to broadcasts of pro

■ **Figure 1: Pro baseball evolution and player hierarchy**
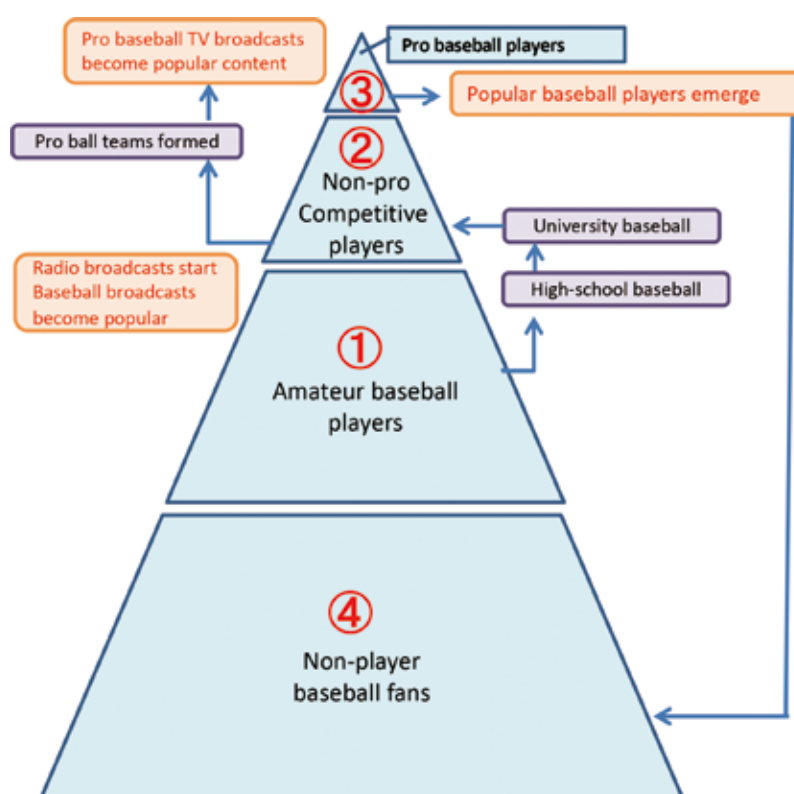
■ **Figure 2: eSports evolution and player hierarchy**
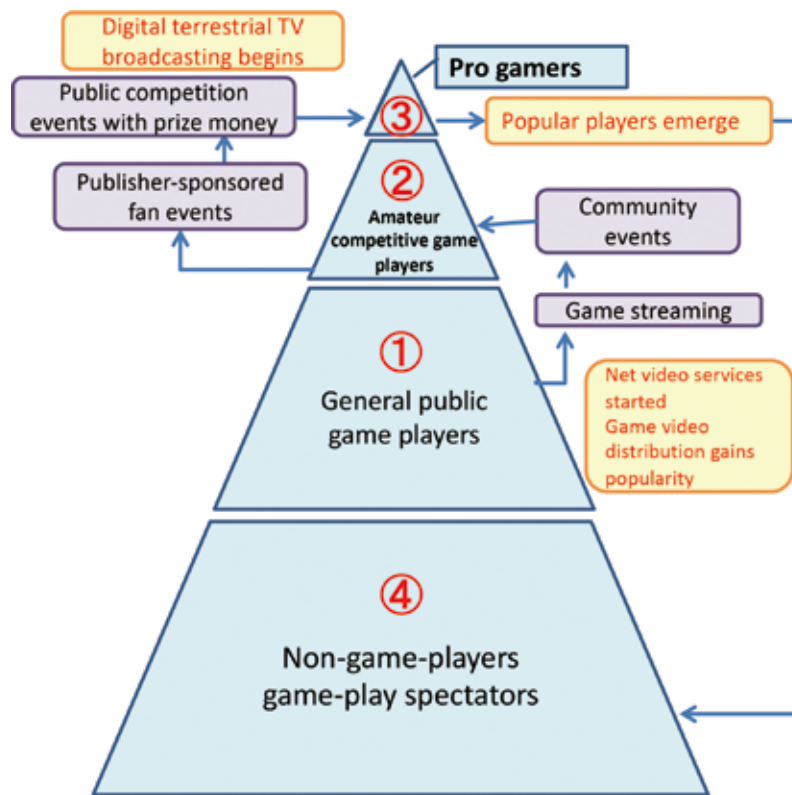
eSports players in various forms, including terrestrial and satellite television broadcasts. As a result, another layer of people who have not played the games became accustomed to watching eSports, not because of interest in the games themselves, but because they were attracted to the players. In Figure 2, levels (1) to (3) are people who actually play the games, while level (4) consists of eSports fans that do not play the games themselves. It goes without saying that growth of this level (4) is what has enabled the eSports industry to achieve its incredible growth.

Baseball and eSports have followed exactly the same lineage. One clear difference is in the media that nurtured them. Baseball as a spectator sport was developed by television, while eSports are spectator sports for a younger generation that was raised without watching television.

Most of the younger generation, who were born into the world when the internet already existed, are not in a habit of watching television; they watch eSports on a smartphone instead. People who watch television or read newspapers and magazines have decreased, while smartphones have spread. Based on the indispensable smartphone, eSports video and eSports fans supporting the players in such video are growing with incredible energy and are already forming an unstoppable trend. Advertising from television and newspapers is now supporting eSports, to reach the younger generation that it cannot reach through television. Enterprises that were sponsoring real sports are leaving real sports and starting to sponsor eSports. We can expect this irresistible trend to continue in the future. Soon, eSports in Japan will reach new heights in the world, expanding from just the younger generation and becoming a movement that involves older age-groups as well. As was the case with baseball and soccer, internet media can be expected to continue to nurture eSports.

Local Government Measures Utilizing Content

— Issues and opportunities for local government collaboration utilizing Anime, Game and eSports —
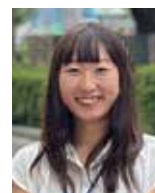
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1. Introduction

The most important goal of regional governments is to promote the welfare of residents within their regions. As such, they must take multi-faceted approaches to solve various issues arising from that goal. One such approach is to use collaboration through eSports and content such as anime. Here, we introduce some opportunities that Yokosuka City has found and used with this approach.

2. Action plan to promote a tourism-based city

Since World War II, Yokosuka City has been built on manufacturing in industries such as automobiles and ship-building, and has more-recently been trying to shift to information and communication related industries. However, these industries are vulnerable to global conditions and with recent developments in new technologies such as automated manufacturing and AI, they are becoming industries that do not as directly result in employment.

To deal with changes in conditions such as declining population and the mind-boggling changes in the global economy and the structure of industry, it is important to diversify the structure of industry within a city. In Japan, with its declining and aging population, it will be difficult to plan for increases in permanent residents in the future, so industries that attract people from outside will be important.

Under such conditions, it will be important to cultivate tourism as a new core industry and build it into a major industry. As such, Yokosuka City has created a tourism-based city promotion action plan, identifying three main directions. The first is to develop a "Marine City" with rich marine products and leisure activities. The second is to develop a "Music, Sports and Entertainment City" that will provide excitement for everyone. The third is to develop a "City with local communities that have their own personality," providing a base for schools and local residents to work together on various initiatives.

We plan to implement these, integrating nature, Japanese heritage, and recent history with sports, music and entertainment, strengthening our communication capabilities through synergistic effects, creating differentiation with other regions, and thus attracting visitors from groups that have not given Yokosuka much consideration in the past, such as women, families and foreign visitors.

We have various collaboration efforts with this approach at the core, which makes our local government extremely easy to work with compared to others.

3. History of collaboration measures

Yokosuka is in a good location, within an hour of metropolitan areas, but it is far enough to require a reason to go and there are other tourism sites nearby, such as Yokohama and Kamakura. As such, an extra push is needed to attract people to Yokosuka, so we have begun using content collaboration as a primer to attract new visitors.

We found that collaborations with Yokosuka City and subculture content have worked very well. There was an action plan to change the image of Yokosuka City. It was often used as the setting in game content because its image was a bit edgy, and users were familiar with many of the games.

The Yokosuka City Tourism Division began such collaborations in 2013 with the "Tamayura" Gourmet Stamp Rally. It became a must-see destination and attracted many fans through collaboration with Keikyu Railway and others.

The following year (2014), we started a campaign with a game called Ingress, which was our first game collaboration. The game used location information distributed by Google at the time and staff were playing the game, which led to a collaboration proposal and eventually to implementation.

Since then the Ingress startup team has gone independent, as Niantic Inc., and launched other applications such as Pokemon GO. Following the location-game event conducted in collaboration with Yokosuka City described above, another public collaboration event was held in 2018 using Pokemon GO.

These events really raised awareness, for Yokosuka City and others, that game content has the potential to move many people.

We held about two collaboration projects per year using anime, manga, games, magazines and other media, and although Yokosuka started to get a reputation that they would try anything, staff at the Tourism Division gained experience, became accustomed to events involving copyright, and formed connections with people in the industry.

4. Lessons learned from collaboration by Yokosuka City

It is difficult to establish culture just by holding events. To create sustainable initiatives requires involvement from many

■ Figure 1: The administration's ideal framework for development
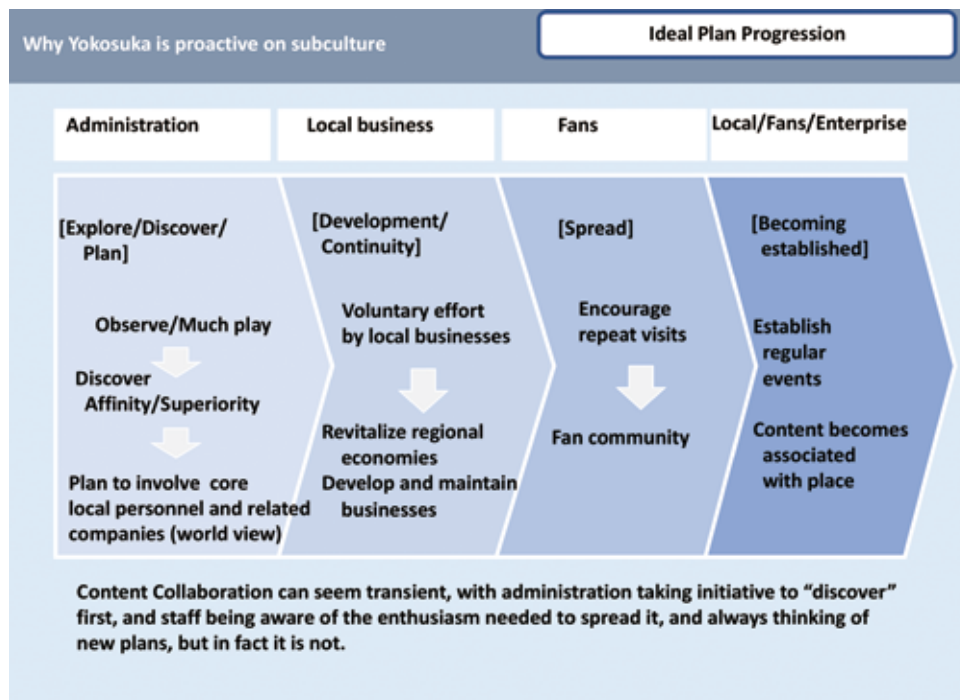
people and awareness of the planning process needed to gain acceptance by fans.

The administration must first take the initiative in searching for, finding, and planning events, local businesses must take-over development and continuity, and fans must help form and expand a community, establish the event, and earn a place as a must-see destination for fans of the content. The ideal process is shown in Figure 1. It is easy to think of content collaboration as transient, but with awareness of this process, even though each event is transient, we have had an increasing number of comments from publishers, that Yokosuka City is becoming known for its agility, and understanding of the various subcultures. The true value of these efforts will be shown as we continue with these initiatives.

However, if a plan ignores a global outlook, or does something that could be done anywhere, fans will soon drift away. When creating plans, we must find aspects of Yokosuka that are attractive and superior from the perspective of a fan, and build on them. Making this the highest priority and planning to appeal to the hearts of our core fans is what will draw their affection.

While it is also good for the administration to take initiative in drafting plans, the path to success is to gather as many colleagues as possible, from related enterprises, local businesses or residents, and form scrums. The eSports project was implemented based on this lesson.

5. eSports Initiatives

Based on connections cultivated in the various collaborative events conducted by Yokosuka City and the Tokyo Game Show, we studied plans to resolve various issues, and in 2019, we released the Yokosuka eSports Project, in collaboration with partner enterprises. For this initiative we asked for collaboration in establishing eSports clubs in the city's high schools, to lend them high-performance PCs free-of-charge. As background for the initiative, PC manufacturers wanted to promote games requiring high-performance PCs, and telecommunications operators were very interested in the eSports market. The timing of these needs and the content of the plan matched, Yokosuka City made the proposal to various enterprises, and we received their endorsements. At the same time, Yokosuka City was also considering holding eSports tournaments to promote eSports culture in the city and to expand the culture of watching such tournaments.

We have proceeded, knowing that Yokosuka City alone would not be able to implement this support and there was doubt whether it was even possible, so at times, we were reminded of the importance of conveying our plans in this new field to as many people as possible, to expand our group of partners.

As we moved into education environments, we also held hearings with teachers and students who are acting as advisors, and continually worked to reflect their input into the initiative, which is described below.

6. Reasons for the initiative

We have been asked why the administration has started working in eSports. There are various answers to this, but we will describe the four main reasons here. Beyond this initiative, we want it to lead to creating new possibilities that Yokosuka City did not have before and to increase the potential of the community itself.

6.1 Expand possibilities for children

By increasing the choices for children, even by one, we can expand their possibilities in the future. It is clear that there are many different ways of learning and living, so more choices is also good.

Becoming a professional player is not the only future path for being involved in eSports, and there are many others such as working with an enterprise or event company in the eSports field, being a streamer, or a game developer.

6.2 Anyone can be involved

In contrast with physical sports, eSports are a level playing field that anyone can join, regardless of age, sex, disability, language, physical strength or other factors. This could also contribute to solving social issues. For example, introducing eSports into facilities for the elderly could promote communication between students and elderly people. From the perspective of local governments, which are highly communal, eSports bring new value in that they are highly impartial and equitable.

6.3 Create opportunities locally

With eSports, anyone can join, and a location does not have to be found. If participants can get on line, they can compete with anyone in the world, so tournaments can be held at very small scale, or covering the whole country. This is clearly not possible with ordinary sports.

6.4 Topicality

eSports is now an often-heard expression, but three years ago, the fact that Yokosuka City was working on it was newsworthy, and provided good PR that the city was agile and helped in finding interesting talent. From the initial release in 2019 till now, we have been called by various media, receiving plenty of feedback. We have also heard from several enterprises, having read some of these articles and thinking that Yokosuka City offices could be a place that would hear their proposals, and this has lead to some actual projects.

7. Disadvantages and issues

A topic that cannot be separated from eSports is video game addiction. We spend much time discussing this when starting the project, but at this stage there have not been any examples of video game dependency arising from an eSports club. Rather, we have seen scenarios where students show a surprisingly high level of awareness, such as discussing together and deciding how much time to play. We were also prepared to receive criticism from parents, but instead, we heard that parents wanted us to introduce the program in more schools.

Even so, the possibility of game addition is not zero. As someone promoting eSports, it is also important to ensure that those involved have accurate information regarding eSports, through seminars and hearings, to give them a deeper understanding of the issues.

One issue that we sensed in running the project was that the shortage of staff in school education is a major problem. This is an issue in school education overall, not related to eSports. Even when teachers were enthusiastic and wanted to let students interested in eSports participate, they did not have time they could allocate to being advisors, there was no space or funding to do it, and no one that could lead the project. Yokosuka City would like to provide any support that it can to resolve these types of issues.

8. Support to establish high-school eSports clubs

8.1 Donating gaming PCs free-of-charge

We have secured the cooperation of INTEL, MSI Computer Japan, NTT East, and TSUKUMO Inc., to provide up to five PCs, monitors and peripheral devices free-of-charge for three years to each of 13 city high schools that want to participate (Figure 2). All of these products were donated to Yokosuka City in FY2021. Currently, eight schools have introduced the computers.

We had expected that many schools would naturally come forward when the program was introduced, but in fact, very few did, and only after we started going to individual schools to recruit them and explaining the program, they began to join. When we actually spoke to them, various concerns came to the surface, such as what to do for the network connection, how to pay for the games themselves, and whether the program could be operated without a person to lead it. We spoke in detail regarding operation with each of the clubs to gain their agreement, and based on these hearings, we added the following two points.

■ Figure 2: Partner companies donating PCs free-of-charge

Gaming desktop PC:
"G-GEAR Powered by MSI"

Figure 3: Structure for PC donations
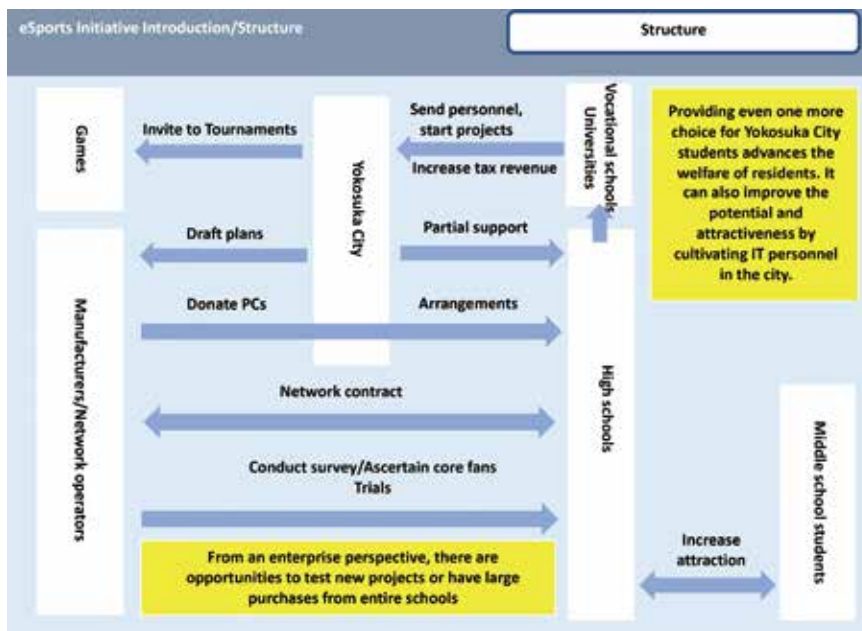
8.2 Network installation support

Kanagawa prefecture high schools already had NURO networks for student use, separate from that used by staff, so these could be used by simply having the participating schools report it to the prefectural education committee. However, almost none of the private schools had networks that could be used for club activity, and new connections had to be arranged. Yokosuka City provided assistance for the initial costs, which were the first hurdle.

We have asked each school to bear the running costs, either through club fees or from the school's activity fees.

8.3 Support student guidance programs

Some people were happy to receive a Gaming PC, but did not know where to start with it, or have anyone who could teach the students. We realized that rather than starting completely in the dark, participants could only appreciate the attraction of eSports and set meaningful personal or club goals with training from a dedicated leader or pro.

As with other issues discussed above, it seemed that it would be difficult for schools to carry the costs of programs provided by private enterprise, so we provided support in the form of course fees, as a startup support measure.

We thought that it would be good to provide introductions to various eSports program titles through people we had met for the project, and by asking the professional eSports teams for their cooperation.

We are already conducting trials with several titles, and they are meaningful both for students to experience valuable time and guidance from pros and for businesses and eSports teams to interact with the younger generation, so we hope that we can expect even more active interaction in the future.

9. Description of eSports project

An issue for the overall eSports industry is recognition. We believe there will be business opportunities, once a culture of watching and supporting eSports spreads, and as the surrounding adults reach a higher level of understanding. Our efforts just within Yokosuka City may not have great effect, but we are working to increase the number of people that understand, even by one person.

9.1 Seminars

We have held seminars to provide accurate knowledge regarding eSports, both for businesses and for the general public. For businesses in particular, we have discussed issues such as sponsorship and cultivating a company's own team.

9.2 eSports facilities

We have taken an approach oriented to high-school club activity, but the number of PCs made available is much smaller than the number of students, and time for such activity is limited. We are also planning eSports facilities to increase opportunities to try eSports, including pre-high-school students and others who have finished school.

9.3 eSports tournaments

We have been holding eSports tournaments for high-school students since FY2020. We hope eventually to invite large-scale tournaments to Yokosuka City, but we will hold regular regional tournaments in order to establish the eSports culture in the city.

10. Future objectives

It cannot be denied that some people are still skeptical about eSports. While we are giving consideration to criticisms of

eSports, we are also actively working to gain understanding of the benefits of eSports described above, from both business people and those involved in schools.

Although we are promoting it through informational articles, SNS and other means, it still feels inadequate. We need to continue our current activity on eSports projects, while also strengthening promotional activities to attract the attention of many more people.

It is due to the interactions we have had with many businesses in the past that we have been able to start and promote these projects. By expanding our circle of interaction with people involved or interested in eSports, we have been able to support projects.

11. Issues and solutions

It is true that there are still many issues to be addressed in continuing these efforts and having them take root as part of the culture of the city. We discuss various issues and ways to deal with them below.

11.1 Projects die out due to staff changes

When personnel involved in a project change, it is difficult for new people to take over the related know-how and personal connections. It is also difficult to preserve enthusiasm and quality, so it is not unusual for projects to die out. This danger is particularly high for projects initiated mainly local governments, where personnel changes are common. To ensure a project continues, it is important to have a key person from a private enterprise as a partner for the local government organization.

11.2 Securing funding and importance of agility

Two weaknesses of projects led by local governments are the difficulty in securing funding and the inability to move quickly. For funding, a budget can be secured through crowd funding, by using municipal taxes collected from private businesses, or through sponsorships from collaborating or endorsing businesses.

Having cooperation and the driving force from a key person from a private business can help improve agility while also helping to secure funding (Figure 4).

12. Conclusion

We have described a full picture of eSports projects conducted by Yokosuka City, but another result of these initiatives is to generate new types of intergenerational interaction between students and adults. eSports seem to be able to fill-in age and generation gaps easily. We hope that more active exchange between generations, such as between students and the elderly, will contribute to revitalization of Yokosuka City in the future.

eSports can also help strengthen communication skills, such as helping senior students communicate with juniors in club activity, even though they may be worried about making those connections. It can also provide opportunities for students to contribute their own strategies, designs, plans for club activities and other ideas, which will also help them in the future.

■ **Figure 4: Measures for securing funding**

Finally, as a person in charge of eSports for the city, the focus on eSports has steadily increased in the three years since we started this project. As actual studies and reports are saying, the eSports market is expanding every year, with more and more people and companies wanting to get involved. We want to use this time, when it is attracting so much attention, to increase the number of colleagues that we can form scrums and work with. By using each of our strengths, we can build an even larger movement.

Cover Art

kyotomeishonouchi shijogawarayuusuzumi (Cooling off in the Evening at Shijogawara (Famous Places of Kyoto))
Utagawa Hiroshige (1797~1858)

Collection of the Art Research Center (ARC)
Ritsumeikan University
Object number: arcBK06-0013_008

Formation and Other eSports Activities for Disabled Persons in Gunma Prefecture

Hironari Hamakawa
Esports GM, ONEGAME,
ONELIFE Inc.

1. Why use eSports in social services for disabled persons?

There is increasing awareness of eSports as a new genre of activity for disabled persons being sponsored by many local governments. Disabled-person eSports has become topical as a form of barrier-free sports that enables people be on the stage as players, regardless of having a disability. eSports tournaments and championships are currently attracting the attention of disability-related facilities at a national level.

Our company first began noticing the potential of eSports for disabled persons an initiated our eSports business in the winter of 2018.

We wanted to give the people with disabilities, who were coming to a facility every day, a chance to have hopes and dreams, so we created a facility for life nursing care with an environment that enables them to set their sights on becoming eSports professionals. No similar facilities existed at the time and we had many applicants, so it was clear there was much demand in the field. For the facility, we contracted with a pro team and prepared a fully-equipped training environment, but there were still many challenges for the players.

2. Types of devices for disabled persons

Every person operates devices differently, even when considering the same type of disability, so finding out how a user will operate a device can be a challenge. The market for such devices is also still small in Japan, so only a limited number of devices can be sold.

Consider the example of Mr. Koshizuka, with whom we have a pro contract. Due to muscular dystrophy, Mr. Koshizuka has difficulty with ordinary controllers and plays using parts of his body from the neck upward. The first game-play method Mr. Koshizuka tried was using line-of-sight as a mouse pointer. However, this quickly became tiring and it was difficult to play for longer periods of time.

The second device we tried was a mouth-operated mouse called a Quad Stick (Figure 1). With this device, mouse operations are done using the mouth, click operations can be done by breathing in or out, and button operations can be optionally configured. Mr. Koshizuka was able to do operations reliably, even when playing intensely, so we decided to build a device for him based on the Quad Stick (Figure 2).

Besides these, he uses ten other devices such as touch-activated

■ **Figure 1: Mouth mouse**

■ **Figure 2: Mr. Koshizuka's devices**

buttons, buttons that can be pushed using your cheek, and buttons that attach to the finger tips. He currently uses these devices to play League of Legends.

3. Disabled person eSports for promotional purposes

Mr. Koshizuka was able to play the game using the devices in this example, but that may not be the case for other users. Devices must be built suited to each person. Many types of devices are also needed to build device configurations for each person, and much more activity in the device market is needed to produce the devices for these configurations. Having eSports for disabled persons will help to build this market.

We have engaged in activities to gather disabled competitors nationally and raise awareness of eSports for disabled people.

As the next step in this activity, we worked to expand activities nation-wide and in 2019 we held the first eSports Tournament for disabled persons in Japan. All participants were players with disabilities. We had a capacity for 20 participants, but when we began recruiting, we received more than expected—almost 30 applications! This gave us a strong impression that it was a big step toward the future.

For the 2019 disabled-person eSports tournament, we provided coaching to players before the tournament, so that even beginners could participate easily. We also included various other aspects into the tournament for people with no knowledge or prior interest in eSports, to promote their interest.

Then, as the tournament day approached, we also held events to make sports culture in Gunma prefecture more interesting and attract them to the event, such as having a parasports area, and holding eSports tournaments for disabled persons and the general public.

However, there were still significant issues to resolve, since there had never been an eSports tournament that enabled disabled people to play to their own satisfaction. For example, the slope to the stage was not designed with proper consideration for wheel chairs, or the desks could not be adjusted for the heights of wheelchairs, which differ for each person. There were many other issues that do not need to be considered at other eSports tournaments, such as people who tend to panic under harsh lighting, how to contact participants that are hard of hearing, and how to accommodate people requiring meal management or other types of care.

■ Figure 3: Disabled person eSports tournament winning team

By providing these improvements, we believe that disabled-person eSports can enable disabled persons to have hopes and dreams, and stand up on the stage. The first tournament in Japan, in 2019, created a strong reaction in various media and the event really showed how it could grow (Figure 3).

4. Start of the Onegame business

As soon as the tournament finished, we took feedback from it and started a business for the next step. We really felt that the tournament had been a place where disabled persons were able to take action, so as our next task we set out to create a training space, so that disabled people could set their sights on reaching that place.

We spent one year to complete the Onegame office, and it opened in July, 2020. We received many inquiries, from within and outside of Gunma prefecture and it became popular with our users. For training, we had professionals from the training industry to create video materials, and participants learned by watching them.

Having only oral or written guidance can be difficult to understand, so we provided support suited to individuals' disabilities, and we found that some of our enrollees were able to learn extremely quickly.

Many participants did not feel comfortable with regular social services for disabled people, and many were interested in becoming eSports pros, so we also provide training in business manners and skills, to help them find work through eSports.

At the time it was a very new experiment and we had difficulty working with the public administration and game companies, but now the reputation of the program has improved considerably and we have almost reached our capacity of participants.

5. Regional establishment of Onegame and franchising

We wanted Onegame to develop associated with the region, so we worked to create an overall eSports facility suited to the region. For example, in Ota City there are eSports departments in both the Gunma prefecture offices and the municipal offices, and the administrations are putting effort into eSports, so our Onegame efforts helped to increase interest in eSports in people and to build excitement in the region.

Other efforts included an event with SEGA, the developer of "Puyo Puyo eSports," and collaboration with UBISOFT, the developer of "Rainbow Six Siege," which provided about 1000 T-shirts commemorating the tournament. The tournament seemed to raise the level of excitement for eSports in the whole gaming industry.

Several photographs from our Onegame efforts are included here. Figure 4 is from an event held at Onegame in April 2021, using Puyo Puyo. This was the first event planned in which we had people competing in the facility from both the Gunma Prefecture and the Ota City eSports Clubs.

We were able to hold an event very closely tied to the region, using the whole facility, with people enrolled in the MC course providing commentary and play-by-play for Puyo Puyo and acting as master-of-ceremonies for the event, people enrolled in the

event course handling relations with the various companies and operating the event, and people enrolled in the player course, dealing with competitors, eSports clubs and the competition.

Even though conditions are still bad due to COVID-19, we are preparing an environment that allow us to hold events for members of the public, as we do for   disabled persons.

Onegame provides a place that disabled persons can go to communicate with their local region and be involved in activities that enliven the region through eSports.

With the Onegame business we are also offering franchises. By franchising, people from throughout Japan will be able to come to a place that previously only existed in Gunma Prefecture, and there will be more opportunities to learn in areas that were not possible earlier, with Type-B continuous work support. We decided to franchise Onegame to provide suitable learning environments and to expand eSports activity.

After we started Onegame, we have seen many facilities throughout the country adopting eSports. However, there really were no facilities with learning environments suited to disabled people. Among the people who inquired at Onegame, there were people who had been going to other facilities providing eSports, but the staff at those facilities did not provide any support, and only provided an environment where games could be played freely. Most of these facilities were providing eSports without permission from the game companies, while Onegame certainly obtains permission and also provides support.

In addition to playing games, we also provide an educational environment that enables people to communicate and have contact with people from outside, through eSports. By having richer communication and contact with people from outside, users can increase their confidence and become more positive about gaining employment. Thus, eSports training at Onegame provides education that has value for people, regardless of disability.

This type of training, available throughout Japan only at Onegame, also provides support suitable for those looking for work, through eSports.

We also hope to build an eSports economy with our franchises, so that disabled people interested in eSports work can learn at Onegame in each region, help to build up the region through Onegame, and thus promote hiring of disabled people.

After we have increased the number of franchise branches, we have a vision for other activities only possible in Japan, such as planning a para-eSports pro league and creating a disabled-person eSports tournament brand.

We want to make progress each day, to enable even one disabled person find a job or make progress toward their dream through eSports education.

These activities also represent what we want to give back to all of those who have enjoyed and supported Onegame.

Onegame will set up the basics for franchises, and will provide

■ **Figure 4: From the left: Gunma Prefecture agency eSports Club, Ota City eSports department**

support for building them to owners after that.

The goal of ONELIFE Co. Ltd. is to be an education business providing training for people's dreams, so with each new franchise branch, we hope to establish Onegame in a new form.

6. Gunma eSports Association

On a slightly different topic, we also have activities to expand eSports to a wider range of people. The Gunma eSports Association is the first eSports organization in Gunma Prefecture. The association promotes eSports in Gunma, increasing the population engaging in eSports, and creates enjoyable spaces for children using PCs and other devices to build interest in IT.

One of our activities to expand eSports was in Ota City in Gunma Prefecture. We held an eSports tournament in collaboration with a hot-springs resort called Yurabu and an internet café called Zima (Figure 5). The event was also intended as tourism PR for Ota City, so prizes for the tournament included items such as admission to the Yurabu hot-springs resort. This was so that visitors to the event would also see the allure of the hot-springs. The tournament attracted many participants, including children and adults, and was quite lively.

Since then, the COVID-19 pandemic has required more restrictions, but even during the pandemic, we have been looking for opportunities for activities with players.

Post COVID-19, many individual shops had closed due to the drop in sales during the pandemic, so we are planning eSports events to invigorate towns that have lost energy during the pandemic.

Onegame is working with the Gunma eSports Association, consulting with everyone in the Ota City eSports department regarding the event, including tourism PR. We have set a goal of making Ota City in Gunma Prefecture a community enlivened by eSports in 2022.

Finally, we will introduce initiatives involving disability, eSports and medical treatment. Some people still believe that eSports can lead to gaming addiction. As such, we plan to conduct a survey this year in collaboration with Gunma University, regarding what benefits eSports could have for disabled persons.

With eSports, players must use their heads to think and hands to control a keyboard or mouse when they play, so we expect that it could have effects such as rehabilitating brain function or training hands or feet. In preliminary experiments for this research, we attached instruments to a player's head while playing a game and gained valuable data showing large changes in activity in the frontal lobe of the brain. As this research progresses, we may find that eSports can be applied to rehabilitate a wide range of disabilities, such as dementia in the elderly, or for physical rehabilitation.

We will continue activities to raise awareness of eSports, to further expand their potential.

■ **Figure 5: Yurabu tournament**

54th Celebration of World Telecommunication and Information Society Day

The ITU Association of Japan
Planning Department

■ **Ceremony at the Keio Plaza Hotel, Tokyo**

On May 17, 2022 for the first time in three years, the ITU Association of Japan (ITU-AJ) held the "54th Celebration of World Telecommunication and Information Society Day" at the Keio Plaza Hotel in Nishishinjuku, Tokyo. It was attended by approximately 90 guests from the Japanese government, telecommunications and broadcasting industries and other related organizations. The event was also posted on YouTube.

The event began with greetings from the Honorable Mr. NAKANISHI Yusuke, State Minister for Internal Affairs and Communications (MIC) and Mr. HARA Keiichi, Deputy Assistant Minister for Foreign Affairs (MOFA). This was followed by a report on the selection of award recipients for this year, by Dr. TOKUDA Hideyuki, Chair of the ITU-AJ Award Selection Board, and presentations of the MIC Minister's Award and ITU-AJ Awards.

The MIC Minister's Award was presented to Dr. SATO Kohei, of the National Institute of Information and Communications Technology (NICT), who has made great contributions to international standardization efforts in wireless communications through the ITU and APT, held various key positions at the APT, and contributed to discussion on next-generation standards in Japan at the Beyond 5G New Management Strategy Center.

The ITU-AJ Special Achievement Award was presented to Dr. ASAKAWA Chieko, of the IBM Corporation and the National Museum of Emerging Science and Innovation (Miraikan), for her efforts improving accessibility in information and communication technology as a researcher who is blind and contributions to standardization.

ITU-AJ Accomplishment Awards were also presented

■ **Award winners and Honorable guests**

to 11 recipients, and ITU-AJ Encouragement Awards to 18 recipients, in recognition of their achievements contributing to ITU activities or ITU-related activities in Japan, to implementing the basic declaration and action plan at the World Summit on the Information Society, to international cooperation in the fields of information, communication, broadcasting and postal services, and to other achievements in international activities related to information, communication and broadcasting.

After the awards ceremony, there was an anniversary keynote presentation by Dr. ASAKAWA Chieko, recipient of the Special Achievement Award, on the theme, "The Future: An Inclusive Society via Science and Technology".

Scenes from the ceremony have been posted on the ITU-AJ web site and can be viewed at the following URL: https://www.ituaj.jp/?page_id=27274 (Japanese only)

Award recipients will be introduced in the next and following issues of New Breeze.

The List of the Award Winners on 17 May 2022

MIC Minister's Award
Dr. SATOH Kohei (National Institute of Information and Communications Technology)

ITU-AJ Special Achievement Award
Dr. ASAKAWA Chieko (IBM Fellow, IBM Corporation Chief Executive Director, Miraikan- The National Museum of Emerging Science and Innovation)

ITU-AJ Accomplishment Awards
Dr. OTSUKI Sinya (NTT) Mr. OBATA Kenji (Japan Cable Laboratories) Mr. KAWANISHI Motoharu (OKI Consulting Solutions) Prof. TAKADA Jun-ichi (Tokyo Institute of Technology) Mr. TANAKA Hidemi Mr. TOCHIO Yuji (Fujitsu) Dr. NAKAJIMA Isao (Seisa University) Mr. FUKUYAMA Masafumi (NTT e-Asia) Mr. HOTTA Akio (BHN) Ms. HONDO Eriko (KDDI) Mr. YOKOYAMA Takahiro (ARIB)

ITU-AJ Encouragement Awards
Mr. AKIYAMA Shinsaku (NTT DOCOMO) Mr. IIZUKA Hiroto (NEC) Mr. ISOHARA Takamasa (KDDI Research) Mr. ITO Fumito (JAPAN BROADCASTING) Mr. INOUE Yoshihiro (NTT Advanced Technology) Mr. OKUGAWA Yuichiro (NTT) Dr. KUMAGAI Shinya (NTT DOCOMO) Mr. KUMAKI Yuichi (NTT EAST) Mr. KUMAMARU Kazuhiro (JAPAN BROADCASTING) Mr. SAITO Susumu (JAPAN BROADCASTING) Dr. SHIMODAIRA Hidekazu (NTT DOCOMO) Mr. TAKEDA Hiroki (KDDI) Ms. TANIDA Hisako (NTT DOCOMO) Mr. HARADA Takashi (OKI) Mr. FUTAKI Hisashi (NEC) Mr. HOYA Kazuhiro (FUJI TELEVISION NETWORK) Mr. MAEGAWA Takanori (NTT EAST) Mr. YOSHIDA Shinji (KDDI Foundation)

■ **MIC Minister's Award winner Dr. SATOH Kohei**

■ **ITU-AJ Special Achievement Award winner Dr. ASAKAWA Chieko**

■ **Honorable Guest : Mr. NAKANISHI Yusuke State Minister, MIC**

■ **Honorable Guest : Mr. HARA Keiichi Deputy Assistant Minister, MOFA**

■ **Anniversary Keynote Presentation: Dr. ASAKAWA Chieko**

= A Serial Introduction Part 2 =
Winners of ITU-AJ Encouragement Awards 2021

In May every year, The ITU Association of Japan (ITU-AJ) proudly presents ITU-AJ Encouragement Awards to people who have made outstanding contributions in the field of international standardization and have helped in the ongoing development of ICT.
These Awards are also an embodiment of our sincere desire to encourage further contributions from these individuals in the future.
If you happen to run into these winners at another meeting in the future, please say hello to them.
But first, as part of the introductory series of Award Winners, allow us to introduce some of those remarkable winners.

Fumito Kubota

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Fields of activity: ITU-R SG 1 Rapporteur, liaise with CISPR on WPT Issues

Study of Wireless Power Transmission (WPT)

I was nominated as a liaison rapporteur with CISPR, on wireless power transmission (WPT) at the ITU-R SG-1 meeting held in June 2015.

The study of WPT technology began at CCIR in the 1970s as a response to the photovoltaic satellite project. The development of technology for transmitting energy by radio waves, which is not as far as geosynchronous orbit, was conducted using beam-type WPT. However, with the invention of magnetic field resonance technology in 2007, which can extend induction coupling and transmit energy for several meters, the need for proximity WPT expanded suddenly. In response, SG 1 expanded Question 210/1 on WPT in 2013 to stimulate study. This non-beam type WPT was recognized as one of the most useful technologies for charging electric vehicles (EV) and mobile/portable equipment. International standardization organizations (e.g., IEC, ISO) and product manufacturer associations had started to develop product standards. The goal of study in ITU-R was to formulate recommendations on frequencies for WPT operation, considering responsibility for managing global frequency spectrum utilization plans.

Since WARC-79, SG 1 has a history of cooperating with CISPR, which formulates international standards to suppress radio interference by ISM equipment in radio services.

However, there were no CISPR standard limits below 150 kHz, at frequencies expected to be used for EV WPT (WPT-EV). Therefore, SG 1 requested the cooperation of CISPR again and decided to appoint a liaison rapporteur who had been suspended for a while. Japan agreed to this and I was nominated.

WRC-15 requested ITU-R urgently to study WPT-EV, WP 1B was in charge of compiling the CPM report for WRC-19. It was a four-year period in which each country had keen interest and conducted in-depth discussion. During this time, work was continuing actively at CISPR as well. Of course, there were disagreements, and some issues still remain, but there was also a cross-country collaborations.

As a result of effort by each country, before the deadline for submitting the report to WRC-19, SG 1 completed study on the operating-frequency recommendations for WPT-EV and also mobile/portable equipment as guidance to the Administrations. The ITU's recommended frequency band of 79-90 kHz for WPT-EV laid the foundation for global interoperability of WPT-EV. This was a great achievement in showing the world that the ITU is the leading international organization in the use of frequency spectra.

It was an unexpected joy to be able to participate in such a meaningful activity.

Kunihiko Toumura

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Fields of activity: IoT Interoperability

Contributing to standardization with running code

It is a great honor for me to receive the Encouragement Award from the ITU Association of Japan ITU. I'd like to take this opportunity to thank everyone that has supported me.

The W3C Web of Things Working Group, in which I participate, is promoting standardization to interconnect siloed IoT systems. When I first joined, I had my hands full trying to catch up with what kind of standardization was underway, but gradually I began to think about how I could contribute to this standardization discussion.

In WoT, an event called "Plugfest" is held in parallel with the discussion to define specifications. Each participant brings their IoT devices and applications to propose new specifications that they think are necessary, to verify whether there are any omissions in the specifications. I decided to contribute to the

standardization discussion by bringing my own implementation. At the time, I was also involved in contributing to Node-RED, a low-code programming tool supported by many developers in the IoT field, so I thought that linking Node-RED and WoT would facilitate the development of IoT applications and promote the advantages of WoT. We developed a tool that automatically generates functional blocks for Node-RED from the Thing Description defined by the WoT, and demonstrated it at Plugfest.

We believe that the development of this tool has helped promote standardization as a "working" use case for the WoT and has made it easier to understand the characteristics of the WoT in facilitating interconnection of IoT platforms.

Currently, as a co-editor of the device discovery function being developed under the new charter, I am examining ways to standardize it in a manner that is compatible with the device discovery functions defined by existing IoT platforms. I would like to develop an easy-to-use standard by communicating the standardization content and its merits in an easy-to-understand manner and feeding back the knowledge gained from implementations to the standardization content, and by promoting open-source implementation of the tool in parallel.

(Node-RED is a registered trademark or trademark of the OpenJS Foundation in the United States and other countries.)

Jiro Nagao

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Fields of activity: ITU-T SG16

Immersive Live Experience (ILE) Standardization activity in ITU-T SG16

It is a great honor to receive the Encouragement Award from the ITU Association of Japan. I would like to take this opportunity to express my sincere gratitude to all those involved – ITU-AJ, current and former supervisors, seniors and colleagues in NTT Group and participants in ITU-T and other SDO meetings.

I have been engaged with ITU-T SG16 since 2019, in standardization activities for Immersive Live Experience (ILE), which enables highly-realistic (immersive), real-time transmission of events to remote locations. I acted as an editor of ITU-T H.430.4 (MMT Profile for ILE), where I encouraged sample codes based on working implementations to ensure interoperability and lower the implementation barrier. As an editor for ITU-T H.430.5 (ILE Presentation Environments), I organized the classification of ILE presentation environments, and fostered the development of the presentation environment reference models comprising multiple options. I also led the development of the implementation guidelines.

I believe the post-COVID world, where remote communication is a new norm, has the potential to bring the world closer and to the higher level of equity. For example, many ITU-T SG meetings have been held virtually. This made participation easier for some people who had been unable to do so because of distance, time, financial or physical constraints. However, to realize more natural and intuitive communication, as if you are physically present, transmission of events with more than just audio and video is essential. ILE was developed for this purpose, and there have been five Recommendations regarding ILE, namely: requirements, framework, service scenario, MMT profile, and presentation environments. Further enhancement of ILE is also necessary, to accommodate other senses such as vibrotactile sensation, touch, heat, and smell. ITU's role to interconnect everyone in the world is now more important than ever before. I would like to continue contributing to realize such a world.

Kazunori Fujita

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Fields of activity: International Cooperation Department

Activities toward Eliminating the Digital Divide and Encouraging SDGs in the Field of International Cooperation

At this time, I would like to express my deep appreciation on receiving an ITU-AJ Encouragement Award. I would also like to thank from the bottom of my heart all those at ITU-AJ who have offered me their assistance in the past. The KDDI Foundation was founded in October 2009 through the integration of the International Communication Fund (ICF) founded in 1988 and KDD Engineering Consulting (KEC) founded in 1974. In

addition, it was reorganized as a public interest corporation to promote activities for the public good in April 2012. This year marks the 13th anniversary of its founding. The pillars of the work performed by the KDDI Foundation are international cooperation projects and grant programs.

Based on the idea that the benefits of information-communications should be spread throughout society and that

information-communications should contribute to world harmony and sound development, the KDDI Foundation has been involved in social contribution activities and Sustainable Development Goal (SDG) activities both in Japan and overseas with the mission of contributing to sustainable growth in international society. To help eliminate the international digital divide that has arisen in countries in the Asia-Pacific region, the KDDI Foundation has been carrying out these social-contribution and SDG activities by cooperating with the Asia-Pacific Telecommunity (APT) and government agencies of member countries and promoting various types of surveys, training programs, and trials. In this way, we aim to contribute to activities for the public good and to international exchanges as a Japanese public interest corporation.

Takae Minemura

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Fields of activity: Global Business Development

JICA Project for Development of Business Continuity Plan (BCP) for Disaster Control in Bhutan

I am very honored to receive this ITU-AJ Encouragement Award at this time. I would like to express sincere thanks to the ITU Association of Japan and everyone else involved for their encouragement and guidance.

This project began in November, 2018, with the goal of developing and enabling operation of the first BCP at Bhutan Telecom (BT) for disaster control. It started with instruction on basic questions like "What is a BCP?" and went on to develop the BCP basic policies. Through repeated disaster-measure drills, the code of conduct for disasters was created, and BT's BCMS (Business Continuity Management System) was officially launched. BT's BCP and its activities were expanded horizontally to relevant local agencies, and in December, 2021, all work was completed. Currently, BT is operating the BCMS reliably, on its own.

The environment in Bhutan is completely different from Japan and BT had very little disaster experience, so it was not easy to develop the first BCP with them. However, with the passion of the Japanese experts, the enthusiastic guidance from everyone at JICA, the strong leadership of BT management, and the sincere attitude of the BT employees, we were able to complete the project successfully.

Although every day felt frantic and worrisome during the project as part of the technical support, upon reflection I personally learned so much from all of the participants from Bhutan and Japan, in terms of technology, thinking, attitude and other factors. I hope to be able to use this experience in the future in collaboration with people in Japan and overseas, to contribute to developing Japanese information and communications together with Bhutan and other countries.

Noboru Yoshikane

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Fields of activity: ITU-T SG15

Standardization activities of OTN interfaces

At this time, I would like to express my appreciation to all concerned on receiving this ITU-AJ Encouragement Award and to sincerely thank ITU-AJ and everyone involved for their efforts in holding this ceremony.

Since 2006, I have been participating in standardization activities at ITU-T SG15 in relation to the Optical Transport Network (OTN). In particular, I have been involved with the OTN interface used by nearly 100% of the world's terrestrial core optical networks by making contributions and proposals on carrier requirements and drafting related Recommendations. I was also fortunate in having the opportunity to work with both domestic and overseas network carriers and network equipment vendors in jointly tackling a variety of problems too difficult to solve independently. In addition, I was able to collaborate with a number of people outside the company in promoting the standardization of an Ethernet transport system on OTN and contributing to the drafting of an OTN Interface Recommendation for transmission speeds in excess of 100G and the drafting of a Flexible OTN Interface Recommendation that could achieve a beyond 100G OTN interface by bundling multiple physical interfaces. This was a rare experience that I cherish.

Going forward, I see the role of the OTN as not just to carry communication traffic but also to support society as a social infrastructure that can help solve a variety of social issues. With this in mind, I will continue in my efforts to contribute to the construction of the OTN as a technical foundation for achieving a safe, secure, and highly reliable information-communications network.

Huang Jingyi, Hiroshi Komatsu, Kentaro Sakata, Shiro Fukumoto

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Fields of activity: ITU-R WP5D, APG, AWG

Kentaro Sakata
(main author)

Standardization Activities for Implementing HIBS

I am sincerely grateful to receive this ITU Encouragement Award at this time.

Our team has been in charge of international standardization activities, mainly with ITU-R and related to International Mobile Telecommunications (IMT). Since 2017, we have been involved in standardization activities relating to High Altitude Platform Stations (HAPS) providing IMT, referred to as High Altitude Platform Stations as IMT base stations (HIBS). Currently, we are studying use of frequencies below 2.7 GHz for HIBS in ITU-R WP 5D, including sharing studies using other systems and any associated regulations. This falls under WRC-23 agenda item 1.4, which was established at WRC-19 based on proposals from Japan and other countries.

This was our first experience establishing a WRC agenda item, and our struggles to make progress as a team, with discussion every day late into the night, is still a fresh memory. The most challenging part was gathering support from other countries and regions. We participated in ITU-R meetings and regional preparatory meetings and also sub-region meetings and small workshops to meet face-to-face with delegates from each country. We explained why HIBS is an effective solution for expanding mobile connectivity, and why frequency bands for HIBS need to be expanded. This activity also taught us how important it is to have a meeting of minds for work on international standardization. Swimming in the Brazilian ocean with meeting participants, and dancing till late at night at the African sub-region meeting with members from various countries still remain as good memories.

In the future, we plan to have further meaningful discussion with the Japanese delegations and members from other countries and regions and hope to reach the best possible conclusion toward our WRC-23 goal of expanding the frequency bands for HIBS. I hope all who have been involved in the discussion will continue their guidance and support.

Croix.,Co.Ltd.

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Fields of activity: Considering that "Maintaining Mental Health is an important global issue for realizing SDGs," we are focusing our efforts on healing music for the human mind. In long collaboration with the medical field, we are using technologies like AI and Big Data to develop unique healing content, and actively expanding in regions like China, India and Africa. Continuing activity in this area is promising for the future.

⊕ CROIX

Changing meditation and sleep around the world

We are very grateful to receive this ITU-AJ Encouragement Award. We would like to express sincere thanks to everyone involved at the ITU Association of Japan.

According to our company concept that "All of our conduct shall be based on a conviction that we can change meditation and sleep around the world," we continue to develop sounds and images in collaboration with medical facilities, medical doctors and other specialists, as well as subscription services and managed treatment devices. These are provided to customers through three channels: our "App & Online business," our "Meditation & Sleep Content business," and our "Healing EC business."

In the future, we plan to expand the current three businesses and also build a well-being platform service that will link everything required to achieve quality meditation and sleep, from travel and lodging, to housing, and even to insurance.
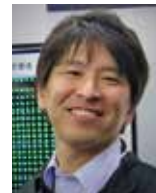
There are still many challenges to solve in realizing the business concept for which we received this award, but we intend to change meditation and sleep around the world, using technologies created by everyone participating in the ITU and to take on a role of connecting the hearts and minds of people. We hope for your continued encouragement and support in this endeavor.

Next Generation DTTB (Digital Terrestrial Television Broadcasting) Task Force

DiBEG
jp-br_nexttv-tf@ml.arib.or.jp   https://www.dibeg.org/
Fields of activity: Next Generation DTTB

Collaboration on next generation terrestrial broadcasting with countries adopting ISDB-T

Kohei Kambara
(main author,
taken at SET EXPO 2019)

Since ISDB-T broadcasting service first started in 2003 in Japan, 20 countries have adopted ISDB-T. Meanwhile, collaboration with ISDB-T adopting countries has matured. In particular, the relationship between Japan and Brazil, the first and the second ISDB-T adopting countries, has deepened over the decades.

Almost 20 years have passed since ISDB-T was standardized. During that time, there have been various technical advancements in the broadcasting field. Nowadays, countries that initially began ISDB-T broadcasting service are starting to consider the next-generation broadcasting system, using new technologies. In Japan, we have been studying advanced digital terrestrial broadcasting systems since 2019, under the auspices of the Information and Communications Council of the MIC. Similarly in Brazil, they started the call for technical proposals for their next-generation terrestrial broadcasting system in 2020. As such, the Next Generation DTTB Task Force has been working to harmonize the next generation broadcasting technologies between Japan and Brazil.

Since 2020, activities have been limited to on-line communications due to the COVID-19 pandemic. The time difference between Japan and Brazil is 12 hours, so online meetings have been conducted at 8:00 am Japan time and 8:00 pm Brazil time, or vice-versa. Although there are advantages of working on-line, such as the ability to meet more frequently, serious disadvantages exist when performing tests or demonstrations using actual equipment. We look forward to resuming real interaction, and accelerating collaboration in the field of next-generation broadcasting technologies with our colleagues worldwide.

Japan Battery Regeneration, Inc.

hit@jpn-bat.com   https://jpn-bat.com/en/
Fields of activity: Battery regeneration

Reduction of Digital Divide & Contribution to the environment

We received an encouragement prize from ITU-AJ and feel greatly honored. We'd like to express our sincere appreciation for assistance we received from ITU-AJ, MIC and others. We exhibited at ITU Telecom World 2015 in Budapest, and received an Entrepreneurship Award. We also participated in ITU Telecom World in 2016 (Bangkok) and 2019 (Budapest). We submitted contribution documents to ITU-D Study Group in 2016 and 2020 through ITU-AJ.

We have been working on ITU related topics based on the theme, "Reduction of Digital Divide and contribution to the environment".

We produce and market an additive (Super-K) for lead-acid batteries, which can extend battery life and with which old, abandoned batteries can be regenerated and re-used. We have experience regenerating and re-using thousands of old lead-acid batteries from telecom towers in Bangladesh. By regenerating old abandoned lead-acid batteries, those batteries can be re-used for construction of small-scale network systems, or re-used for off-grid communication systems in non-electrified regions such as remote islands and rural areas. With such applications, we think we can contribute for reducing the digital divide. Inappropriate disposal of abandoned batteries is also a serious problem for the environment, and our technology can contribute to reducing industrial waste.

We will keep working so our technology can be widely utilized to reduce the cost and extend the life of batteries and to re-use old batteries around the world. We'd like to contribute to and support SDGs in areas that preserve the environment by stopping mass production, mass consumption and mass disposal, create clean energy for everybody, and promote sustainable consumption and production.

Standards for Connecting the World Through Technological Innovation

- Nomination for the Director of the ITU Telecommunication Standardization Bureau -

Telecommunications technologies have brought about the information society and promoted digital society around the world, and are supporting the progress of digital transformation. Its impact on people's lives, industries and society has been growing in recent years. ITU-T continues to play a role in ensuring technology evolution and its timely deployment throughout the world. Mr. Onoe's leadership will contribute greatly to the realization of a vision that brings inclusive, sustainable and reliable society through the worldwide spread of technology standards that result in the deployment of meaningful and affordable broadband connections all over the world. Here, the Government of Japan nominates him for the Director of the ITU Telecommunication Standardization Bureau and would like to seek your support for him.

ONOE, Seizo

Present Title
Chief Standardization Strategy
Officer of NTT Corporation
and Fellow of NTT DOCOMO, INC.

Born
12 May 1957; Hyogo, Japan

Nationality
Japanese

Marital Status
Married with 2 Children

Extensive International Experience in Standardization and Management

- Leading the evolution of generation for the mobile communications network

- Abundant experience in organization management

- Active in standardization organizations and forums

- Work on ITU related activities

Education

| 1980 | Bachelor of Electronics Engineering, Kyoto University, Japan |
| 1982 | Master of Electronics Engineering, Kyoto University, Japan |

Professional Experience

1982	Joined NTT Public Corporation
1992	Transferred to NTT DOCOMO, INC. at its foundation
2002	Managing Director of the Radio Network Development Department
2008	Senior Vice President and Managing Director of R&D Strategy Department
2012	Chief Technology Officer and Executive Vice President and a Member of the Board of Directors and Managing Director of the R&D Center (later R&D Innovation Division)
2017	President of DOCOMO Technology, Inc. and Chief Technology Architect of NTT DOCOMO, INC.
2021	Chief Standardization Strategy Officer of NTT Corporation and Fellow of NTT DOCOMO, INC.

Commendations

2007	Accomplishment Award by the ITU Association of Japan
2008 and 2014	The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology
2018	Medal with Purple Ribbon

Mr. ONOE has extensive experience in international standardization and management. He has led the evolution of the mobile communications network through standardization initiatives and global coordination, and is known as "the Father of LTE". Mr.ONOE's experience, capabilities and tested management skills will surely be a driving force for ITU-T activities.

ONOE, Seizo

Candidate for the Director of the ITU Telecommunication Standardization Bureau

Standards for connecting the world through technological innovation

www.onoe-seizo.jp