Introduction

In Japan until now, there was no comprehensive accounting standard for revenue recognition, but it was published that the Accounting Standard No. 29 "Accounting Standard for Revenue Recognition" (referred to as "Revenue Recognition Standard") and the Accounting Standard Application Guideline No. 30 "Application Guideline on Accounting Standard for Revenue Recognition" (referred to as "Revenue Recognition Application Guideline") by the Accounting Standards Board of Japan on March 30, 2018. Prior to the publication of these standard and application guideline, the International Accounting Standards Board and the Financial Accounting Standards Board in the U.S. jointly developed comprehensive accounting standard for revenue recognition, and in May 2014, "Revenue from Contracts with Customers" (IFRS 15, FASB Topic 606) have been published. In developing comprehensive accounting standard on revenue recognition, that is revenue recognition standards, the Accounting Standards Board of Japan made some examination on IFRS 15.

It is applied that Revenue Recognition Standard and Revenue Recognition Application Guideline from the beginning of the consolidated fiscal year and business year on after April 1, 2021 in principle. With the application of Revenue Recognition Standard, the following will be abolished: the Accounting Standard No. 15 "Accounting Standard for Construction Contracts" (referred to as "Construction Contracts Standard") and the Accounting Standard Application Guideline No. 18 "Application Guideline on Accounting Standard for Construction Contracts" (referred to as "Construction Contracts Application Guideline"), the Practice Corresponding Report No. 17 "Practical Treatment on Accounting for Software Transaction Revenue".

At this paper, when introducing Revenue Recognition Standard and the same Application Guideline in Japan, to begin with we will organize the differences from recognition standards such as realization basis and so on; secondly, we should clarify the response to review some issues: Completed Contract Method which will be discontinued, and Percent of Completion Method related to Construction Contracts Standard, and the same Application Guideline.

1. The present revenue recognition standard

In Japan, as the comprehensive accounting standards about the revenue recognition, it is only the regulation of accounting principle for business enterprises of "a sale to the one which was realized by the provision of the
sale or the service of the commodity and so on according to the principle of realization” (the second, 3B).

Also, when reading a typical opinion about the realization concept, according to Paton and Littleton, revenue is "it is realized according to the dominant view, when it is evidenced by cash receipts or receivables, or other new liquid assets. Implicit here are two tests: (1) conversion through legal sale or similar process; (2) validation through the acquisition of liquid assets” (Paton and Littleton 1965, p.49). In other words, it is and it is that current assets are acquired to the 2nd about whether the property has transferred the requirement of the realization by Paton and Littleton to the primacy or the invisible has provided it.

Then, as the one which is defining revenue in Japan, "the concept framework" (referred to as "Concept Framework"). In Concept Framework, revenue is defined as "the part which was released from the risk of the investment among the sum which corresponds with the increase of the assets which were the item to increase a net profit or a minority shareholder income and occurred by the end of a term of the specific period and the decrease of the debt" (ASBJ 2006, chapter3, para.13). Also, it is defined as "the measure in case of accounting which corresponds with the cash flow which is gotten from the investment" (ASBJ 2006, chapter3, para.13). Moreover, in the concept framework, the risk of the investment is supposed to be the uncertainty of the result of the investment. And if the result becomes a fact, it explains that it is released from the risk (ASBJ 2006, chapter3, para.13). In other words, it is possible to say that the fact that the result becomes a fact is realizing the increase of net assets and that the element is revenue.

As for the difference of the requirement of the realization by Paton and Littleton and the concept framework, the former lists the acquisition of the current assets but the latter lists that cash, i.e. cash or cash equivalent is gotten. Paton and Littleton list the acquisition of the current assets as the requirement of the realization. On the other hand, Prof. Hirose points out what it should make the acquisition of the monetary assets. Because, it is when acquiring the current assets of the securities of the purpose of the buying and selling and so on as a result of selling a product, it says that the dealings to acquire monetary assets, selling current assets must be done (Hirose 2015, pp.460-461). In other words, it thinks that the realization of the profit in case of dealings to acquire monetary assets, selling current assets is because it has been different from the one by the product sale at first.

In this way, as for the revenue recognition in Japan, the realization-basis becomes a principle but revenue isn't earned only in the sales process. It is as follows when showing an earned process with revenue and revenue recognition standards with profit with the figure.
As in chart 1-1, it becomes a series of flow that the main business operation process of the company begins the production of the product after buying raw material, and selling a complete product, and it does price collection. In a series of this flow, it thinks that revenue is gradually earned in the manufacturing process of the product, sales process, price collection process (Hirose 2015, p.456). As the revenue recognition standard about each process, the manufacturing process corresponds Accrual Basis, the sales process corresponds Realization Basis, the price collection process corresponds Cash basis. Also, as the specific standard of Accrual Basis, there are Percent of Completion Method, Crop Basis, Production Basis, Time Basis. Further, as the specific standard of Realization Basis, there are Sales Basis, Completed Contract Method, Due Date for Coming Basis. Furthermore, as the specific standard of Cash Basis, there are Collection Basis, Receipt Basis. In the present Revenue Recognition Standard, Realization Basis is a principle. It argued that a specific standard was applied from each process of the main business operation of the company. In the next chapter, it considers about the contents with new comprehensive Revenue Recognition Standard.

2. The new revenue recognition standard

(1) Five steps which are based on the basic principle

By the new Revenue Recognition Standard and the same application guideline which was published by ASBJ, the following is made a basic principle, "About move to the promised property or the custom of the service, describe at the sum of the concerned property or the consideration to expect that the company gets a right by the exchange for the service, to recognize revenue like this" (ASBJ 2018a, para.16).

To recognize revenue according to the basic principle, following five steps are applied (ASBJ 2018a, para.17).

Step 1: Identify the contract with a customer

<table>
<thead>
<tr>
<th>Manufacturing process</th>
<th>Sales process</th>
<th>Price collection process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production start</td>
<td>Production end</td>
<td>Collection of payments</td>
</tr>
<tr>
<td>Accrual Basis</td>
<td>Realization Basis</td>
<td>Cash Basis</td>
</tr>
<tr>
<td>Percent of Completion Method</td>
<td>Sales Basis</td>
<td>Collection Basis</td>
</tr>
<tr>
<td>Crop Basis</td>
<td>Completed Contract Method</td>
<td>Basis</td>
</tr>
<tr>
<td>Production Basis</td>
<td>Due Date for Coming Basis</td>
<td>Receipt Basis</td>
</tr>
</tbody>
</table>

(Created by author with refer to Hirose 2015, p.458)
Step 2: Identify the performance obligations for contract
Step 3: Calculate sale price
Step 4: Allocate the transaction price to the performance obligations in the contract
Step 5: The time to have satisfied the performance obligations or with satisfying, it recognizes revenue

According to Concept Framework, about revenue "The fund which the company invested is released from the risk of the investment when and as for the profit which shows the result of the investment, a principal objective is placed in the explanation of the matters such as how to be appropriated" (ASBJ 2006, Chapter 4, Introduction). From this thing, whether or not to be realized and how revenue is appropriated when think that it is the most important to the revenue recognition. Therefore, in the above five steps, it decides to see Step 5 about whether or not to be realized and how for revenue to be appropriated when in detail.

As mentioned previously, in the present revenue recognition, it is two requirements of the realization as the principle, that is, completing the moving of the property or the offer of the service, having the receipt of the monetary assets, cash or cash equivalent. In contrast, by the company transfers promised property or service to the customer, revenue recognition is done as the performance obligations is satisfied or satisfies by Revenue Recognition Standard (ASBJ 2018a, para.35). The moving of property or service is ability to be blessed with all of few of the conveniences of the remainder after directing their use (ASBJ 2018a, para.37). In other words, it is the acquisition of the control for property or service.

About each performance obligations which was identified with Step 1 on the trade start day about the contract, whether to be satisfied by fixed period or temporary point is judged in revenue recognition (ASBJ 2018a, para.36). Furthermore, it decides to argue about the performance obligations which is satisfied for fixed period.

(2) Performance obligations which is satisfied for fixed period

About the contents which are transferred to the customer for property or service, when having the performance obligations satisfied for fixed period, it fills with either of the following requirements (ASBJ 2018a, para.38).

(1) As the company performs the obligations about the contract with the customer, the customer be blessed with the convenience.
(2) By the company performs the obligations about the contract with the customer, assets occur or the value at assets increases, the customer dominates assets.
(3) Fill with either of the following requirement.
① The company performs the obligations about the contract with the customer, assets which can't be diverted into another use occur.
② About the part where the company completed the performance obligations about the contract with the customer, it has the right for there to be compelling force which receives a consideration.

About three requirements of the performance obligations which is satisfied for fixed period, in what case
will you be specifically applied? First, the business which provides cleaning service and so on is thought about (1). Then, a construction contract to the land and the building of the customer and so on are assumed about (2).

Finally, the construction contract at the order house or the supply contract about the special product of the customer and so on are thought about (3). When filling with either of these requirements, they are applied in relation to the construction contract will increase. In addition, after application of the new Revenue Recognition Standard, Construction Contracts Standard and Construction Contracts Application Guideline are to be abolished. Therefore, even if it is the construction contract which applies Completed Contract Method at present, Percent of Completion Method must sometimes have to have been shifted to. It embodies the performance obligations which is satisfied for a fixed period.

In revenue recognition method about the performance obligations which is satisfied for fixed period, it estimates the progress times which relations affects the satisfying of performance obligations, it appropriates revenue for fixed period based on the progress times (ASBJ 2018a, para.41). This the progress times are estimated in the single method, the way of being consistent is applied to the similar performance obligations and status (ASBJ 2018a, para.42). In the way of estimating the progress times, there are the following two. First, the output method which is based on the elapsed time, the transfer unit amount and so on as the value of property or service which was transferred to the customer. Then, the input method which is based on the rate to account for consumed resources and an occurring working hour and a cost and so on are expected (ASBJ 2018b, para.15).

About the estimate with the progress times, when it is possible to calculate rational, it does revenue recognition for fixed period (ASBJ 2018a, para.44). On the other hand, when it isn't possible to calculate rational, the collection of the occurring expense is expected, it is processed by the cost collection standard until it becomes possible to calculate rational (ASBJ 2018a, para.45). In the same way, even if it is the performance obligations which is satisfied for fixed period, when the period of the construction contract is very short, it doesn't do revenue recognition for fixed period, revenue can be recognized when satisfying the performance obligations fully (ASBJ 2018b, para.95).

Hence, about revenue recognition which the performance obligations which is satisfied for fixed period, when it isn't possible to estimate, that the progress times is rational, if the collection of the occurring expense is expected, it is admitted in the processing of cost collection standard. When processing by the cost collection standard, profit isn't recorded (Kazuta and Adachi 2018, p.57). Thus, among the construction contract which applies Completed Contract Method at present, at first, if the calculation of profit is difficult, it will shift to Percent of Completion Method if the collection of occurring expense is expected. Moreover, it is a limit when the period of the construction contract is very short, it applies Completed Contract Method exceptionally. To recognize whether it is the long-term or short-term based on 1 year of accounting, it thinks that " the period is very short " is about several months. Thus, it thinks that the switchover from Completed Contract Method to Percent of Completion Method is promoted. Therefore, for the performance obligations which is satisfied for fixed period, what requirement is judgment that the performance obligations are satisfied temporary point? It argues at the following paragraph.
(3) **Performance obligations which is satisfied for temporary point**

When satisfying no of the requirement that the performance obligations are satisfied for fixed period, as the performance obligations which is satisfied temporary point, it transfers the control for property or service to customer. Consequently, it recognizes revenue when the performance obligations are satisfied (ASBJ 2018a, para.39).

In deciding when to transfer control to property or service to customer. Whether it is the ability to be blessed with all of little of the conveniences of the remainder from property or service is considered. Also, when reviewing the transfer of the control, it considers the index the following from (1) to (5) (ASBJ 2018a, para.40).

(1) Have the which receives a consideration about assets which the company provided the customer present right.
(2) The customer has legal ownership to assets.
(3) The fact that the company transferred the physical occupation of assets.
(4) The customer assumes the important risk which accompanies the possession of assets and is blessed with economic value.
(5) The customer checks assets.

As mentioned above, in the requirement of Realization Basis which is a principle with present Revenue Recognition Standard, property has transferred, or service has provided, also it is the acquisition of monetary assets. On the contrary, in case of revenue recognition by the performance obligations which is satisfied temporary point, the requirement makes transferring the control for property or service to the customer, it is requesting that it considers above-mentioned five indexes. While acceding to the requirement of the present Realization Basis from above-mentioned five indexes, it be clear from specifically (5) the index., there is a characteristic to emphasize about that the control for property or service is confirmed on the side of the customer.

In a word, it argued about revenue recognition about Revenue Recognition Standard and Revenue Recognition Application Guideline, to clarify a difference with Construction Contracts Standard and Construction Contracts Application Guideline. In the next chapter, it considers using the concrete example of the accounting procedure.

3. **Accounting procedure by present standard and new standard about construction contracts**

(1) **Procedure by Construction Contracts Standard**

In Japan, before Construction Contracts Standard and Construction Contracts Application Guideline are published, about revenue for the long-term contract work construction by the accounting principle for business enterprises, it estimates the construction progress times of period end, also, the Percent of Completion Method which profit and loss of the current term is a part with construction revenue by the appropriate construction
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revenue ratio. On the other hand, Completed Contract Method appropriates construction revenue on the day when the construction was finished and the transfer was complete. Thus, the applying these either in the choice was admitted （Commentary7）. Hence, about the similar contract work construction, the standard of revenue recognition which differs in the company is applied. Thus, it has indicated that there was danger of compromising a comparability among the financial statements.

"Construction contract" about Construction Contracts Standard and Construction Contracts Application Guideline, among the contract that the consideration is paid for the completion of work, it does a basic specification and details of work based on the direction of the customer for manufacture of the engineering works, the architecture, the shipbuilding, the gear and so on （ASBJ 2007a, para.4）. The construction contract to say here, generally, it thinks that it relates to the engineering works and the architecture if saying construction. Moreover, the one which relates to the shipbuilding and the manufacture of the gear is included. On the other hand, when the main purpose of the contract is the offer of the service, it makes Construction Contracts Standard unapplied （ASBJ 2007a, para.30）. When manufacturing standard items by the construction, it doesn't include in the coverage of Construction Contracts Standard even if the choice of the customer is admitted by the accompanying part （ASBJ 2007a, para.31）.

In a word, the one the main purpose of which is the offer of the service or the one as it manufactures standard items were excluded in contract by Construction Contracts Standard and Construction Contracts Application Guideline.

To deepen understanding about the present Construction Contracts Standard and Construction Contracts Application Guideline, it's as the following when doing accounting procedure with transaction example shown.

【Example】
Sapporo construction （Accounting term is 1year, Closing date is March 31）, it concluded following Construction contract.

The transaction price which was specified in the contract is 50,000,000 yen, it begins on 20X1 June 1st, and the construction is the schedule of the transfer on 20X3 July 10th, after complete. About the construction cost, the estimate total sum is 40,000,000 yen. Also, about the actual amount generated, 20X1 is 20,000,000 yen, 20X1 is 13,000,000 yen and 20X3 is 7,000,000 yen.

In addition, the agreement includes the offer of the 2year maintenance service. The maintenance service is implemented after transfer, the contents of 20X4 and 20X5 are the same.

【Journal】
March 31, 20X2 (Closing date)

<table>
<thead>
<tr>
<th></th>
<th>Dr. Completed construction accounts receivable</th>
<th>25,000,000</th>
<th>Cr. Completed construction height</th>
<th>25,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completed construction cost</td>
<td>20,000,000</td>
<td>Incompletion work expenditure</td>
<td>20,000,000</td>
</tr>
</tbody>
</table>

March 31, 20X3 (Closing date)

<table>
<thead>
<tr>
<th></th>
<th>Dr. Completed construction accounts receivable</th>
<th>16,250,000</th>
<th>Cr. Completed construction height</th>
<th>16,250,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completed construction cost</td>
<td>13,000,000</td>
<td>Incompletion work expenditure</td>
<td>13,000,000</td>
</tr>
</tbody>
</table>
March 31, 20X3 (Closing date)

Dr. Completed construction accounts receivable 8,750,000 Cr. Completed construction height 8,750,000
Completed construction cost 7,000,000 Incompletion work expenditure 7,000,000

It is clear with above-mentioned journalizing, Journalizing is done based on Percent of Completion Method which does revenue recognition by the construction progress times of the main construction contract. In Construction Contracts Standard and Construction Contracts Application Guideline, when making offer such as the maintenance service the main purpose, it is made unapplied. Thus, processing the account in the form to be buried in the primary construction contract as the accompanying service about the offer of maintenance service.

2 Procedure by the accounting base about new revenue recognition

To clarify a difference with the accounting procedure by Construction Contracts Standard and Construction Contracts Application Guideline, it journalizes based on above-mentioned dealing example according to Revenue Recognition Standard and Revenue Recognition Application Guideline. First, to recognize profit according to the principle which becomes basic as above-mentioned in Revenue Recognition Standard and Revenue Recognition Application Guideline, five steps are applied. Add a condition about the offer of the construction contracts and maintenance service to above-mentioned dealing example, When the contents and the flow when applying five steps are shown, it is as the following.

Step 1: It identifies the contract with a customer
Step 2: It identifies the offer of the construction contract and maintenance service as the performance obligations, it makes each the unit of the revenue recognition.
Step 3: It calculates transaction price to the offer of the construction contract and the maintenance service with 50,000,000 yen.
Step 4: Based on the independent selling price of the construction contract and the maintenance service, it distributes 50,000,000 yen of transaction price to each performance obligations, the transaction price of construction contract is 46,000,000 yen, the transaction price of maintenance service is 4,000,000 yen.
Step 5: From the nature of the performance obligations, it judges that each of the construction contract and the offer of maintenance service satisfies the performance obligations for fixed period, the construction contract is revenue recognition within 3 years of 20X1 - 20X3, the maintenance service is revenue recognition within 2 years of 20X4 -of 20X5.
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Chart 3-1 Five steps to recognize revenue

By the journalizing which is based on above-mentioned Revenue Recognition Standard and Revenue Recognition Application Guideline, for one construction contract about Construction Contracts Standard and Construction Contracts Application Guideline, it is identified as two performance obligations, the construct contract and the offer of maintenance service. Thus, the transaction price is distributed to each performance obligations, the revenue recognition can be applied after judging whether fixed period or temporary point. In
short, by the identifying of multiple performance obligations, for the offer of accompanying service and so on, the revenue recognition by the strict period belonging is possible.

**Conclusion**

The difference of revenue recognition about the Realization Basis which becomes the principle of the present revenue recognition, Revenue Recognition Standard and Revenue Recognition Application Guideline became clear. About the former, there are following requirements. First, Complete the transfer of property or the offer of the service. Then, the receipt of the monetary assets by cash or cash equivalent. On the other hand, about the latter, by the company transfers promised property or service to the customer, the revenue recognition is done as performance obligations which is satisfied for temporary point, or fixed period. Also, while acceding to the requirement of the present Realization Basis, in addition to the corporate side which provides the property or the service, fixed control for property or service is esteemed by the side of the customer. These are the characteristic of Revenue Recognition Standard and Revenue Recognition Application Guideline.

It relates to Construction Contracts Standard and Construction Contracts Application Guideline which is abolished in the future. About the support by the reconsideration of Completed Contract Method and Percent of Completion Method, the increase of the construction contract which satisfies those requirements is expected. It must be sometimes necessary to have switched over from the present Completed Contract Method to Percent of Completion Method about the construction contract. At that time, need to estimate the progress times which affects the satisfying of performance obligations, when it isn't possible to calculate rational, the collection of the occurring expense is expected, processing in the cost collection standard is admitted. Only the period of the construction contract is very short, it applies Completed Contract Method exceptionally. Of course, about the very short period and how long, it will be the problem which it should define by the practice in the real estate industry. From now, we think that switchover from Completed Contract Method to Percent of Completion Method is forwarded.

By the present Construction Contracts Standard and Construction Contracts Application Guideline, the offer of the maintenance service and so on must process the account as the part of construction contract which comes to be of primary concern as the accompanying service. On the other hand, about the construction contracts by Revenue Recognition Standard and Revenue Recognition Application Guideline, by the identifying of multiple performance obligations, for the offer of accompanying service and so on, the revenue recognition by the strict period belonging is possible. However, when identifying multiple performance obligations, it expects that it becomes a complicated procedure. In real estate companies or real estate industry, the mechanism of the revenue recognition which supported Revenue Recognition Standard and Revenue Recognition Application Guideline will have to be shared.

In Japan, By the introduction of Revenue Recognition Standard and Revenue Recognition Application Guideline, the switchover from Completed Contract Method to Percent of Completion Method, or if identifying as the performance obligations such as the offer of the maintenance service is done, the revenue recognition by the appropriately period belonging must promote. Accordingly, until now, the offer of the maintenance service
which seems to have been slighted from the viewpoint of the profitability and so on come to get in the spotlight, it must be expected to accelerate costly innovation.

Reference
ASBJ (2006), Discussion materials "Conceptual framework of financial accounting".
ASBJ (2007a), Accounting Standard No. 15 "Accounting Standard for Construction Contracts".
ASBJ (2018a), Accounting Standard No. 29 "Accounting Standard for Revenue Recognition".
ASBJ (2018b), Accounting Standard Application Guideline No. 30 "Application Guideline on Accounting Standard for Revenue Recognition"