A Quantum Leap in NSSOL's Corporate Value (Translated from Japanese Version)

To: NS Solutions Corporation
Mr. Kazuhiko Tamaoki, Representative Director & President
Board of Directors

September 10, 2024

Pursue Real Growth

3D Investment Partners’ Basic Investment Principle: Pursue Real Growth

- Not contrived growth, but solid value creation
- Not one-off gains, but organic, compound, sustained growth
- Not for the benefit of a few, but for all participants

We are a group that supports and realizes “Real Growth" that is not apparent.

Unlimited growth from limited resources.

Resources are limited, for individuals and businesses.

Productivity depends on how the resources are used, and how profits are reinvested.

Long term growth is the result of ongoing decisions about using limited resources most productively.

If limited resources are used productively growth can be unlimited.
The path toward real growth begins with changes in the way we think and act.

For NSSOL’s Dramatic Enhancement of Corporate Value

3D INVESTMENT PARTNERS

Executive Summary

- **Due to poor of governance, NSSOL is not managed with the maximization of shareholder value and corporate value as primary objectives. There is significant room for improvement in the P/L, B/S and capital allocation**

Poor governance

— **It is crucial to develop a governance structure to establish the management with the maximization of shareholder value and corporate value as primary objectives**

— **However, NSSOL's governance is inadequate, and NSSOL does not have a structure in place to manage the company with the maximization of shareholder value and corporate value as primary objectives**

✓ Governance issues include lack of independence of the board of directors and improper accounting of round-trip transactions

✓ General shareholders are concerned about NSSOL's governance

Failure to conduct management with shareholder value and corporate value as the KPIs

Better Profitability

— For the maximization of profits, there appears to be room for improvement in areas such as ① Review of Pricing for Nippon Steel, ② Review of Pricing for Other Customers, ③ Reallocation of Resources Away From Low Return Projects, ④ Reducing Outsourcing Costs for Subcontractors, ⑤ Increase Offshore Share of Outsourcing, ⑥ Reduce Headcount and Personnel Expenses in General Management, ⑦ Reduction of Other Costs, ⑧ Development of Domestic Steel Manufacturer Customers, ⑨ Development of Overseas Steel Manufacturer Customers.

— These seven improvement measures are expected to result in a profit of approximately 19 billion yen.

Liquidating Non-Core Financial Assets

— For the maximization of investment funds, there appears to be room for improvement in areas such as ① resolution of deposits with the parent company that fall below the cost of capital, ② sales of cross-shareholdings, ③ sales of other securities that fall below the cost of capital, and ④ improvement of the CCC, which is centered around a receivable turnover period

— These four improvement measures are expected to result in the creation of investment funds of approximately 179 billion yen

Reinvestment in High Yield Returns

— By reinvesting the investment funds gained from improving B/S at a level that adequately exceeds the cost of capital, it is possible to achieve value improvement in a cumulative manner

— Possible reinvestment policy includes "recruiting in existing areas, R&D and reinvestment in M&A", "reinvestment for venturing and expansion into new areas", and "reinvestment in treasury shares"

— It is suggested that reinvestment that combines treasury share acquisition which can be conducted at the company's discretion, and reinvestment in business should be carried out. We believe this is the most effective way to enhance value per share

- **The root cause of NSSOL's poor governance is the fact that NSSOL has not achieved independence from Nippon Steel**

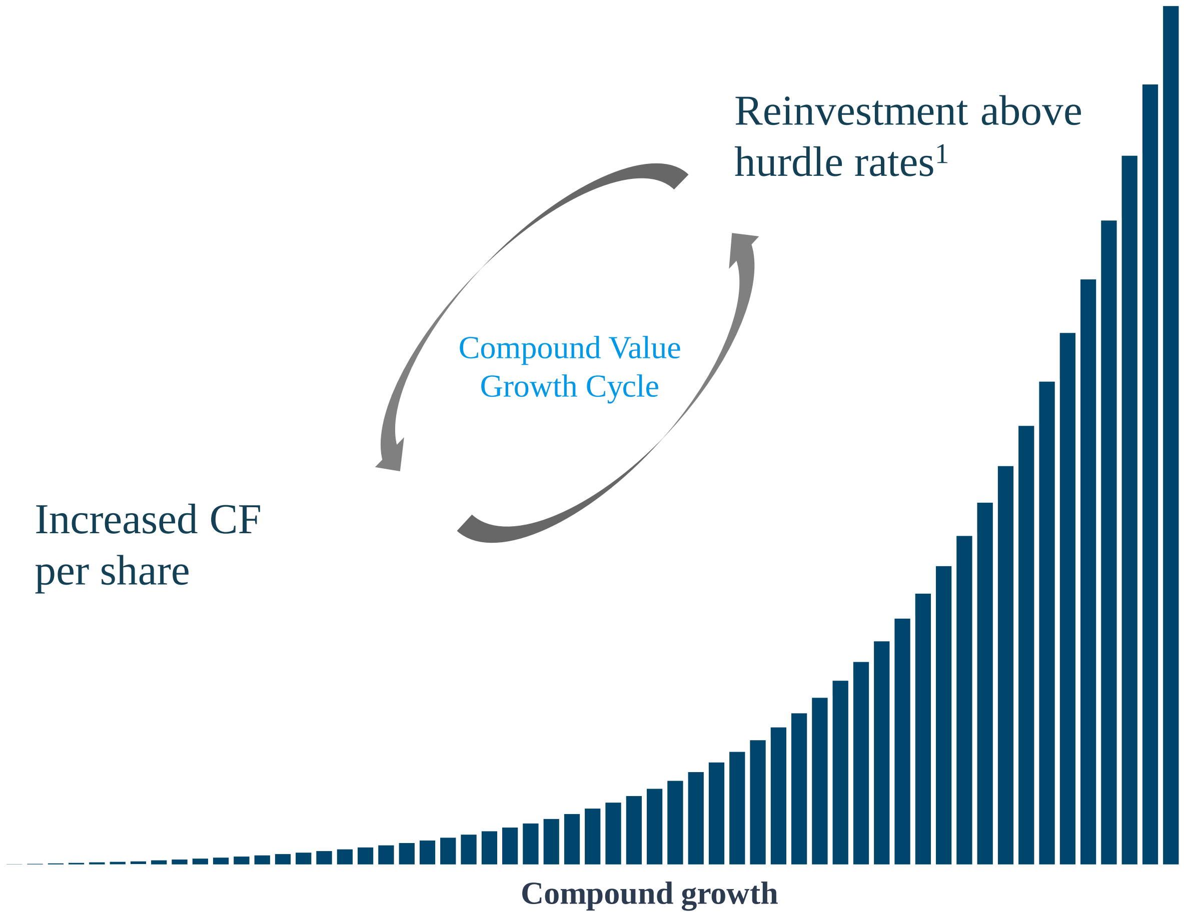
— If there is a structural risk of conflict of interest between Nippon Steel and minority shareholders, and the company is not independent from Nippon Steel, it is difficult to develop the governance structure to maximize shareholder value and corporate value

— Based on the structure of your board of directors, and the status of transactions and deposits with Nippon Steel, NSSOL has not achieved independence from Nippon Steel

Therefore, NSSOL should ensure complete independence from Nippon Steel, and maximize shareholder value and corporate value by developing the governance structure

Corporate value grows through a virtuous cycle of cash flow reinvested at above hurdle rates.

Compound growth from increased cash flow and continuously reinvested at above hurdle rates drives corporate value.



Sustained quantum growth can be achieved only by making corporate value management's overriding priority.

Note: [1] hurdle rate = IRR above +4% cost of capital

The heart of corporate governance is management's overriding duty to maximize corporate value.

Good governance is officially recognized in Japan as the key driver of corporate value.

Corporate Governance Code

-To achieve sustainable growth and increase corporate value over the mid- to long-term-

JPX
TOKYO STOCK EXCHANGE

June 11, 2021

Tokyo Stock Exchange, Inc.

"Corporate Governance Code –For sustainable growth and enhancement of mid- to long-term corporate value of the company- "

"In this Corporate Governance Code, "corporate governance" means a structure for transparent, fair, timely and decisive decision-making by companies, with due attention to the needs and perspectives of shareholders and also customers, employees and local communities. ***This Corporate Governance Code establishes fundamental principles. for effective corporate governance at listed companies in Japan.*** *It is expected that the Code's appropriate implementation will contribute to the development and success of companies, investors and the Japanese* ***economy as a whole through individual companies' self-motivated actions so as to achieve sustainable growth and increase corporate value over the mid- to long-term****.*

Practical guidelines for corporate governance systems

Ministry of Economy, Trade, and Industry

*"****The corporate governance reform*** *aims to break out of the current situation in Japan, where corporate value has been stagnant for nearly 30 years, to* ***achieve sustainable growth and enhance corporate value over the medium to long term*** *by effectively leveraging human resources to create value and increase productivity through innovation, and to build an economic system in which a virtuous cycle is realized in which the fruits of the economic growth are widely distributed to employees, consumers, and others, leading to economic growth through increased investment and consumption.*

Action program to substantiate corporate governance reforms

Statement from the Follow-up Conference on the Stewardship Code and the Corporate Governance Code

Financial Services Agency

*"****From the perspective of promoting sustainable corporate growth and enhancing corporate value over the medium to long term****, it is essential to further develop substantive measures in line with the purpose of the reform in resolving the above issues, and we cannot expect sufficient results simply by establishing a formal system. [Omitted] In light of the above, in the future, in order to promote the sustainable growth of companies and increase their corporate value over the medium to long term, measures to promote autonomous awareness-raising between companies and investors, including enhanced information disclosure, and measures to improve the effectiveness of constructive dialogue between companies and investors, will be fundamental to resolving the above issues, and* ***it is appropriate to supplement this with other measures, as necessary.****"*

*"****The Follow-up Conference recommends that the following measures and studies be carried out sequentially to underpin corporate governance reforms. The Follow-up Conference should also review the status of implementation of these measures and conduct studies from time to time and consider whether additional measures are needed.****"*

Independent outside directors are particularly important in the governance of listed subsidiaries (listed companies with a dominant corporate shareholder) like NSSOL.

Expected role of independent outside directors in listed companies with controlling or dominant shareholders

Tokyo Stock Exchange, Listing

December 26, 2023

JPX
JAPAN EXCHANGE GROUP

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- **In a normal listed company without a dominant corporate shareholder, shareholder interests coincide with those of the company itself.**

"Under normal circumstances, minority shareholders have no interests other than their interests as shareholders, so the interests of minority shareholders can be considered to be the same as the common interests of shareholders and consistent with the interests of the company itself."

- **However, in the case of a listed company, there is an inherent conflict of interest between the controlling shareholder (parent company) and general shareholders. The controlling shareholder is in a position to cause the company to favor the controlling shareholder's interests at the expense of general shareholders.**

"There is a risk of conflict of interest (structural conflict of interest) where the controlling shareholder exercises its influence for its own interests (interests other than those as a shareholder) , and thereby the interests of minority shareholders are impaired and only the controlling shareholder benefits from it."

- **Maximizing corporate value of a listed subsidiary requires management in the best interests of general shareholders.**

"Adequate protection of the interests of minority shareholders in the management of a listed company is of paramount importance to a listed company's ability to achieve its business objectives and sustainably increase its corporate value."

- **Independent outside directors are critical to protect general shareholders from self-serving action by the controlling shareholder.**

"In listed companies with controlling or dominant shareholders, independent outside directors have an important role and responsibility to protect the interests of minority shareholders."

"We urge listed companies that have controlling or dominant shareholders (as opposed to ordinary listed companies) to be aware of the additional role they play in protecting the interests of minority shareholders, and to perform their duties with this role in mind."

However, there are governance issues that have surfaced in NSSOL.

Signs of poor governance at NSSOL

Example 1: Lack of independence of the Board of Directors

- **Mr. Hiroto Naitoh, Nippon Steel's Managing Executive Officer, has been appointed** as a non-executive director.
- **A majority (8) of NSSOL's 13 directors are from Nippon Steel**, which is rooted in NSSOL's history**.**
- Proxy advisor Glass Lewis **recommended against re-election of Representative Director & President Tamaoki at this year's AGM, citing the board's lack of independence.**

"In our view, the Board does not have a sufficient number of independent directors and we have serious concerns about the Board's objectivity, independence, and ability to provide adequate oversight. In view of the lack of a sufficiently independent Board of Directors, it is recommended that you vote against the candidate Mr. Kazuhiko Tamaoki (Representative Director & President) in order to meet the criteria for independence that you deem appropriate."

Example 2: Improper accounting of round-trip transactions

- In 2020, NSSOL, together with at least eight other companies including Net One Systems, and Toshiba IT-Services, was found to have engaged in improper "round-trip" transactions designed to inflate revenues.
- NSSOL engaged in improper accounting for a total of 29 transactions with sales of 42.9 billion yen over a 6-year period from fiscal 2014 to the first half of fiscal 2019.

Breakdown of fictitious circular transactions

(Amounts are rounded down to the nearest 0.1 billion yen)

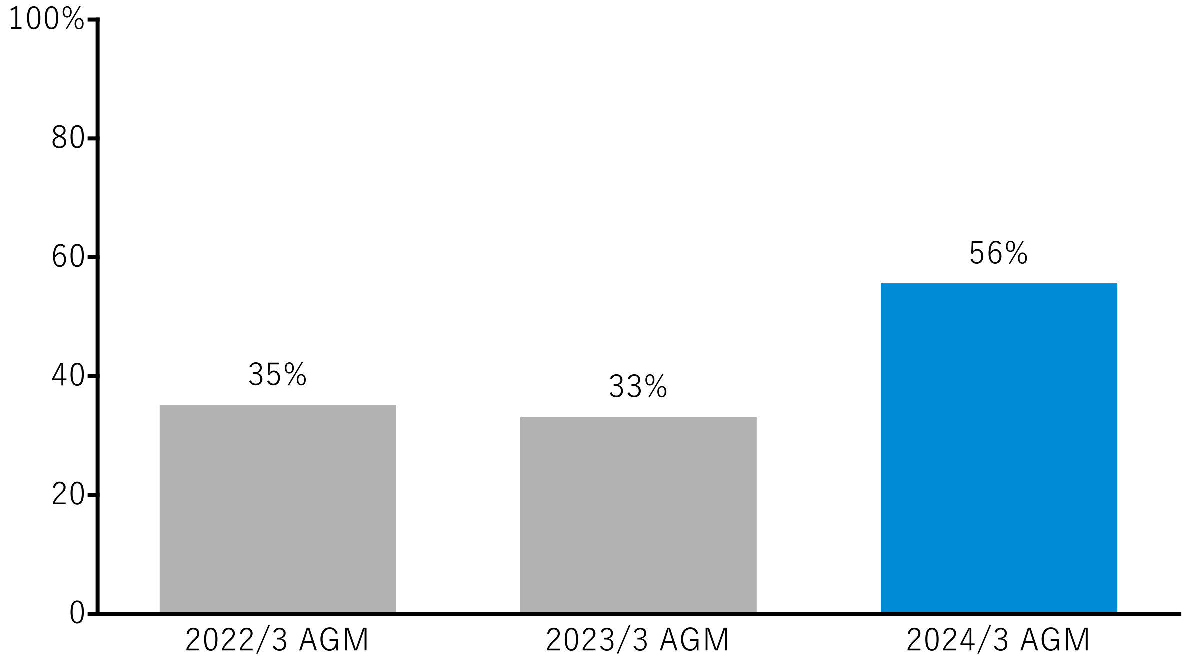
	Number of transactions	Sales amount	Cost of sales	Trading profit
Fiscal 2019	4	13.4 billion yen	12.5 billion yen	0.9 billion yen
Fiscal 2018	4	10.6 billion yen	9.9 billion yen	0.6 billion yen
Fiscal 2017	9	13.3 billion yen	12.5 billion yen	0.8 billion yen
Fiscal 2016	7	4.6 billion yen	4.3 billion yen	0.2 billion yen
Fiscal 2015	1	0.1 billion yen	0.1 billion yen	0.0 billion yen
Fiscal 2014	4	0.6 billion yen	0.6 billion yen	0.0 billion yen
Total	29	42.9 billion yen	40.2 billion yen	2.7 billion yen

Source: Nikkei Business; Materials disclosed by your company

General shareholders are concerned about NSSOL's independence from Nippon Steel.

The percentage of general shareholders voting in favor of the proposal to re-elect Representative Director & President Tamaoki at the most recent GM was a very low 56%, while there has been some improvement.

Percentage of minority shareholders voting in favor of the proposal to elect the president[1]



Doubts about NSSOL's governance structure are likely behind the low approval level.

- **Glass Lewis, a proxy advisory firm, recommended against Representative Director & President Mr. Tamaoki at this year's AGM, citing problems with the board's lack of independence.**

"In our view, the Board does not have a sufficient number of independent directors and we have serious concerns about the Board's objectivity, independence, and ability to provide adequate oversight. In view of the lack of a sufficiently independent Board of Directors, it is recommended that you vote against the candidate Mr. Kazuhiko Tamaoki (Representative Director & President) in order to meet the criteria for independence that you deem appropriate."

- **ISS, a proxy advisory firm, recommended against Representative Director & President Mr. Tamaoki at the last year's AGM, due to inappropriate capital allocation in light of large amount of Cross-Shareholdings.**

"Although the company discloses some information on cross-shareholdings as of March 2023, the level of disclosure is not sufficient for ISS to apply its cross-shareholding policy. Therefore, the voting recommendation is based on the company's most recent annual report (as of March 2022). NS Solutions allocates 29.5% of its net assets to cross shareholdings, which does not meet the ISS threshold, and inappropriate capital allocation is the responsibility of senior management."

We must say that NSSOL's governance is lacking and it appears that NSSOL do not have a system in place to manage NSSOL with maximizing shareholder value and corporate value as KPIs.

Source: Extraordinary Report; ISS/ Glass Lewis Proxy Advisory Report (translated by us)
Note: [1] Calculated on the assumption that NS exercises all of its voting rights in favor of the proposal.

NSSOL's management has failed to prioritize shareholder value and corporate value. NSSOL's management must focus on three areas to maximize value.

Section 1	Section 2	Section 3
Better Profitability	**Liquidating Non-Core Financial Assets**	**Reinvestment in High Yield Returns**

Section 1: Better Profitability

- **Domestic system integrators (SIs) have strengthened their sales and profitability. IT investment and a shift from labor-intensive to service-oriented businesses are major sources of greater demand.**
- **The SI market is expected to continue to grow at a steady rate of 5% per year, with cloud computing and business process automation centered on ERP being significant growth areas.**
- **At the same time, with rising personnel expenses and changes in the external environment and industry structure, there is growing uncertainty about future profit growth. Profit maximization is a critical issue for NSSOL.**
- **The following measures can increase NSSOL's profits by up to 19 billion yen annually.**

Better profitability

— ① Review of pricing for Nippon Steel: Prices charged to Nippon Steel are set "so that the gross margin rate is consistent with the company-wide average." Nippon Steel should be one of NSSOL's most profitable customers.

— ② Review of Pricing for Other Customers: NSSOL should seek additional price increases of approximately +5% for long-standing large customers.

— ③ Reallocation of Resources Away From Low Return Projects: NSSOL should re-assign sales and engineering personnel tasked with low-profit small customers in the Industrial Business System Solutions Units to other more profitable areas.

— ④ Reducing Outsourcing Costs for Subcontractors: NSSOL can achieve 5% - 10% price reductions from its subcontractors through negotiation and benchmarking against competitors.

— ⑤ Increase Offshore Share of Outsourcing: NSSOL should increase subcontracting to offshore contractors to the same level as its competitors level. The offshoring should be focused in Southeast Asia, NSSOL should acquire bridge SEs, local supervisory SEs, and other human resources to implement this goal.

— ⑥ Reduce Headcount and Personnel Expenses in General Management: NSSOL should reduce general management staff to competitive best-practice levels.

— ⑦ Reduction of Other Costs: NSSOL should conduct an in-depth review of procurement costs and practices, including headquarters rental costs.

Increased Revenue

— ⑧ Development of Domestic Steel Manufacturer Customers: NSSOL should develop business centered on projects to renew the core systems of domestic steel manufacturers such as JFE and Kobe Steel

— ⑨ Development of Overseas Steel Manufacturer Customers: NSSOL should develop business centered on projects to renew the core systems of Indian, Korean, European and American manufacturers

Section 2: Liquidating Non-Core Financial Assets

- **NSSOL has an excess of non-business assets, such as cash deposits with Nippon Steel and "strategic" shares of cross-held public companies held other than for investment purposes.**
- **There is also room to rationalize working capital, which is a business asset.**
- **As shown below NSSOL can generate at least 175.2 billion yen by liquidating excess non-business assets and an additional 3.4 billion yen by reviewing business assets as follows.**

Liquidation of non-business assets: 175.2 billion yen

- **Deposits with Nippon Steel: 96.1 billion yen**

  —The deposits with Nippon Steel can be withdrawn at any time according to the NSSOL's IR Department.
- **"Strategic" shares: 60.0 billion yen**

  —All "strategic" shares should be liquidated. There should be no adverse business impact.
- **Other securities: 19.1 billion yen**

  —All investments with returns below target hurdle rates should be sold.

Optimization of business assets: 3.4 billion yen to be generated

- **Working Capital: 3.4 billion yen to be generated**

  —Assuming that the CCC improves to the average level of SCSK, TIS, and BIPROGY.

  —If it improves to the highest level in the industry, it is possible to create more investment funds.

Section 3: Reinvestment in High Yield Returns

- Quantum growth in corporate value depends on reinvesting funds in projects and assets that generate returns that exceed the cost of capital.

  — In general, investment at investment efficiency lower than the cost of capital would damage corporate value, and it is necessary to set a strict hurdle rate for reinvestment.
  — The relevant hurdle rate should be the business's cost of capital plus a margin. A margin of 4% or more will generate quantum growth.
  — NSSOL's cost of capital is about 8.4%, so its hurdle rate should be 12.4% or more.

- NSSOL should reinvest funds in a combination of the following areas:

  — Reinvestment in existing product market domains:
    - ✓ Acquisition of human resources/R&D investment such as software development in existing areas/M&A for accelerating growth in existing areas and acquisition of capabilities, etc.

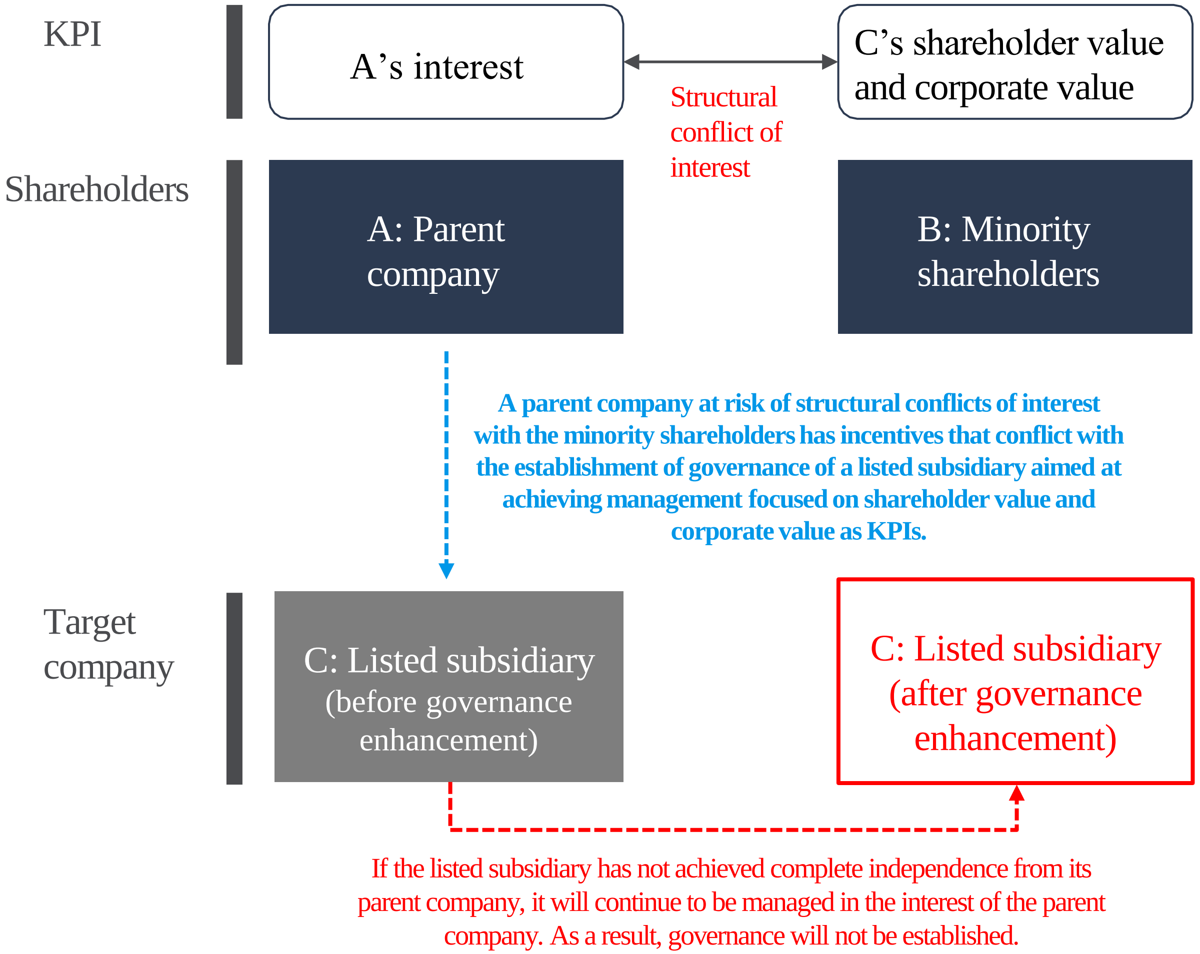
  — Reinvestment in new product market domains:
    - ✓ NSSOL has better potential for diversification into areas other than SI, its "core business," compared with its competitors.
    - ✓ Potential options for diversification into new areas include IT consulting, self-developed software, outsourcing, and overseas.
    - ✓ Decisions on the direction of diversification into new areas should be made based on quantitative analyses from the two perspectives of "where to fight" and "how to win."

  — Reinvestment in share buy-backs:
    - ✓ Reinvestment in the form of a combination of discretionary share buybacks, M&A and reinvestment in the core business can achieve higher rates of return than reinvestment in the core business alone.

- Reinvestment of funds must be conducted within a system that ensures adequate expertise and discipline.

NSSOL’s poor governance is rooted in its lack of independence from its parent company. (1/2)

There is a risk of structural conflicts of interest between the parent company and NSSOL’s minority shareholders. Therefore, when NSSOL fails to achieve independence from the parent company, it is difficult to establish governance to maximize shareholder value and corporate value.



- **However, in the case of a listed company, there is an inherent conflict of interest between the controlling shareholder (parent company) and general shareholders. The controlling shareholder is in a position to cause the company to favor the controlling shareholder’s interests at the expense of general shareholders.**

“If the company has a parent company, there is a risk of conflicts of interest between the listed company and its minority shareholders and the parent company in situations such as transactions with the parent company, coordination and distribution of business opportunities and lines of business, etc.

Disclosure of a listed company that has a parent company

“There is a risk of conflict of interest(risk of structural conflicts of interest) where a controlling shareholder exercises its influence for its own interests (interests other than those as a shareholder), and thereby the interests of minority shareholders are impaired and only the controlling shareholder benefits from it.”

Roles expected of independent outside directors of a listed company that has controlling shareholders or dominant shareholders

- **If the listed company has not achieved complete independence from its parent company, it will continue to be managed in the interest of the parent company, and therefore governance will not be established.**

NSSOL's poor governance is rooted in its lack of independence from its parent company. (2/2)

Considering the composition of NSSOL's board of directors and the status of its transactions with and deposits to its parent company, NSSOL does not seem to have achieved independence from the parent company.

Composition of the board

- **Mr. Hiroto Naitoh, Nippon Steel's Managing Executive Officer, has been appointed** as a non-executive director.
- **A majority (8) of NSSOL's 13 directors are from Nippon Steel**, which is rooted in NSSOL's history**.**

Transactions with Nippon Steel

- NSSOL sets prices for projects with Nippon Steel **to yield the company-wide average profit margin.**
- In the SI industry work for long-standing clients is generally priced to yield higher than average margins. **NSSOL's target profit margin for work performed for Nippon Steel should be 5 percentage points higher than the company average.**

※ Please see slide 34 onward for details.

Deposits with Nippon Steel

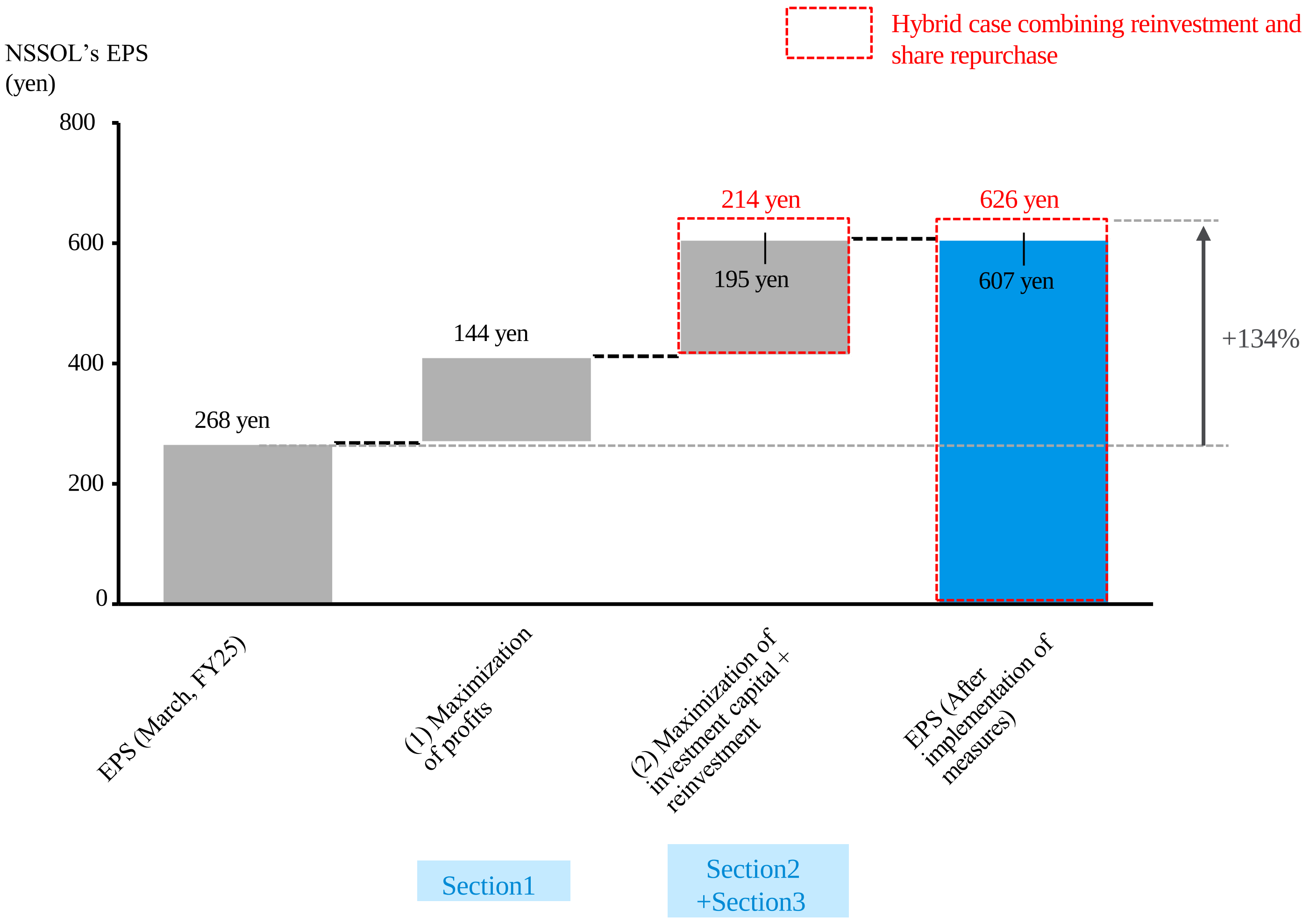
- NSSOL has approximately **96 billion yen in cash on deposit** with Nippon Steel.
- **The interest rate is an extremely low 0.2%**, well below NSSOL's cost of capital.

※ Please see slide 149 onward for details.

NSSOL should ensure complete independence from Nippon Steel and maximize shareholder value and corporate value through establishment of governance.

By ensuring complete independence from Nippon Steel and achieving management focused on shareholder value and corporate value as KPIs, CF per share will grow dramatically.

By implementing our proposed reforms, EPS[1] can be raised by about 134% from current levels.



Assumptions on which the calculation of EPS improvements are based

- **§EPS forecast for March FY25**
  - — Calculated by dividing NSSOL's forecast net profit for March FY25, 24.5 billion yen, by the total number of issued shares (excluding treasury shares), 91.49 million.
- (1) **Better Profitability** – Section1
  - — Operating profit will increase by 18.9 billion yen through profitability improvements and revenue expansion measures.
- (2) **Liquidation of non-core assets + reinvestment of proceeds**– Section2+3
  - — Reinvesting the proceeds from liquidation of non-core assets, 17.86 billion yen, at a hurdle rate of 12.4%[2] into the core business will generate 17.9 billion yen.
    - ➢ If a company with 19% ROIC and 5% annual net income growth is acquired at EV/NOPAT 10x (with an investment capital 17.86 billion yen generating 17.9 billion yen), an IRR of 12.4% can be achieved.
  - **— The hybrid case assumes that, of the investment capital of 17.86 billion yen, 89.3 billion yen will be allocated for share repurchase, and the remaining 89.3 billion yen will be reinvested into the core business.**
    - ➢ Share repurchase at 5,250 yen per share is assumed.

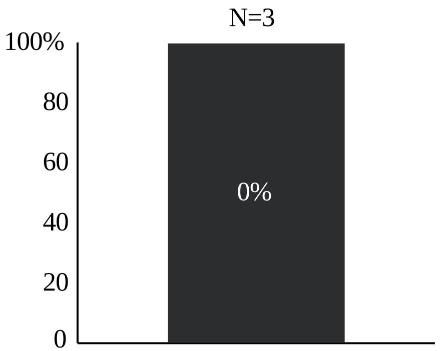
Notes: [1] EPS is used as an alternative indicator for cash flow per share. [2] This is the amount of NSSOL's capital cost we estimated, 8.4%, plus additional 4.0% (See p. 164 and thereafter).

(Reference) Nippon Steel will continue to be NSSOL's client even if Nippon Steel ceases to be its controlling shareholder.

Business computer business	Process control and its innovation business	Infrastructure business	Maintenance and operation business

"If NSSOL were to become independent from its parent company, Nippon Steel, what percentage of NSSOL's businesses would be shifted to other SIs? (Interviews with former employees of Nippon Steel)

0%
Percentage of businesses to be shifted to other SIs



0%
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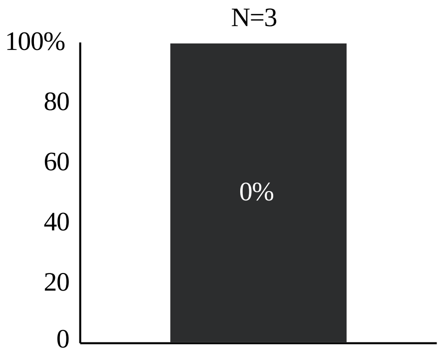

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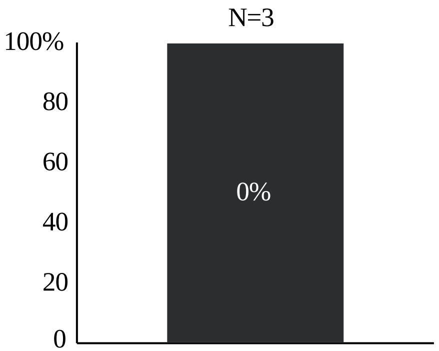

0%
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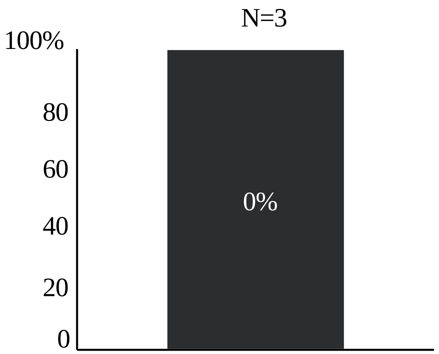

*"**It is completely inconceivable** that NSSOL, which has been building steel plant systems since it was the information system division of Nippon Steel, **will be replaced by other SIs**. There are too many disadvantages in doing so in terms of technologies, costs, and risks, and even if NSSOL were no longer part of the Nippon Steel Group, it would not matter."*

Undisclosed

*"The actual situation is that they are entrusted with the systems because only NSSOL knows the steel mill's systems, not because they are a group subsidiary. Even if NSSOL were to become independent, **the relationship would continue in order to keep the steel mill's system running**."*

Undisclosed

*"Nippon Steel is now working on the assumption that the steel mill system will be entrusted to NSSOL, and even if NSSOL leaves the Nippon Steel Group, **we need them to continue to be at the steel mill on site.**"*

Undisclosed

Source: Interviews with market participants

Section 1:Better Profitability

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- **Domestic system integrators (SIs) have strengthened their sales and profitability. IT investment and a shift from labor-intensive to service-oriented businesses are major sources of greater demand.**
- **The SI market is expected to continue to grow at a steady rate of 5% per year, with cloud computing and business process automation centered on ERP being significant growth areas.**
- **At the same time, with rising personnel expenses and changes in the external environment and industry structure, there is growing uncertainty about future profit growth. Profit maximization is a critical issue for NSSOL.**
- **The following measures can increase NSSOL's profits by up to 19 billion yen annually.**

Better Profitability

— ① Review of Pricing for Nippon Steel: Prices charged to Nippon Steel are set "so that the gross margin rate is consistent with the company-wide average." Nippon Steel should be one of NSSOL's most profitable customers.

— ② Review of Pricing for Other Customers: NSSOL should seek additional price increases of approximately +5% for long-standing large customers.

— ③ Reallocation of Resources Away From Low Return Projects: NSSOL should re-assign sales and engineering personnel tasked with low-profit small customers in the Industrial Business System Solutions Units to other more profitable areas.

— ④ Reducing Outsourcing Costs for Subcontractors: NSSOL can achieve 5% - 10% price reductions from its subcontractors through negotiation and benchmarking against competitors.

— ⑤ Increase Offshore Share of Outsourcing: NSSOL should increase subcontracting to offshore contractors to the same level as its competitors level. The offshoring should be focused in Southeast Asia, NSSOL should acquire bridge SEs, local supervisory SEs, and other human resources to implement this goal.

— ⑥ R educe Headcount and Personnel Expenses in General Management: NSSOL should reduce general management staff to competitive best-practice levels.

— ⑦ Reduction of Other Costs: NSSOL should conduct an in-depth review of procurement costs and practices.

Increased Revenue

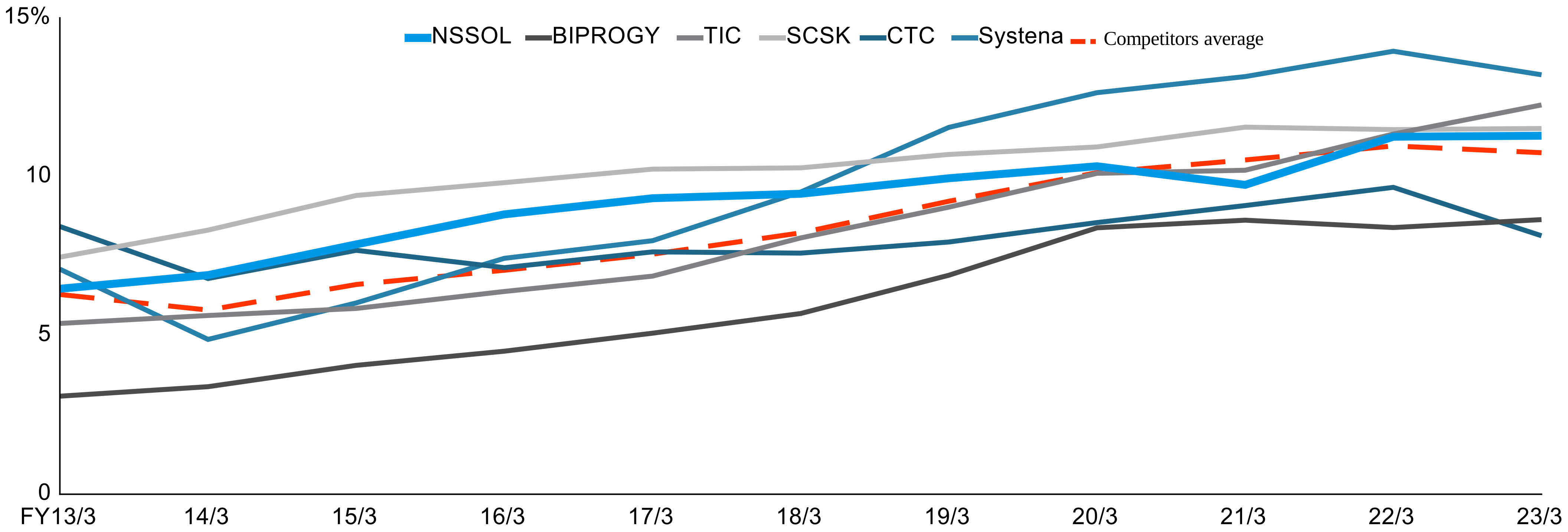
— ⑧ Development of Domestic Steel Manufacturer Customers: NSSOL should develop business centered on projects to renew the core systems of domestic steel manufacturers such as JFE and Kobe Steel.

— ⑨ Development of Overseas Steel Manufacturer Customers: NSSOL should develop business centered on projects to renew the core systems of Indian, Korean, European and American manufacturers.

Domestic SI Market Environment

Domestic system integrators (SIs) have strengthened their sales and profitability. IT investment and a shift from labor-intensive to service-oriented businesses are major sources of greater demand.

Major SIer operating profit rate
(%)



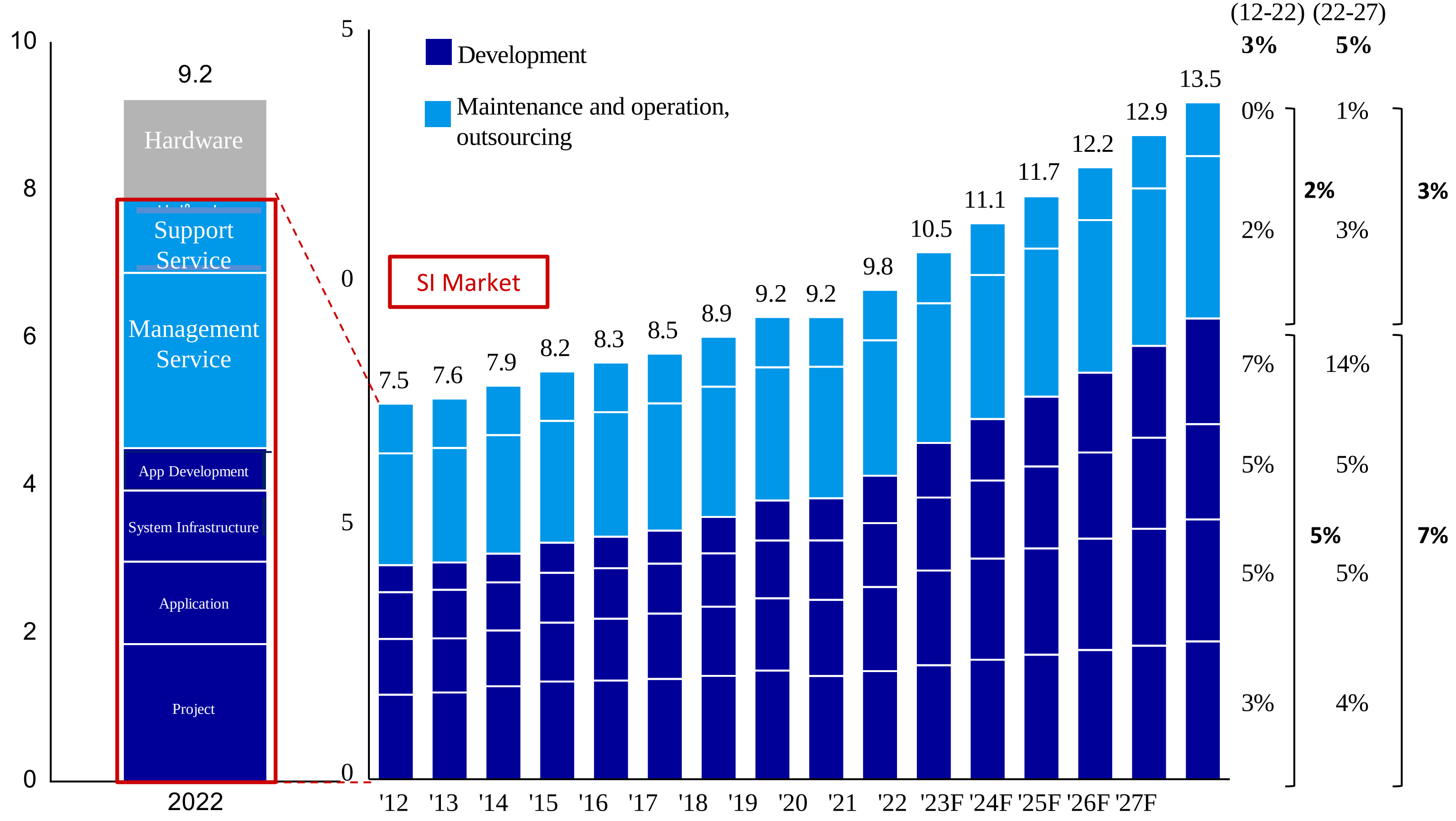
Stable growth in investment in domestic IT services

Accelerating investment in cloud computing and modernization. Increasing share of profitable “service-providing” businesses.

Domestic SI market is forecast to continue stable growth at 5% per annum.

Domestic IT service investment (trillion yen)

Transition of domestic IT service investment by business area (trillion yen)



Major drivers of future growth in the domestic SI market

Shifting to the Cloud with a focus on ERP

To respond to the 2027 problem, ICT players are accelerating the shift to cloud computing

Automation of business processes

Process automation is underway to strengthen global competitiveness.

Expansion of data-driven business

Progress in using data to help users expand their own businesses

Note: The IT service market is defined as the IT market excluding hardware and infrastructure sales, and does not include hardware devices and telecom services.

Source: IDC

(Reference) NSSOL's medium-term business plan for FY21-25 aims at an annual sales growth rate of 5-6%, around the same rate as the market growth, and in the "focus areas" such as DX in manufacturing, an annual sales growth rate of 10%.

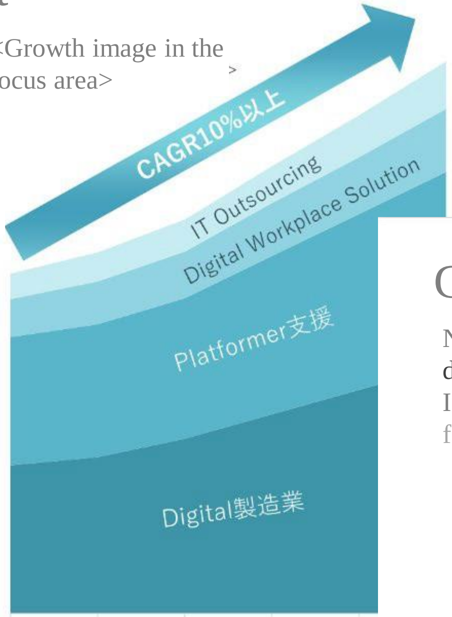
Medium-term business growth target

Aiming for business growth that outpaces the growth of the IT service market accelerated by DX needs

Consolidated sales growth: 5-6%

Focus area sales growth:
10% or higher

<Growth image in the focus area>



Growth story

NSSOL will work as one to maximize the acquisition of DX demand and expand our business while developing deeper relationships with our customers.
In particular, NSSOL will drive business growth by aggressively investing business resources in the following four focus areas.

DX in Manufacturing Industry

Digital Platformer

Digital Workplace Solution

IT Outsourcing

 6

Source: Company IR

However, rising personnel costs and changes in the external environment and industry structure are creating uncertainty about future profit growth

1 Rising personnel expenses

Acquisition and development of human resources
to support modernization in growth areas

- In the domestic labor market, there has been a persistent labor shortage over the past decade, with **the supply and demand for engineers being particularly tight**.
- Amid intensifying competition for talent that drives growth, **human resource costs are on an upward trend and are expected to continue rising in the future**.

2 Changes in the external environment and industry structure

Changes in the external environment and industry structure
surrounding the SI industry

- As the focus of IT investment by users is shifting towards “aggressive IT," aimed at strengthening products and services or transforming business models, **in-house execution of SI functions** is progressing.
- Major players that traditionally focused on upstream processes (e.g., Accenture) are now expanding into midstream and downstream areas.
- Agile development system leveraging open-source software (OSS) and cloud services is expanding, with growth drivers transitioning from conventional SI to modernization.
- Roles expected of SIs are shifting towards the capability to make specialized proposals and provide solutions. For SIs, investing to gain an advantage in new business areas is becoming increasingly important.

Now is a critical time for NSSOL to address profitability in a changing market.

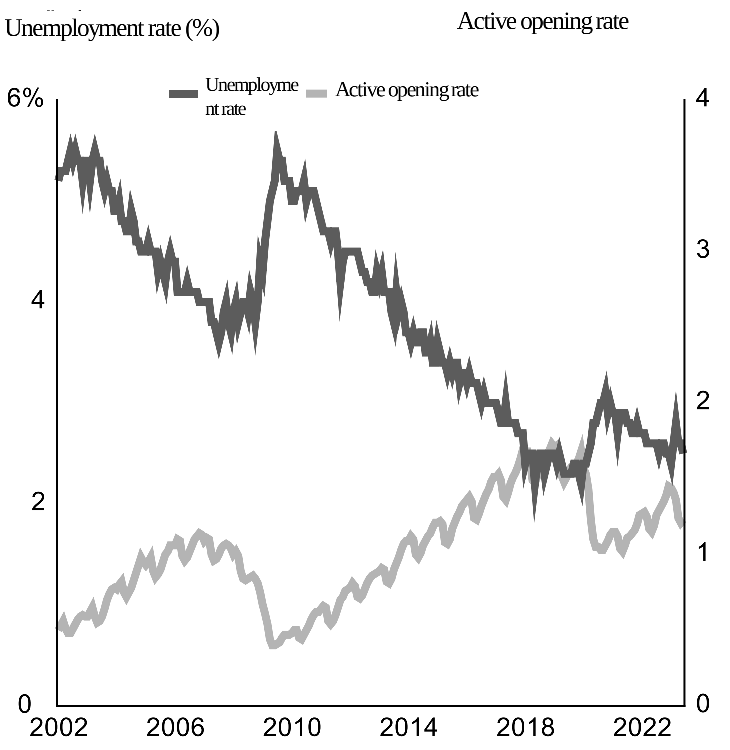
HR costs are expected to continue rising as competition for skilled human resources intensifies.

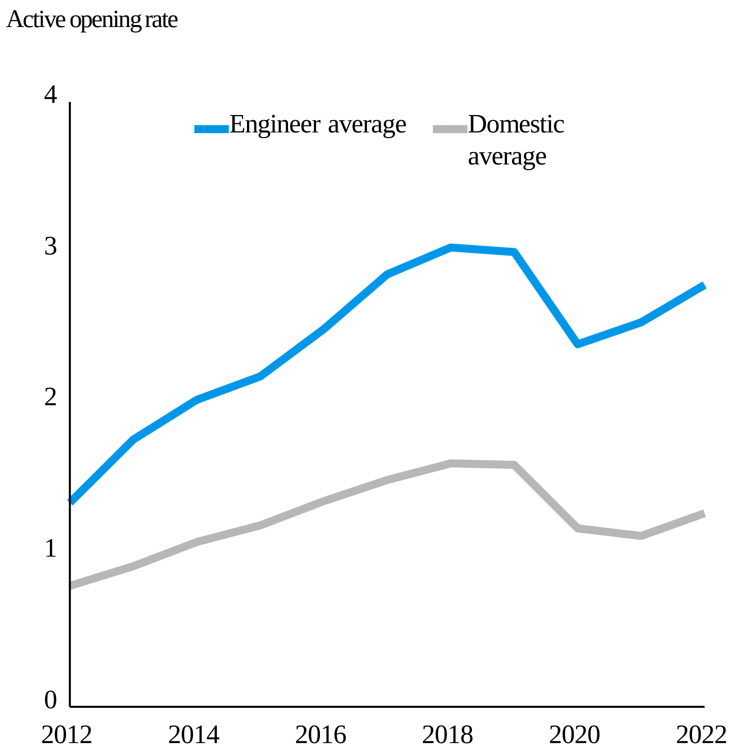
① Rising personnel expenses

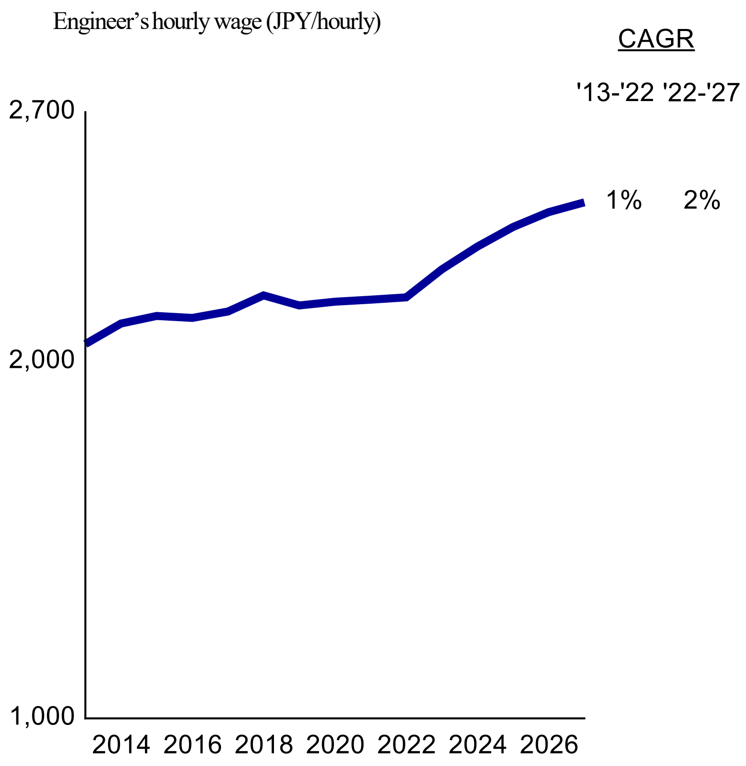
In the domestic labor market, there has been a persistent labor shortage over the past decade.

… the supply and demand for engineers are particularly tight.

Human resource costs are on an upward trend and are expected to continue rising in the future.







Note: GDP is on the spending side.
Source: Ministry of Health, Labour and Welfare; Cabinet Office; Analyst Report

The external environment and industry structure of the SI industry are undergoing significant changes.

2 Changes in the external environment and industry structure

Changes in the external environment and industry structure surrounding the SI industry

In-house execution
of SI functions by users

- Users’ focus in using IT is shifting from “defensive IT,” such as business management and streamlining, to “aggressive IT,” which aims to reinforce products and services and transform business models.
- As a result, the number of IT personnel required within companies has increased and the roles required of them have diversified. Insourcing of SI functions, such as IT strategy, design, project management, and in-house development that utilize “aggressive IT” has become more active, which is a shift from a traditional small IT team mainly working on maintenance and operation.

Expansion into midstream and downstream areas
of the major players that traditionally focused on upstream processes

- Major players who used to be IT consultants have advanced into not only the upstream process, which used to be their primary battleground, but also development, maintenance and operation.
- As more players compete for users’ IT budgets in the midstream and downstream processes, competition in the SI market may further intensify in the future.

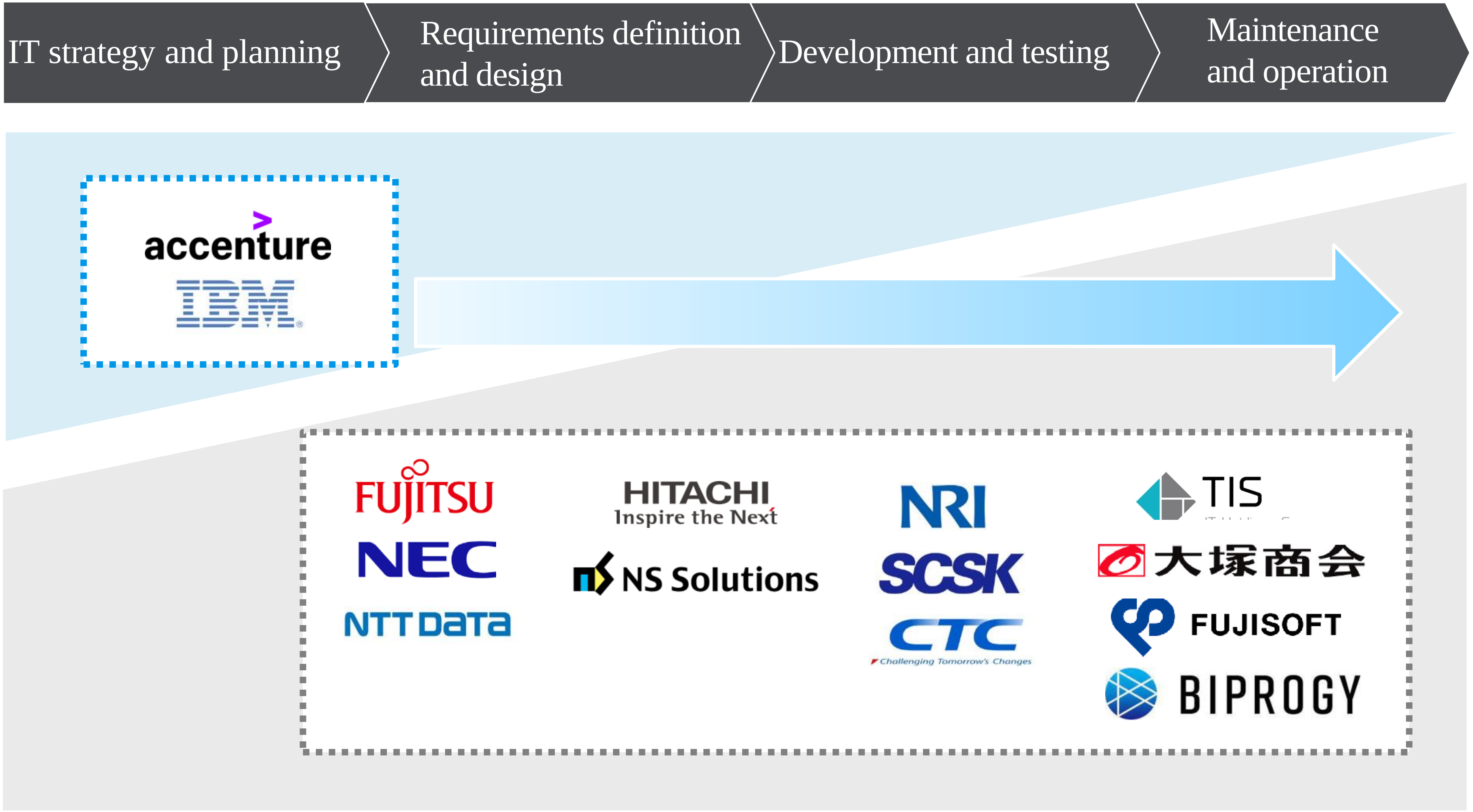
Shift to OSS/agile development
from conventional SI

- Agile development using open-source software (OSS) and cloud services has expanded.
- Under such circumstances, while conventional SI business, which develops systems from scratch for individual users, is experiencing slow growth or decline, the source of growth (such as major renovation of core systems) is shifting to modernization areas.

Changes to the “multi-layered subcontracting structure” and change of the role expected of SIs

- As a result, the roles of SIs expected by users are likely to shift from contracting or subcontracting from the design phase through the entire SI business towards offering the capability to make specialized proposals and provide solutions.
- For SIs to aim for sustainable growth, obtaining capabilities to gain an advantage in new business areas and investing therein is becoming increasingly important.

(Reference) Competition in the SI market is likely to intensify as major players, traditionally focused on upstream processes, increasingly expand into midstream and downstream areas.



- Major players who used to be IT consultants have advanced into not only the upstream process, which used to be their primary battleground, but also the process from development to maintenance and operation.
  - For example, Accenture has achieved expansion of its businesses with new customers and existing customers with low transaction shares by acquiring a share of customers' entire IT investments in the process from upstream through downstream after receiving orders for maintenance and operation at a low price.
- As more players compete for users' IT budgets in the midstream and downstream processes, competition in the SI market may further intensify in the future.

(Reference) A Snapshot of NSSOL and its Domestic Peers

	Company name	Sales in March FY23/3 (100 million yen)	Similar market tier	Similar sales volume*	Similar business model
Tier 1	Fujitsu	37,138			
	NTT Data	34,902			
	NEC	33,130			
	Hitachi	25,295			
	Accenture	-			
	IBM (IBM Japan)	6,493			
Tier 1/2	Otsuka Corporation	8,610	✓		
	NRI	6,922	✓		
	Itochu Techno-Solutions Corporation (CTC)	5,709	✓		✓
	TIS	5,084	✓	✓	✓
	SCSK	4,459	✓	✓	✓
	BIPROGY	3,399	✓	✓	✓
	Fuji Soft	2,989	✓	✓	
	NSSOL	2,917			
	Toshiba Digital Solutions	2,356	✓		✓
	Dentsu Soken	1,426	✓		✓
	Systena	745	✓		✓
	Mitsubishi Electric Information Systems	419	✓		
Tier 2	NSD	780			
	CEC	482			
	INES	424			
	Inet	350			
	COMTURE	291			
	CIJ	229			

Note: The sales data refer to those for the fiscal year ending December 2022 for Otsuka Corporation, January 2023 for CEC, June 2023 for CIJ, and March 2023 for the other. Hitachi's sales data refer to those of the Digital Systems & Services segment.
Source: Company IR

Measures to Improve Profitability

Direction toward P/L Improvement (Maximizing Profits)

Measures to Improve Profitability

1. Review of Pricing for Nippon Steel
2. Review of Pricing for Other Customers
3. Reallocation of Resources Away From Low Return Projects
4. Reducing Outsourcing Costs for Subcontractors
5. Increase Offshore Share of Outsourcing
6. Reduce Headcount and Personnel Expenses in General Management
7. Reduction of Other Costs

Revenue Expansion

8. Development of Domestic Steel Manufacturer Customers
9. Development of Overseas Steel Manufacturer Customers

(Reference) Overview of Issues Affecting Profitability and Measures to be Taken

Issues Affecting Profitability

Issues seen in NSSOL

- **Sales**
  - Pricing of client projects is too low
    - NSSOL pricing low compared to similar projects by peers
    - A high proportion of low-priced projects
  - Not enough client projects
    - Failure to pursue projects that could have been acquired
    - Low sales productivity (number of bids, bids won)
    - Engineers not contributing to sales
- **Labor costs**
  - Labor costs for engineers are high
    - High proportion of senior engineers
    - Labor costs high in relation to similar positions at peer companies
  - Outsourcing costs are high
    - Planned outsourcing costs are too high
    - Labor costs high in relation to similar positions at peer companies
  - (The same issues affect both engineer costs and outsourcing costs)
  - Other sales costs are high
- **SG&A**
  - Labor costs for sales personnel are too high
    - Number of sales personnel large in relation to magnitude of sales
    - Compensation levels are high
  - Head office costs are too high
    - Number of head office staff is large in relation to engineers and sales staff
    - Compensation levels are high
  - Other SG&A expenses are high

Measures to be taken by NSSOL

Measures to Improve Profitability

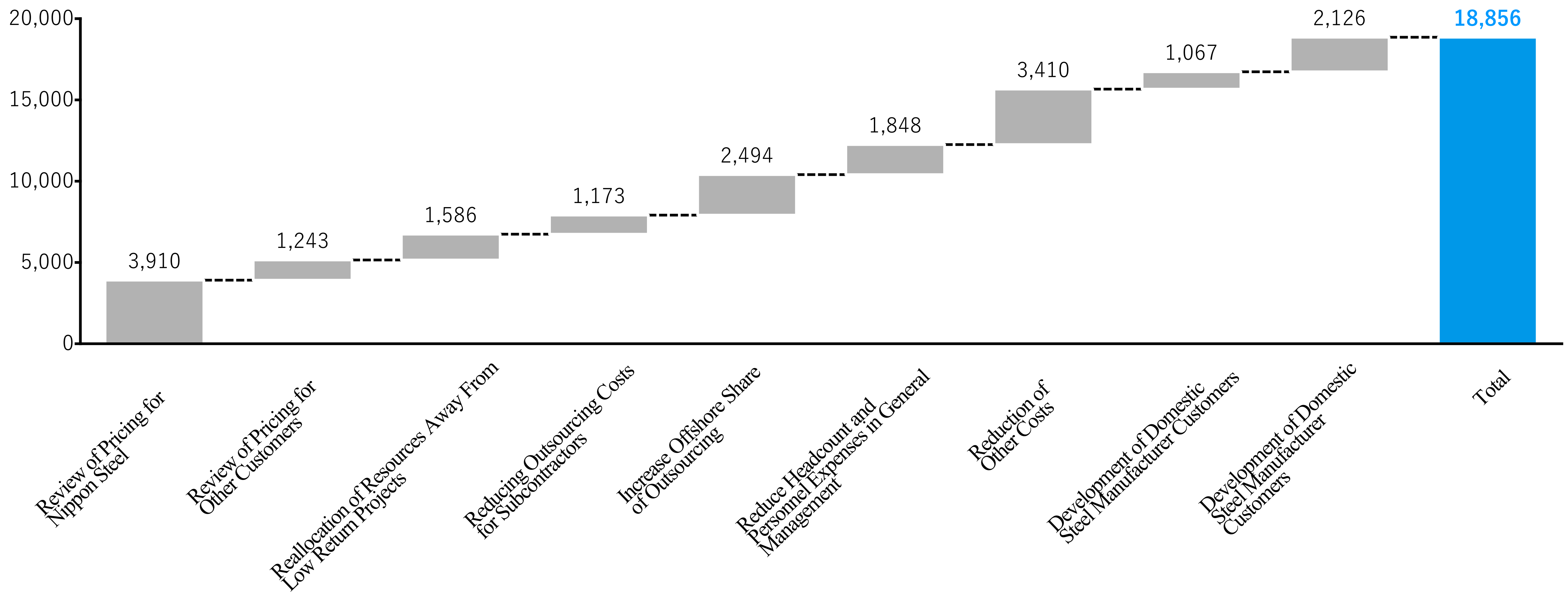
1. Review of Pricing for Nippon Steel
2. Review of Pricing for Other Customers
3. Reallocation of Resources Away From Low Return Projects
4. Reducing Outsourcing Costs for Subcontractors
5. Increase Offshore Share of Outsourcing
6. Reduce Headcount and Personnel Expenses in General Management
7. Reduction of Other Costs

Revenue Expansion

8. Development of Domestic Steel Manufacturer Customers
9. Development of Overseas Steel Manufacturer Customers

By implementing these measures, NSSOL's profits are expected to improve by approximately 19 billion yen.

Profit improvement effects of each measure (M JPY)



① Review of Pricing for Nippon Steel

1

Review of Pricing for Nippon Steel

Current issues

- NSSOL sets the gross profit margin for Nippon Steel projects to align with the company-wide average, including general customers.
- However, in the SI industry, ongoing transactions with long-term customers generally carry higher margins. Given the nature of projects with the parent company, the "desired profit margin" for the parent company should be 5 percentage points higher than the current rate.
  - Ongoing projects with long-standing customers, such as Nippon Steel, typically have low price elasticity (i.e., less pressure to cut prices) and incur lower costs relative to sales.
  - In fact, at NSSOL, the gross profit margin for ongoing projects with long-standing customers is generally around 25-30%, which is approximately 5% higher than the estimated gross profit margin for Nippon Steel's projects (i.e., company-wide average).
  - In addition, a competing steel manufacturer's captive SI has commented that "the parent company is one of our most profitable accounts".
  - Parent company projects benefit from lower sales costs, providing a cost advantage in SG&A expense. However, even when accounting for the difference in sales costs, the estimated operating profit for the parent company's projects remains lower compared to ongoing projects with similarly long-standing customers.

Proposed direction

- The desired profit margin" for the parent company should not be the current "company-wide average," but the "average of ongoing projects with long-standing customers (like the parent company)".
- Considering the current margin rate gap, it is appropriate to raise the unit price so that the gross profit margin for parent company projects will improve by about 5 percentage points.
- Given NSSOL's deep understanding of business processes and its significant role in supporting the core system, Nippon Steel has very little incentive to switch to other SIs. Even if unit prices are raised, the risk of losing the Nippon Steel as a core client is small.

1 Review of Pricing for Nippon Steel | Profit margins on ongoing projects with long-standing customers tend to be high.

Projects with high profit margins in general

Projects easily differentiated by SIs based on business knowledge and project experience

- Long-standing customers
- Development projects with previous experience, additional development and maintenance of the systems developed by the SI itself

Customers' price elasticity is low (i.e., less pressure to cut prices).

- Limited price competition with competing SIs
- Common understanding between the customer and the SI about the quality of deliverables

Lower costs relative to sales

- Low sales cost
- Limited man-hours and costs for gaining customers' understanding of business and other preparation of projects
- Easy to estimate the work period and man-hours at the time of project design

Projects with low profit margins in general

Projects that are difficult for SIs to differentiate based on business knowledge and project experience

- Short-term or new customers
- Newly ordered development projects

Customers' price elasticity is high (i.e., more pressure to cut prices)

- Price competition with competing SIs is likely to occur.
- In some cases, high uncertainty about the quality of deliverables for customers

Higher costs relative to sales

- High sales cost
- It takes man-hours and costs to gain customers' understanding on business (prior preparation of data, etc.)
- Difficult to estimate the work period and man-hours at the time of project design

"The longer you deal with a particular customer, the better you understand the customer's situation and, as a result, the easier it is for the SI to control costs."

Undisclosed

"With long-standing customers, at which our staff permanently stay, we can catch emerging needs and acquire deals at a minimal operating cost"

Undisclosed

"With new customers or those with a short transaction history, issues are more likely to occur, leading to higher costs. Additionally, since we are constantly compared to other SIs, prices tend to be lower"

Undisclosed

1 Review of Pricing for Nippon Steel | NSSOL's projects with Nippon Steel "projects with generally high profit margins" in the SI industry.

Requirements for projects with high profit margins

Customers' price elasticity is low (i.e., less pressure to cut prices)	Limited price competition with competing SIs
	Common understanding among customers and SIs about the quality of deliverables
Lower costs relative to sales	Low sales cost
	Limited man-hours and costs for gaining customers' understanding on business and other preparation of projects
	Easy to estimate the work period and man-hours at the time of project design

Characteristics of projects with the parent company for NSSOL

- *"NSSOL manages all the core systems of the parent company, so there will be no competition with other SIs"*

  Undisclosed

- *"Originally, we were the parent company's IT department, so we naturally understand each other's needs and expectations well. As a result, issues like discrepancies in the quality or understanding of deliverables that often arise with external customers rarely occur.*

  Undisclosed

- *"We don't have to make sales pitches to the parent company, which we do to external customers. While we have employees seconded to the parent company's IT division, even taking that into account, the sales effort required is about one-quarter of what is needed for an average external client."*

  Undisclosed

- *"Generally, with customers with short transaction histories, it takes us certain amount of time for initial understanding of their existing systems and data structures, but with the parent company, we are already familiar with their systems."*

  Undisclosed

- *"The volume of orders and development details are determined according to the parent company's IT investment plan, which allows us to grasp the timeline and required man-hours early on. Also, the process leading up to the order is clear through seconded employees, minimizing the risk of estimation errors."*

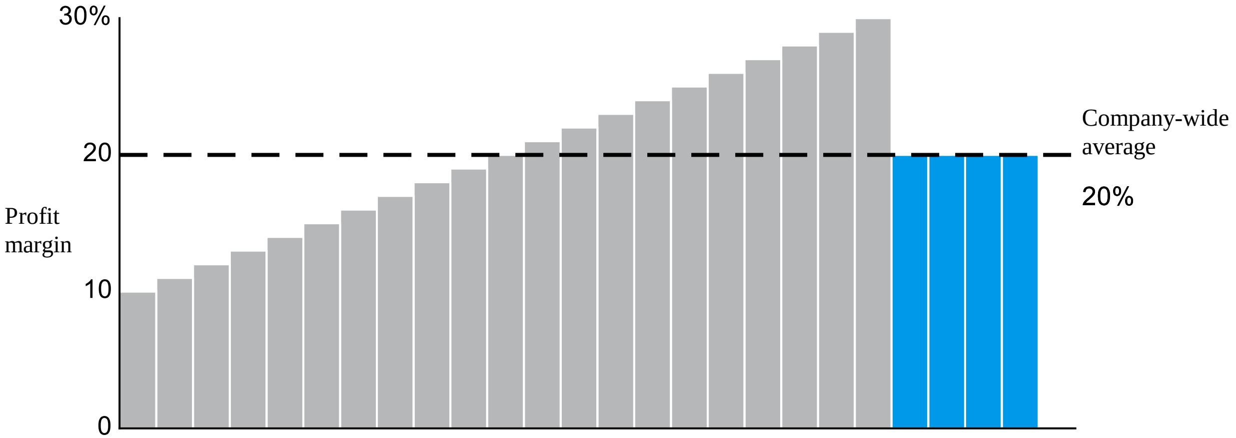
  Undisclosed

Source: Interviews with market participants

1 Review of Pricing for Nippon Steel | Pricing for Nippon Steel is set "to align with the company-wide average gross profit margin."

The unit price for projects with Nippon Steel is set "to align with the company-wide average gross profit margin."

Visualization of "company-wide average gross profit margin"



"The unit prices for projects with Nippon Steel are at the same level as the company-wide average. I do not think we accept their orders at a lower price."

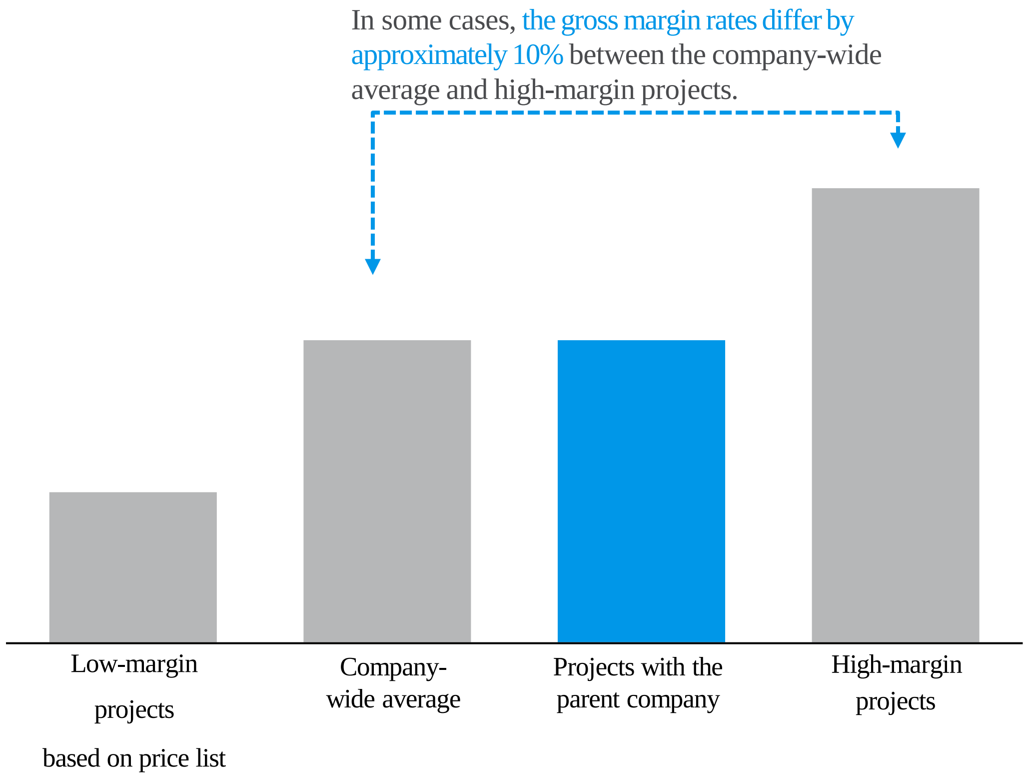
Undisclosed

"The basic approach is to adjust the gross profit margin for projects with the parent company to align with the company-wide average."

Undisclosed

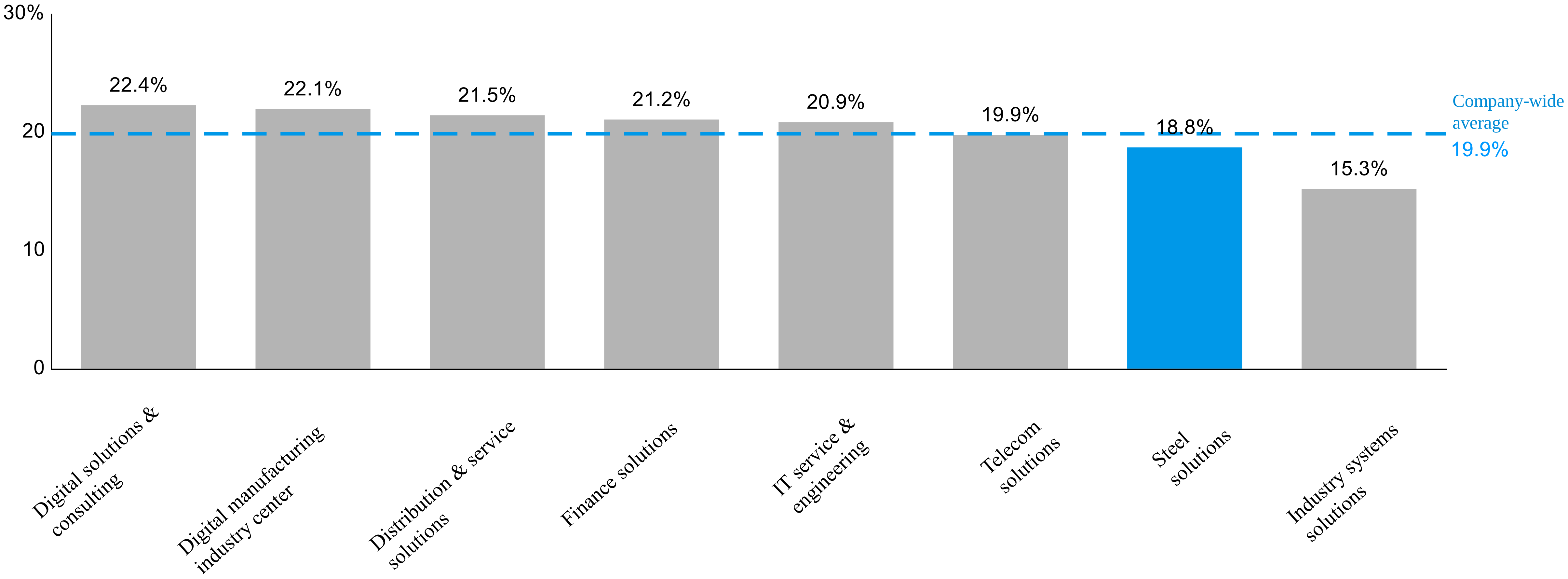
As a result, the gross profit margin of projects with Nippon Steel is lower than the "desired rate."

An example of a project for updating a company-wide ERP package (such as SAP and Oracle) for a customer with approximately 500 billion yen sales, with one-year work period, and with a team consisting of one project manager (PM) and five project leaders (PJ leaders)

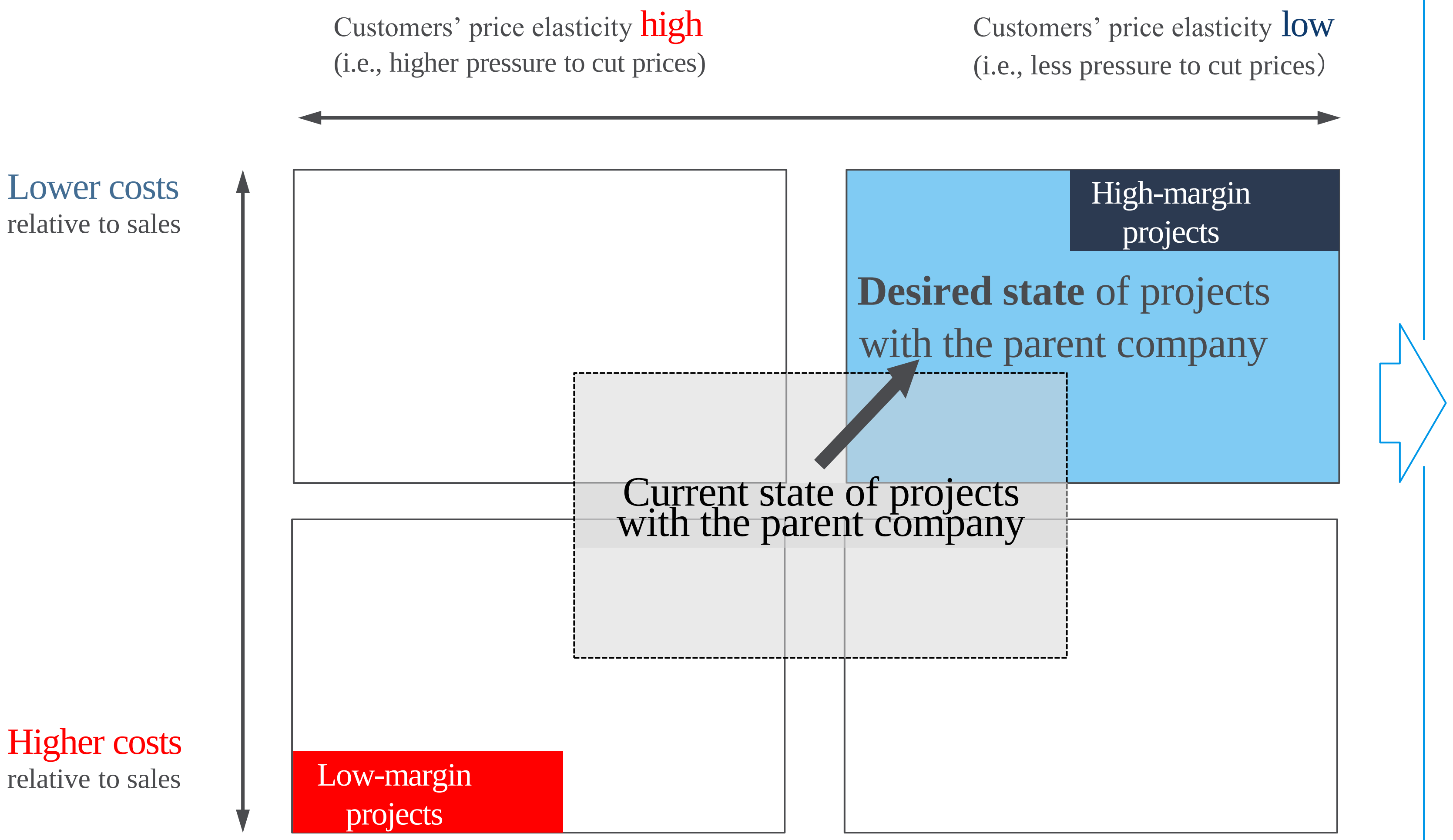


Review of Pricing for Nippon Steel | According to a third-party research institution, the gross profit margin of projects with Nippon Steel is slightly below the company-wide average.

NSSOL's gross profit margin by units
(for fiscal year 23/3, %)



1 Review of Pricing for Nippon Steel | The unit price for projects with Nippon Steel should be set at the same level as those with "low price elasticity of customers" and "lower costs relative to sales," rather than the "company-wide average," so that NSSOL's added value will be properly compensated.

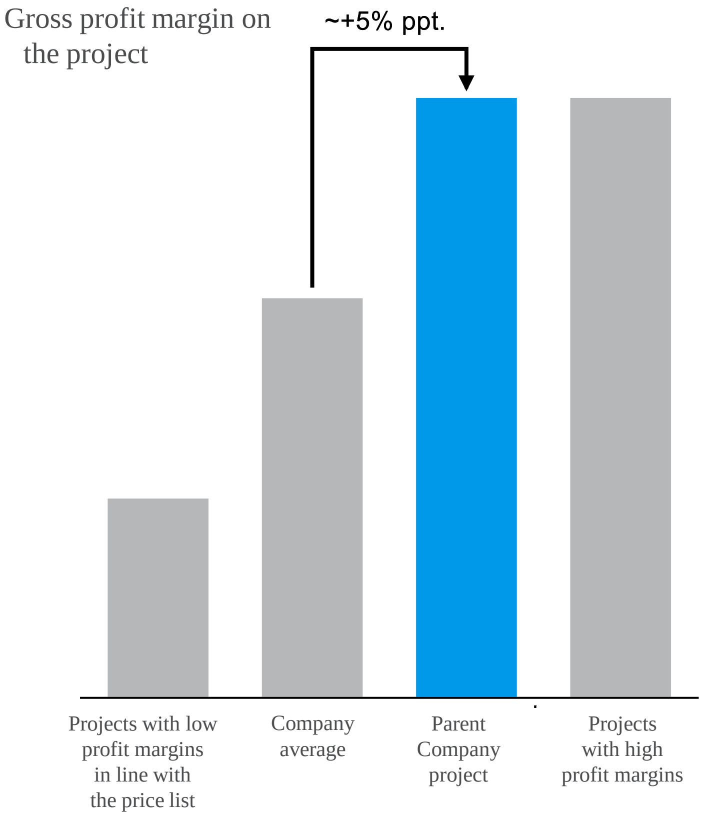


The profit margin of projects with Nippon Steel should be at the same level as the following projects (rather than the company-wide average).

- Long-standing customers
- Development projects with previous experience, additional development and maintenance of the systems developed by the SI itself

1 Review of Pricing for Nippon Steel | For other SI is affiliated with steel manufacturers, the parent company is one of the most profitable accounts.

Parent company projects achieve the highest level of gross profit margin in the company.



Comments from competitors about profitability of parent company projects (example of JFE Systems)

JFE システムズ

"Projects for the parent company (JFE Steel) are the most profitable among development projects. They (projects with the parent company) are about 5% higher in gross profit margin and about 10% higher in operating profit rate than the company-wide average."

"For parent company projects, the gross profit margin are around the same level as those of the most profitable external customers."

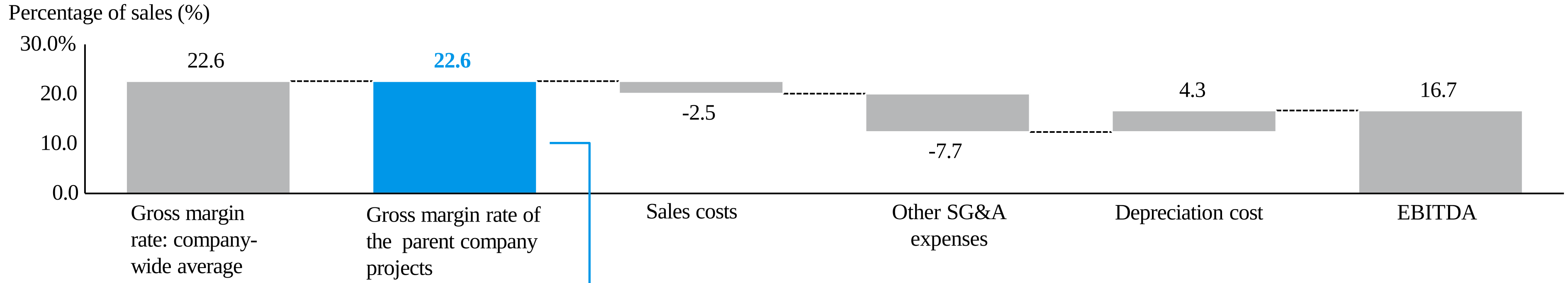
"JFE Systems dispatches personnel to the IT division of JFE Steel and gains information such as JFE Steel's annual development plans at the beginning of the fiscal year, making it easier for us to develop an annual work plan. As a result, there is almost no need for unexpected additional man-hours."

"Although there are price negotiations with the parent company every year, they almost always accept the profit levels we request."

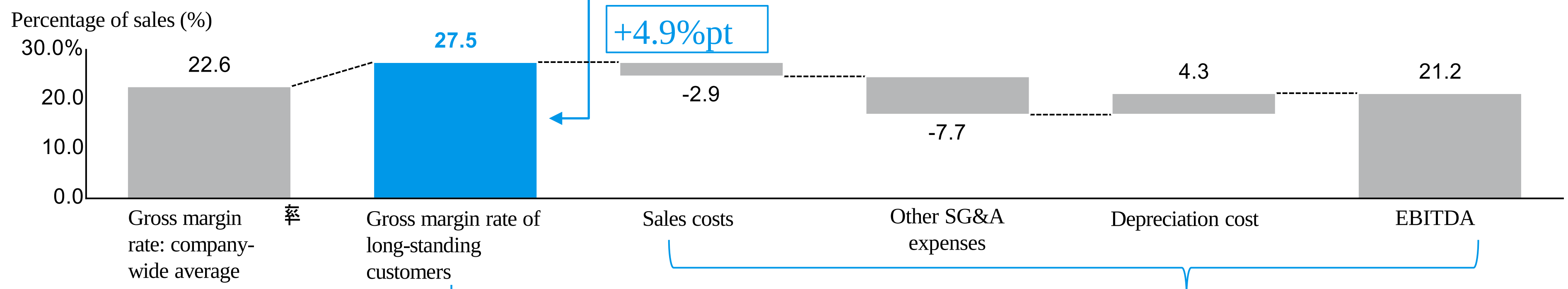
1 Review of Pricing for Nippon Steel |There is approximately 5% room for improvement by raising the unit price of projects for Nippon Steel to a level where the added value is fairly compensated and by raising the gross profit margin to the level of customers with which NSSOL has long business relationships.

An example of a project for updating a company-wide ERP package (such as SAP and Oracle) for a customer with approximately 500 billion yen sales, with one-year work period and with a team consisting of one project manager (PM) and five project leaders (PJ leaders)

Profitability of parent company projects



Ongoing projects with long-standing customers other than the parent company



- The gross profit margin for projects with the parent company is set to align with the company-wide average, including general customers.
- On the other hand, for long-standing customers, the average gross profit margin is about 27.5%. There is an approximately 5% difference on the basis of gross margin.

- Parent company projects benefit from lower sales costs compared to general customers, providing a cost advantage.
- However, even when accounting for the difference in sales costs, the operating profit for the parent company's projects remains lower compared to ongoing projects with similarly long-standing customers.

There is potential for improvement of approximately 5%, equivalent to 3.9-6.1 billion yen based on gross margin rate/EBITDA.

Source: Company IR, interviews with market participants

1 Review of Pricing for Nippon Steel | Financial Impact and Calculation Methodology

Calculation methodology		Reason	Source
Base case			
Gross margin rate for the parent company after implementing measures	~27.5%	Gross margin rates for existing projects that have long business relationships with NSSOL are generally from 25% to 30%. The base case adopts the average of 27.5%.	Estimate based on interviews with multiple market participants
Sales to the parent company after implementing measures	**~61.8 billion**	Sales required to achieve the average gross margin rate of 27.5% for existing projects that have long business relationship, while maintaining the current cost of sales to the parent company	Calculation result based on the following estimates
= Current cost of sales to the parent company	~44.8 billion	The average gross margin rate of 22.6% for the fiscal year ended March 31, 2023 is adopted, based on the results of the hearing that "the unit price for the parent company's projects should be set so that its gross margin rate matches the overall company average."	Estimate based on IR interviews and interviews with multiple experts
÷ (100% - Gross margin rate for the parent company after implementing measures)	~72.5%	Gross margin rates for existing projects that have long business relationships with NSSOL are generally from 25% to 30%. The base case adopts the average of 27.5%.	Estimate based on interviews with multiple experts
Sales to the parent company after implementing measures	~61.8 billion	Calculated based on the above	
– Current sales to the parent company	~57.9 billion	Fiscal year ended March 31, 2023 Sales to NIPPON STEEL CORPORATION	Corporate IR
= Financial impact (sales and EBITDA)	**3.9 billion**	The cost is fixed to improve the unit price (sales effect amount = EBITDA effect amount)	
Upside case			
Gross margin rate for the parent company after implementing measures	~30.0%	Gross margin rates for existing projects that have long business relationships with NSSOL are generally from 25% to 30%. The base case adopts the average of 27.5%. The upside case adopts the highest rate of 30.0%.	Estimate based on interviews with multiple market participants
Sales to the parent company after implementing measures	**~64.0 billion**	Sales required to achieve the average gross margin rate of 30.0% for existing projects that have long business relationship, while maintaining the current cost of sales to the parent company	Calculation result based on the following estimates
= Current cost of sales to the parent company	~44.8 billion	Same as above	Estimate based on IR interviews and interviews with multiple experts
÷ (100% - Gross margin rate for the parent company after implementing measures)	~70.0%	Gross margin rates for existing projects that have long business relationships with NSSOL are generally from 25% to 30%. The upside case adopts the average of 27.5%. The upside case adopts the highest rate of 30.0%.	Estimate based on interviews with multiple experts
Sales to the parent company after implementing measures	~64.0 billion	Calculated based on the above	
Current sales to the parent company	~57.9 billion	Fiscal year ended March 31, 2023 Sales to NIPPON STEEL CORPORATION	Corporate IR
= Financial impact (sales and EBITDA)	**6.1 billion**	The cost is fixed to improve the unit price (sales effect amount = EBITDA effect amount)	

1 Review of Pricing for Nippon Steel | Even if NSSOL increases prices by 5%, it is highly unlikely that Nippon Steel will shift to other Sls.

Reasons why Nippon Steel will not shift to other SIs even if NSSOL increases costs by 5%

Deep understanding and knowledge of **existing business processes and systems**

*“ Most of the sales from the parent company are **additional development and maintenance of business computers that were developed by NSSOL, as well as DX solutions that requires a deep understanding of Nippon Steel Corporation’s business processes**. It is not easy for other companies to get involved in these business, and **the parent company will continue to use NSSOL** as long as NSSOL has enough manpower.”*

Undisclosed

*“ Furthermore, in order to change vendors of the core system for steel plants, it is necessary to accurately transfer all **important data and settings that are directly related to the production of steel such as the composition of ingredients and the length of time of refining which are set in business computers**. If these are mistakenly transferred, **there will be a great risk, so it is not realistic to change vendors taking into such risk**.”*

Undisclosed

High **switching costs**

*“ **Even Nippon Steel Corporation’s information department employees do not fully understand** the systems of steel plants, and it is necessary to understand these systems when changing SI(s) to other ones. **It’s hard** to spend time and money **to change the SI(s)**.”*

Undisclosed

*“ Changing the systems of steel plants to external vendors **requires a long period of downtime and a huge investment. They would be willing to accept a cost increase of about 5%** if they do not have to spend these costs.”*

Undisclosed

Source: Interviews with market participants

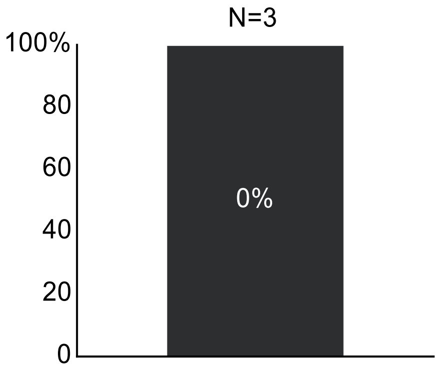
1 Review of Pricing for Nippon Steel | According to interviews with Nippon Steel Corporation's former employees, there is almost no business that NSSOL would lose if it raises unit costs by 5% in any of its business areas.

If NSSOL **raises** unit costs **by approximately 5% points**, what percentage of NSSOL's businesses will be shifted to other SIs?
(Interviews with former employees of Nippon Steel)

Business computer business

0%

Percentage of businesses shifting to other SIs as a result of raising unit costs



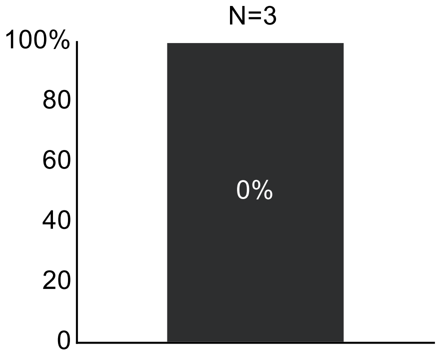
*"This system is directly related to the production planning of steel plants and **a deep understanding of existing systems of the steel plants is essential**."*

Undisclosed

Process control and its innovation business

0%

Percentage of businesses shifting to other SIs as a result of raising unit costs



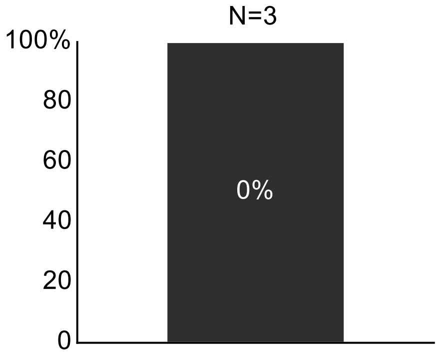
*" This business area is related to the operation of production equipment and contains know-how at the field level. Switching is **extremely difficult** because it requires reconfiguring various settings from scratch."*

Undisclosed

Infrastructure business

0%

Percentage of businesses shifting to other SIs as a result of raising unit costs



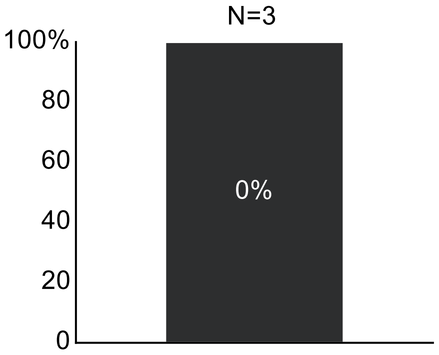
*"The equipment to be introduced is provided by external vendors (Fujitsu and IBM), **but a deep understanding of the existing steel plants' systems is essential** for integrating with the systems."*

Undisclosed

Maintenance and operation business

0%

Percentage of businesses shifting to other SIs as a result of raising unit costs



*" Since maintenance and operation are conducted by the vendor that developed the system, **switching will not occur as long as NSSOL develops the system**."*

Undisclosed

Source: Interviews with market participants

1 Review of Pricing for Nippon Steel | Approaches to examine the implementation of measures

Identify the **"desired profit margin"** using internal data	Establish each project's **target unit costs and gross profit margin** after review	**Develop strategies** for **negotiations** with the parent company for reviewing unit costs	Implement **negotiation processes and communication plans**
• Identify gross margin rates **for high-margin projects that are provided to general customers** – Targets for internal benchmarking includes long-term clients, previously experienced development projects, and additional development and maintenance projects for systems that SIs have worked on.	• Set "high-margin projects" of other clients as benchmarks and establishing **"desired unit costs and profit rate" for each project's content for Nippon Steel**	• Examine **potential trade-offs (e.g., reduced orders) associated with the increase in unit costs (extremely limited, but if any)** • Based on the above, **Prioritizing projects** for unit cost negotiations with the parent company **and** organizing **the timeline and steps for the negotiations**	• **Prior consultation and agreement** on the significance and **general direction** of this initiative **at the management level** • Discuss policies for **reviewing unit costs of each project at the working level** – For existing projects, determining guidelines for reviewing current conditions – For upcoming new projects, discussing and establishing methodologies and guidelines for determining unit costs for each project content

② Review of Pricing for Other Customers

2 Review of Pricing for Other Customers

Current issues

- Currently, NSSOL's pricing for similar projects are **at the same level or higher than** those of **competitors** (such as TIS, CTC and SCSK) which mainly focus on development and maintenance operation. On the other hand, it is **approximately 10% lower** than those of NTT Data and NRI, which differentiate themselves from competitors through IT consulting and planning.

- NSSOL has been raising prices in the same way as competitors as its personnel expenses increase. However, **large customers that have long-term business relationships with NSSOL** are highly likely to accept **an additional cost increase of around 5% compared to current pricing.**
  - Customers highly evaluate NSSOL's ability to handle large projects and generally regard NSSOL as a "**high-quality SI in terms of cost effectiveness**".
  - According to customer interviews, **price sensitivity will be low (i.e. the impact on sales would be small)** even if costs are increased by 5%.

Proposed Direction

- NSSOL **should increase unit costs by approximately 5 percentage points** for customers (approximately 30% of NSSOL's SI sales) whose transaction share is less likely to flow out to other competitors as a result of the cost increase.
  - The target customers should be **large customers that are highly dependent on NSSOL's systems development, maintenance and operation**.

2 Review of Pricing for Other Customers | NSSOL's pricing is lower than those of players who provide end-to-end services starting from IT consulting, but they are at the same level or higher than those of competitors which focus on design, development, maintenance, and operation.

Differences between each player's pricing under the same conditions (based on interviews with market participants)

about +10%

IBM, accenture, NRI, NEC

Players which provide **end-to-end services starting from IT consulting**

NS Solutions

about +0-5%

BIPROGY, CTC, TIS, SCSK

Players which **focus on design, development, maintenance and operation**

The pricing of companies that provide services starting from IT consulting, which is an upstream process, tends to be higher compared to projects with the same conditions handled by other companies.

*" **The pricing of companies** like Accenture and NRI, **which cover services starting from consulting, which is an upstream process, seem to be generally high.** These unit costs are about 10% higher than those of SIs (BIPROGY, NSSOL, TIS and SCSK) about the same size of CTC."*

Undisclosed

*" **The upper processes have more value added** than the lower processes, so IBM and Accenture, which have many capabilities to handle the upper processes, can set high unit costs."*

Undisclosed

NSSOL's unit costs are at the same level or 0-5% higher than those of competitive SIs that focus on design, development, maintenance and operation.

*" **In my image,** NSSOL is **a runner-up** to a high value-added player like Accenture. NSSOL's unit costs are up to about 5% higher than those of TIS and CTC."*

Undisclosed

*" Compared to CTC and TIS, **NSSOL's unit costs are high and up to about 5% higher** than that of CTC or TIS."*

Undisclosed

Source: Interviews with market participants

❷ Review of Pricing for Other Customers | Increasing prices by 5% is likely to be accepted by customers given NSSOL's customer evaluation of service quality.

Customers **highly evaluate** the current NSSOL's **service level in terms of cost effectiveness**.

*" NSSOL's prices are lower than those of NRI, Accenture and NTT DATA, but higher than those of other SIs. However, **increasing prices by approximately 5% would be acceptable since NSSOL's service quality is consistently good**."*

Undisclosed

*" NSSOL is strong in market-based systems that require specialized knowledge specific to financial institutions and is familiar with our internal environment through long-term presence. Therefore, **the impact on trading volumes (due to increased prices) will be small**."*

Undisclosed

*"I feel that **NSSOL's prices are reasonable**. Even if the prices are raised, I think that the trading volume would decrease by an amount that is less than the increase of the costs or at most, the total cost could be maintained."*

Undisclosed

Increasing prices by 5% would be **positive for NSSOL despite the decrease in trading volume**.

Interviews with large corporate customers for whom NSSOL has developed major systems :
If NSSOL increases costs by 5% while other SIs keep their costs stable, how much do you think the transactions would change?

Expected decrease in transactions (%, selected percentage)

Since orders are placed on a project basis, there is a possibility that the trading volume would not actually decrease.

The average decrease in sales is -2.9%.
It is expected that net sales will increase by approximately +2.1%.

Source : Interviews with market participants (N=8)

2 Review of Pricing for Other Customers | The main targets for price increases should be large corporate customers for which NSSOL has developed major systems.

Customers for whom NSSOL has **developed major systems** (such as core systems)

Major corporate customers with sales of several hundred billion yen or more

Customers for whom NSSOL has handled major development projects, such as core systems or business applications that require regular additional development, maintenance, and operation, **have high switching costs** and are more likely to accept the increase in unit costs.

*"If NSSOL is in charge of developing a customer's core system, **there would be no advantage for the customer when switching from NSSOL unless there is a significant issue** such as a major system failure or data breach."*

Undisclosed

*"NSSOL has the best understanding of the systems of companies for which it (NSSOL) has been involved in large-scale developments such as developing core systems, **and the customers tend to think that the costs of excluding NSSOL would exceed the benefits**."*

Undisclosed

Major corporate companies with high IT literacy and large budgets **tend to be less price-sensitive**, and the risk of losing market share is also relatively low.

*" It seems that major companies have well-established IT departments on their customer side and they are willing to listen to our requests for increasing costs. With their large budgets, they **tend to be relatively tolerant of price increases**."*

Undisclosed

*"There are small and medium-sized companies that will not accept price increases due to rising costs. Their IT literacy is low, and **investing resources in cost negotiations is less worthwhile for SIs**.*

Undisclosed

About 30% of NSSOL's SI sales* meet the above conditions.**

*Excluding sales from IT infrastructure and steel ; ** Customers with whom NSSOL has experience in developing core systems or major front-end systems and whose sales are at least 100 billion yen were surveyed for their sales proportion.

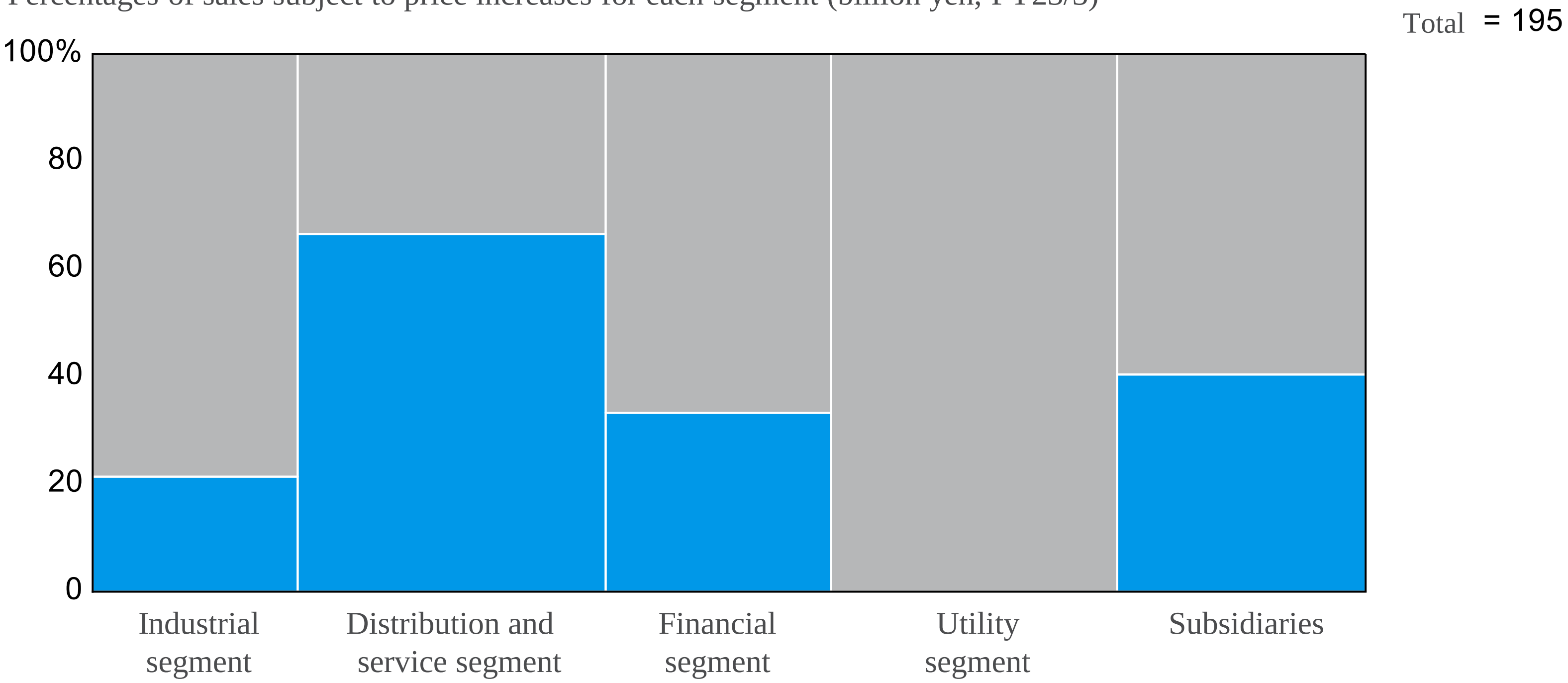
Source: Interviews with market participants

② Review of Pricing for Other Customers | If "NSSOL increases costs for "major corporate customers for which it has developed major systems" by 5% , we expect that the measure will have an impact of approximately 1 billion yen on EBITDA.

Percentages of sales from each segment which are subject to price increases

Sales from **"major corporate customers for whom it has developed major systems"** that are subject to price increases

Percentages of sales subject to price increases for each segment (billion yen, FY23/3)



Estimated EBITDA improvement impact is 1.2 billion yen (base case/ if costs are increased by 5%, the transaction volume decreases by 2.9%) ~3.2 billion yen (upside case/if costs are increased by 5%, the transaction volume decreases by 0.0%).

Identify Customers that should be subject to price increases based on each customer segment's characteristics

Set the sales of SI business for external customers as the scope for review

- IT Infrastructure is excluded as it is not a SI business.
- Unit costs for Nippon Steel Corporation are excluded as these costs have been already reviewed.

- Identify sales ratio of **"major corporate customers for which NSSOL has developed major systems"** for each segment
  - Industrial segment : this sector has many small-scale customers and the sales ratio (～23%) is lower than other segments
  - Distribution and service segment : NSSOL has a large share (～23%) of its customers' business.
  - Financial segment : NSSOL has a certain transaction share (～35%) in the business of some megabanks and regional banks
  - Utility segment : Bidding is often done, so cost reductions are not negotiable.
  - Subsidiaries: they adopt the average (～43%) of the industrial segment, distribution and service segment, and financial segment

Source: Company IR; interviews with market participants

Review of Pricing for Other Customers | Financial Impact and Calculation Methodology (1/2)

Calculation Methodology		Reason	Source
Base case			
Sales subject to price increases	**64.9 billion yen**		
= Sales from the industrial segment that are subject to price increases	6.7 billion yen	Sales from the industrial segment 31.4 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 22.5%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the distribution and service segment that are subject to price increases	31.3 billion yen	Sales from the distribution and service segment 47.1 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 70%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the financial segment that are subject to price increases	11.5 billion yen	Sales from the financial segment 34.5 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 35%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the utility segment that are subject to price increases	0 billion yen	Sales from the utility segment 43.8 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 35%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from subsidiaries that are subject to price increases	15.4 billion yen	Sales from subsidiaries 38.0 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to the price increases 42.5%	Estimate based on corporate IR and interviews with multiple experts
Price increases **(ratio to current unit costs)**	**5.0%**	This ratio is adopted taking into consideration cost differences with other SIs based on interviews with market participants and price sensitivity based on interviews with customers.	Estimate based on interviews with multiple experts
Percentage of reduction in the trading volume due to price increases (ratio to the current trading volume)	**2.9%**	Based on interviews with customers, we use the amount of the transactions that are expected to decrease if unit prices are raised by 5%.	Estimate based on interviews with multiple experts
Sales after price increases	**66.1 billion**	Based on the above, we use the sales amount that will be generated if a target’s unit prices increase by 5% and the transaction volume decreases by 2.9%.	
− Current sales that are subject to price increases	64.9 billion	Same as above	
= Financial impact（EBITDA）	**1.2 billion**		

2 Review of Pricing for Other Customers | Financial Impact and Calculation Methodology (2/2)

Calculation Methodology		Basis	Source
Upside case			
Sales subject to price increase	**64.9 billion yen**		
= Sales from the industrial segment that are subject to price increases	6.7 billion yen	Sales from the industrial segment 31.4 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 22.5%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the distribution and service segment that are subject to price increases	31.3 billion yen	Sales from the distribution and service segment 47.1 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 70%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the financial segment that are subject to price increases	11.5 billion yen	Sales from the financial segment 34.5 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 35%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from the utility segment that are subject to price increases	0 billion yen	Sales from the utility segment 43.8 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 35%	Estimate based on corporate IR and interviews with multiple experts
+ Sales from subsidiaries that are subject to price increases	15.4 billion yen	Sales from subsidiaries 38.0 billion yen × Percentage of sales from existing customers 95% × Percentage of sales that are subject to price increases 42.5%	Estimate based on corporate IR and interviews with multiple experts
Increased prices (ratio to current unit costs)	**5.0%**	This ratio is adopted taking into consideration cost differences with other SIs based on interviews with market participants and price sensitivity based on interviews with customers.	Estimate based on interviews with multiple experts
Percentage of reduction in the trading volume due to price increases (ratio to the current trading volume)	**0.0%**	Assuming that there will be no decrease in transaction volume due to price increase	Estimate based on interviews with multiple experts
Sales after price increases	**68.1 billion yen**	Based on the estimations above, assuming that the unit price of the target sales will increase by 5% and there will be no decrease in transaction volume	
− Current sales that are subject to price increases	64.9 billion yen	Same as above	
= **Financial Impact (EBITDA)**	**3.2 billion yen**		

2 Review of Pricing for Other Customers | Approach for examining and implementing measures

Identify **"customers subject to price increase"** based on analysis of details of transactions with all customers	Establish **target unit prices and gross profit margin** on a customer/project basis	**Develop a negotiation strategy** with customers to review unit prices	Execute **negotiation process/communication plan(s)**

Identify "customers subject to price increase"

- List all existing customers of NSSOL (and transaction size for prioritization)
- Organize the list based on the **"likelihood of a price increase"** (whether the company has handled major development projects such as core systems, and the size of the customer's company). **Narrow down the customers who should be subject to a price increase**

Establish target unit prices and gross profit margin

- Cooperate with each customer representative and examine the customer's **status of transaction with other SI(s) and current project unit price**
- Examine in-house benchmark (compare unit prices with a customer of similar scale) and **competitive SI(s)'s transaction status**. Determine the extent of risk of an expected decrease in sales due to the price increase
- Through the above, establish the **"desired unit price"** and **"desired gross profit margin"** for every customer

Develop a negotiation strategy

- **Prioritize customers subject to negotiation** based on the list of "customers subject to price increase" and "desired unit price/gross margin rate"
- Determine the **timing of negotiation** for every customer based on the details of the current transaction for every customer
- In addition to each account manager, assign senior staff as necessary to provide support

Execute negotiation process/communication plan(s)

- Work with each account manager to begin specific **price negotiation**
- **Regularly review the progress and results of negotiation** with each customer and intervene as necessary if there are any delays or problems
- Internally share successful negotiations regardless of department at any time, and use them in negotiations with other customers

③ Reallocation of Resources Away From Low Return Projects

3

Reallocation of resources away from low return projects

Current issues

- The gross profit margin of the Industrial Business System Solutions Units is **approximately 5%** lower than the NSSOL company average, and **approximately 3-5%** lower than the manufacturing segment of major competitors

- Unlike other segments that have been able to achieve "selection of and concentration on large projects," the Industrial Business System Solutions Units have fallen behind competitors in developing large customers. The Industrial Business System Solutions Units are **receiving many small orders from small customers**. This is due to less control over profitability in these accounts.

Proposed Direction

- As with other units, thoroughly implement "selection of and concentration on large projects".
  Of the Industrial Business System Solutions Units, **reassign** sales and engineering staff in charge of small customers with low profitability (approximately 1/3 of the total sales applies to this category) to **other units with higher profitability** (steel, telecom, IT services and engineering, finance, distribution and services, etc.)

3 Reallocation of Resources Away From Low Return Projects | Gross margin rate for projects in Industrial Business System Solutions Units (manufacturing) is lower than that of other segments

Gross margin rate for projects in Industrial Business System Solutions Units (for manufacturing) is low

"The low gross profit margin of the manufacturing industry itself means that ***projects for the manufacturing industry tend to have low gross margin rates****"*

Undisclosed

"The ***gross profit margin*** *of Industrial Business System Solutions Units is* ***lower by around 7% compared to the total average****"*

Undisclosed

"Projects for customers in the manufacturing industry are difficult to scale out or sell as a package, and ***tend to be costly because they are made to order****"*

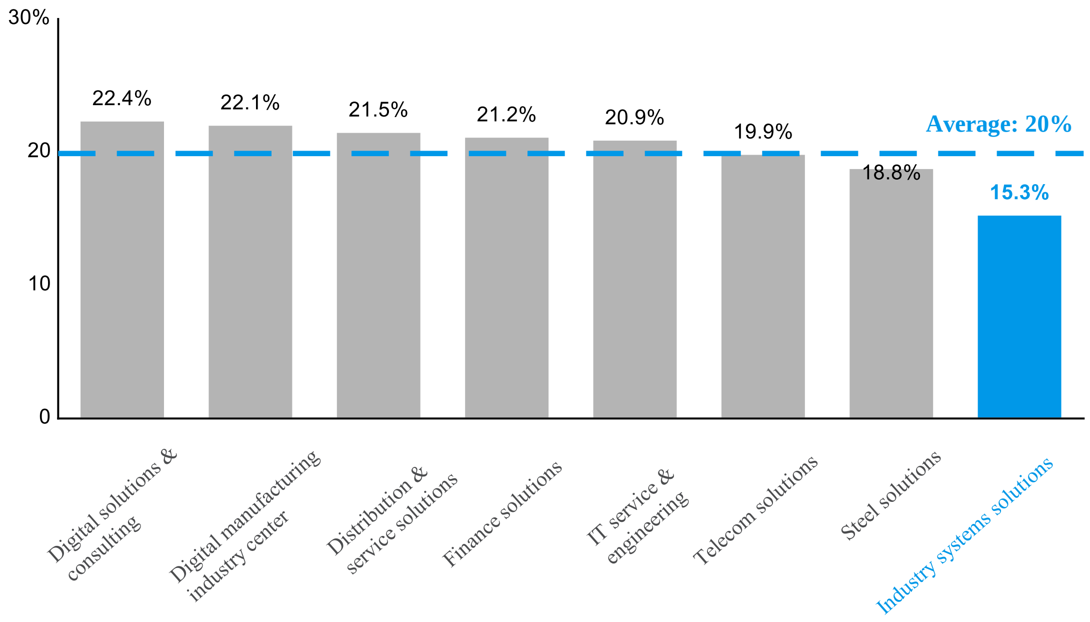
Undisclosed

"Customers in the manufacturing industry tend to have low gross profit margin, so we ***tend to offer lower project unit prices*** *compared to those for other industries"*

Undisclosed

According to an external organization's research results, the Industrial Business System Solutions Units have a low gross margin rate

NSSOL's gross margin rate by units
(for fiscal year 23/3, research)



"The gross margin rate of the Industrial Business System Solutions Units is not surprising"

Undisclosed

Source: Interviews with market participants, third-party research organization

3 Reallocation of Resources Away From Low Return Projects | Having many small customers and small projects is resulting in inadequate project management – a factor contributing to low profit margin

Reasons for the low profit margins of NSSOL's Industrial Business System Solutions Units

Receiving many orders for **small projects from small customers**

- Competitors are continuously receiving orders from major companies with long business relationships; meanwhile, NSSOL has **relatively few major customers**
- As a result, to secure sales, the Units **have no choice but to accept a large number of** new **small projects** and **have a relatively large number of small customers**

*"The manufacturing segment has few large customers, so, to secure sales, the Units are **taking on many small projects with new customers**"*

Undisclosed

*"Since NSSOL tends to focus on the parent company projects, **perhaps it is unable to focus on other manufacturing companies**"*

Undisclosed

Insufficient project management leading to frequent **post-order cost increases**

- There are many small projects, and in some cases, **risk assessment and project management are not being carried out sufficiently**
- In addition, because there are many new customers, **unexpected cost increases** after orders are received are more common compared to other business units

*"With **existing customers (especially large customers)**, we can systematically acquire projects and execute the projects, **so many of them have gross margin rates of over 20%, while new customers** often involve new factors that carry risk, such as new areas and new solutions that carry risk, and **in many cases the profit margin drops to around 10%**"*

Undisclosed

*"Due to a large number of projects, **resources cannot be allocated for risk assessment at the time of the proposal**, and **many unexpected cost increases** occur **after the orders are received**"*

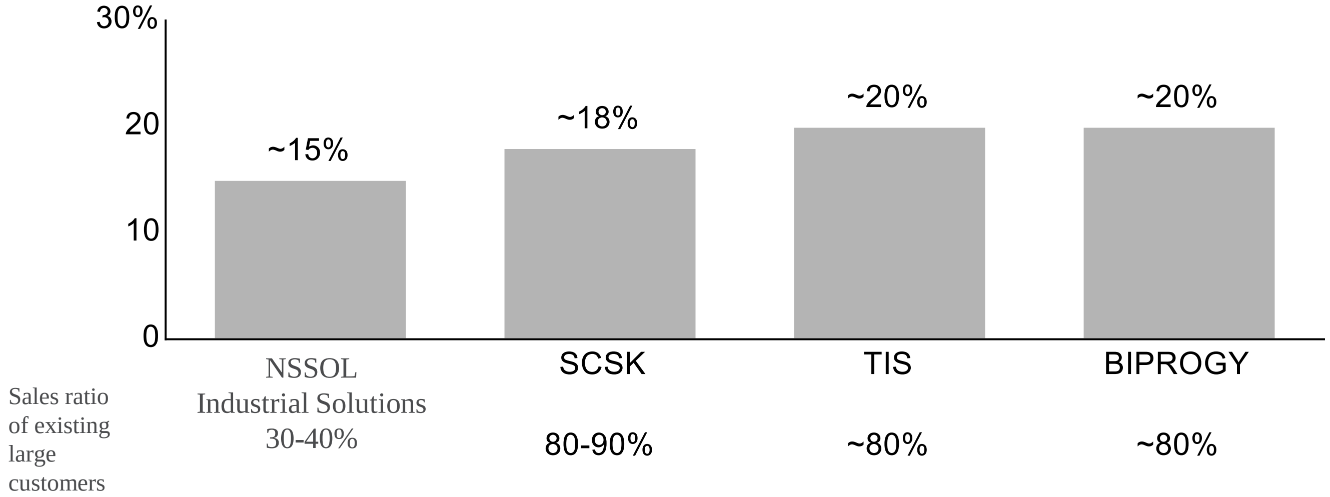
Undisclosed

Source: Interviews with market participants

3 Reallocation of Resources Away From Low Return Projects | Competitors are leading in deepening relationships with major customers in the manufacturing industry. As a result, NSSOL is currently approaching small projects to maximize performance at the business unit level.

Competitors are leading the way in developing large accounts in the manufacturing industry. As a result, NSSOL is mostly approaching small customers with low profitability yet easy to develop

Estimated gross margin rate for the manufacturing industry (for fiscal year 23/3*)



In the manufacturing industry, **competitors are leading in deepening business relationships with large customers**; NSSOL has a low percentage of large customers

*"NSSOL is a **latecomer** to the manufacturing industry, and has therefore **not been able to penetrate the market of its competitors' large customers**"*

Undisclosed

KPI was designed to be "unit-optimized", and as a result, despite low profitability, there has been no reallocation of resources to other units

(While reallocating resources away from Industrial Solutions to other units may maximize the whole company's sales and profits,) because **KPIs are set for each unit**, the Unit has **no choice but to pursue even small projects from the perspective of maximizing the Industrial Solutions Unit's performance**

*"I believe that if the Industrial Solutions Unit's resources were reallocated to other units that have staff shortages, the profit of the whole company would increase. But because **there is no function to manage the profit of the whole company across units** and **there are KPIs for each business unit**, the current situation is that the sales of the Industrial Solutions Unit are prioritized"*

Undisclosed

*"There was a time when the Industrial Solutions Units and Retail & Service Business System Solutions Units were under the same headquarters, but then both units grew in size and were split into two, and from then on **there was less staff mobility between the units**"*

Undisclosed

Source: Interviews with market participants

3 Reallocation of Resources Away From Low Return Projects | By reassigning staff from Industrial Business System Solutions Units to other units with higher profitability, an improvement effect of around 1.6-3 billion yen on EBITDA basis can be expected.

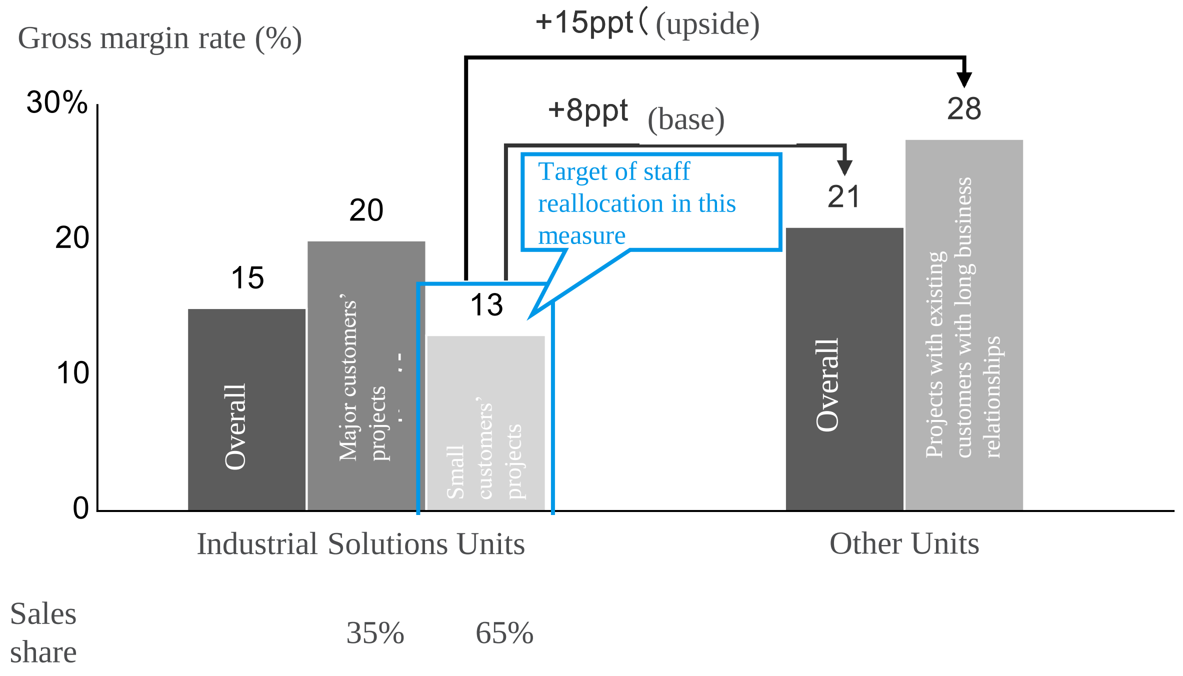
Approach to reallocation from Industrial Business System Solutions Units

- Of the Industrial Business System Solutions Units, **reassign staff involved in small customer projects** (estimated to account for around 65% of the unit's sales) **to projects in other units with higher profitability**

- The estimated gross margin rate for small customer projects is around 13%; it is assumed that **in the base case**, it will reach **the average gross profit margin of other units** (around 21%), and **in the upside case**, it will reach **the average gross profit margin of existing customers with long-term business relationships** (around 28%)
  - Of the Industrial Business System Solutions Units, the expected gross profit margin of large customers' projects is around 20%, and the expected gross profit margin of small customers' projects is around 13%*
  - Since the Units consist of around 35% of large customers and around 65% of small customers, the expected gross profit margin of the whole Units is around 15%

Basis for calculation of financial impact

	Financial impact	=	Sales of Industrial Solutions Units	×	Ratio of low-profitability projects (small customers)	×	Improvement in gross profit margin
Base	**~1.6 billion yen**		~31 billion yen		~65%		~8ppt
Upside	**~3.0 billion yen**						~15ppt



* Based on gross margin rate for the manufacturing business of competitors, where the majority of business is large customer projects, and interviews with Undisclosed

Source: Corporate IR; third-party research institution, interviews with market participants

③ Reallocation of Resources Away From Low Return Projects | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case			
Sales of Industrial Business System Solutions Units' small projects	**20.4 billion yen**		Third-party research institution(s)
＝ Sales of Industrial Business System Solutions Units	31.4 billion yen		-
× Ratio of small projects	65%		Estimation based on interviews with multiple experts
× **Improvement in gross profit margin of small projects**	**8%**	Estimating that the sales of small projects in the Industrial Solutions are reallocated and earned at other units of NSSOL	-
= Average gross profit margin of units other than NSSOL's Industrial Solutions	21%	Average gross profit margin of other units of NSSOL (unconsolidated), excluding Industrial Business System Solutions Units. To be applied as the target gross margin rate after reallocating resources	Third-party research institution(s)
−Current gross profit margin of small projects	13%	Reverse calculated in light of the mixed sales from the gross profit margin of the whole Industrial Business System Solutions Units [15%, third-party research institution(s)] and gross profit margin of large customer projects [20%, multiple experts]	Estimation based on third-party research institution(s) and interviews with multiple experts
＝ **Financial Impact (EBITDA)**	**1.6 billion yen**		
Upside case			
Sales of Industrial Business System Solutions Units' small projects	**20.4 billion yen**	-	Third-party research institution(s)
＝ Sales of Industrial Business System Solutions Units	31.4 billion yen		-
× Ratio of small projects	65%		Estimation based on interviews with multiple experts
× **Improvement in gross profit margin of small projects**	**15%**	Estimating that the sales of small projects in Industrial Solutions are earned by continuous projects with existing customers with long-term business relationships	-
= Average gross profit margin of existing customers with long-term business relationships	28%	The average gross profit margin of continuous projects with existing customers with long-term business relationships applied as the gross profit margin to be aimed for	Estimation based on interviews with multiple experts
−Current gross profit margin of small projects	13%	Reverse calculated in light of the mixed sales from the gross profit margin of the whole Industrial Business System Solutions Units [15%, third-party research institution(s)] and gross profit margin of large customer projects [20%, multiple experts]	Estimation based on third-party research institution(s) and interviews with multiple experts
＝ **Financial Impact (EBITDA)**	**3.0 billion yen**		

3 Reallocation of Resources Away from Low Return Projects | Approach for examining and implementing measures

Identify customers who are eligible for reallocation of resources	Determine where personnel will be transferred	Develop internal plans for personnel transfers	Implement reallocation of resources

Identify customers who are eligible for reallocation of resources

- **Define small customers** (example: customers with sales under 100 billion yen) in the Industrial Business System Solutions Units and identify the relevant customers
- **Risk assessment** of discontinuing transactions with eligible small customers
  - Impact on other customers (Example: Subsidiaries of other large customers)

Determine where personnel will be transferred

- Based on customer demand and utilization rates in other divisions, identify **eligible customers/projects to which resources will be added**
  - Customers/projects with high profitability
  - Customers/projects where resources are currently tight
  - Customers/projects where expansion is expected in the future

Develop internal plans for personnel transfers

- Develop **concrete plans for personnel transfers** in response to reallocating resources
  - Timing of transfer, assignment, etc. of customers/projects after transfer
  - Transfer plan for corporate functions by department in response to increase in personnel

Implement reallocation of resources

- **Gradually start reallocating resources** according to the status of transactions with existing small customers
  - Gradually implement to avoid damaging the reputation from existing small customers

④ Reducing Outsourcing Costs for Subcontractors

3D INVESTMENT PARTNERS

4

Reducing Outsourcing Costs for Subcontractors

Current issues

- NSSOL's outsourcing costs from domestic subcontractors are **approximately 10% higher than SCSK’s costs** from the same subcontractors
  - According to one subcontractor, **“SCSK, which negotiates unit prices more rigorously, places orders for the same personnel at unit costs that are approximately 10% lower.”**
- Compared to SCSK, which achieves a lower unit cost per project, NSSOL does not adequately implement **the “essentials of unit cost negotiations with outsourcing partners,”** such as thorough information gathering, preparation of the “carrot-and-stick” approach necessary for negotiations, and persistent negotiations over multiple rounds

Proposed Direction

- Using SCSK’s initiatives as a benchmark, thoroughly negotiate with subcontractors to reduce unit costs
- Implement in order of subcontractors with a high possibility of achieving cost reductions, aiming for a **unit cost reduction of ~5-10%**

Reducing Outsourcing Costs for Subcontractors | Among other factors, price negotiations with subcontractors are inadequate.

Factors that lead to higher outsourcing costs

a

Orders are placed with subcontractors that have a high unit cost per project (relative to the difficulty of the project)

b

Competitive bidding has not been consistently required

c

Cost negotiations with subcontractors are inadequate

Current status of NSSOL

a: As with competitors, NSSOL is appropriately cultivating new subcontractors, sharing information internally, and differentiating between subcontractors

b: Competitive bids of subcontractors are generally implemented in the same way as competitors, in terms of both frequency and number of companies targeted

c: **Potential for improvement**

NSSOL also conducts unit cost negotiations, but SCSK does this more rigorously. As a result, some say **"SCSK is 10-15% lower, even for people with the same skill set"**

Reducing Outsourcing Costs for Subcontractors | Cultivation of subcontractors and differentiating them depending on the content/difficulty of the project

Status of the cultivation and proper use of subcontractors at NSSOL

Cultivating low-cost/high-quality subcontracting partners

- (As with industry best practices,) **continuously cultivates new subcontracting partners** while keeping an eye on changes in development languages and project trends
- A long list of subcontractors is created **and shared within the company** so that the most suitable subcontractor can be selected

Finding/investigating new subcontractors

- Implement **networking activities**, including with subcontracting SIs of existing partner companies and partner companies of customers, etc.
- **Thoroughly investigate corporate and employee information** (credit information inquiries, profile research, etc. through LinkedIn) before placing orders with new subcontractors

Organizing/sharing information about subcontractors within the company

- Create a **long list of existing subcontractors** with organized information on costs and development details, etc.
- Share information throughout the company about good subcontractors used by other departments

*"NSSOL is very particular about quality, so I have the impression that they carefully cultivate and investigate subcontractors. In the company, there was a **list that organized information about the evaluation of subcontractors and the development details they can handle**, and information about subcontractors with a good reputation was shared across departments"*

Undisclosed

Differentiating subcontractors depending on development difficulty/project

- For simple development projects, **orders are placed with low-cost subcontractors**, as with competitors
- **Quality is ensured by differentiating subcontractors for different areas**, based on an understanding of the strengths and issues of each subcontractor

Differentiation of subcontractors at NSSOL

Project	Development details/ environment (example)	Difficulty	Tier of subcontractor
ERP development	Financial accounting, production control	High	High
	Finance, HR and labor	Low	Low
Other development (backend, business applications, etc.)	Linux environment	High	High
	Oracle, Microsoft environment	Low	Low

*"While using the list of subcontractors within the company, **we divided the subcontractors according to the subcontracting details and difficulty level"***

Undisclosed

Source: Interviews with market participants

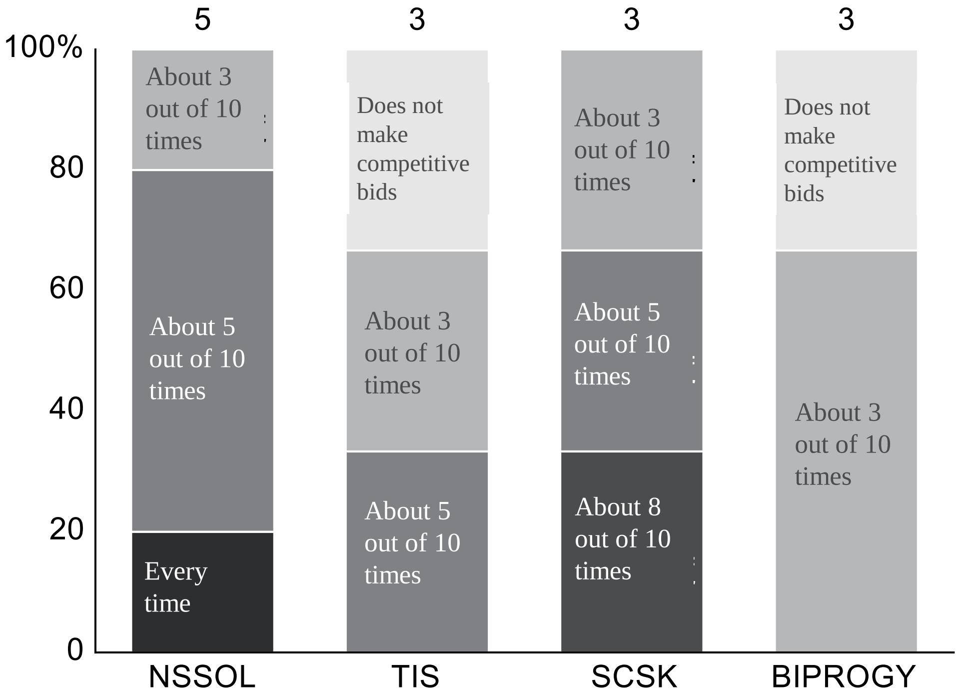
4b Reducing Outsourcing Costs for Subcontractors | Compared to competitors, NSSOL also generally makes competitive bids in the same way as competitors, in terms of both frequency and number of companies targeted

INTERVIEWS WITH FORMER EMPLOYEES

Assuming a project to update the company-wide ERP package (SAP, Oracle, etc.) for customers with sales of around 500 billion yen
Assuming a project duration of one (1) year and a team size of one (1) PM + five (5) project leaders

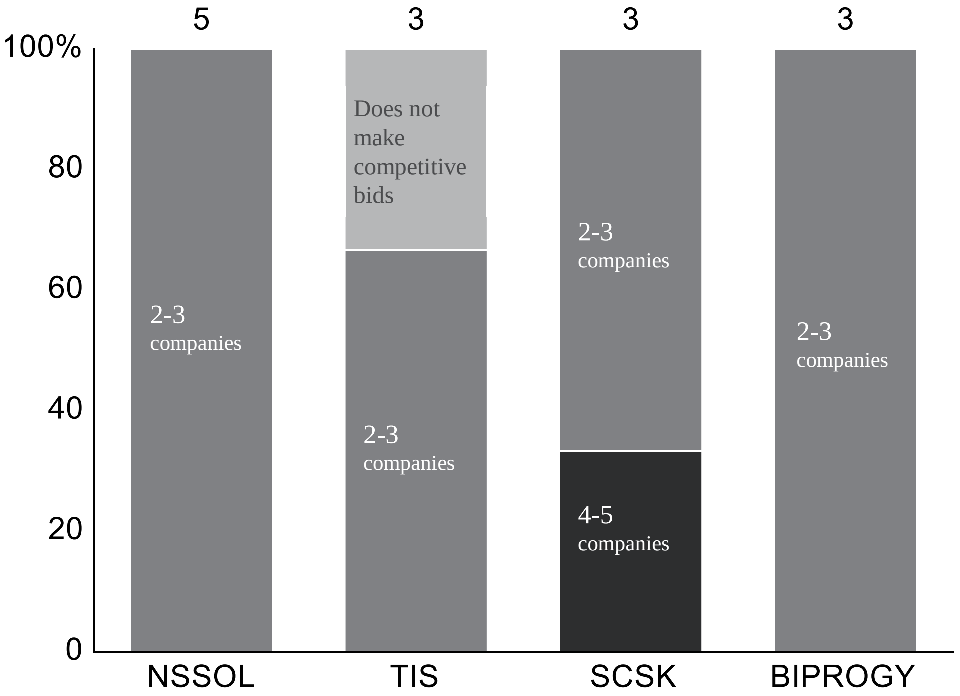
The frequency of competitive bids is generally the same as that of competitors

Frequency of making competitive bids when contemplating a subcontractor



The number of companies targeted for competitive bids is also at the same level as competitors

Number of companies targeted when making a competitive bid

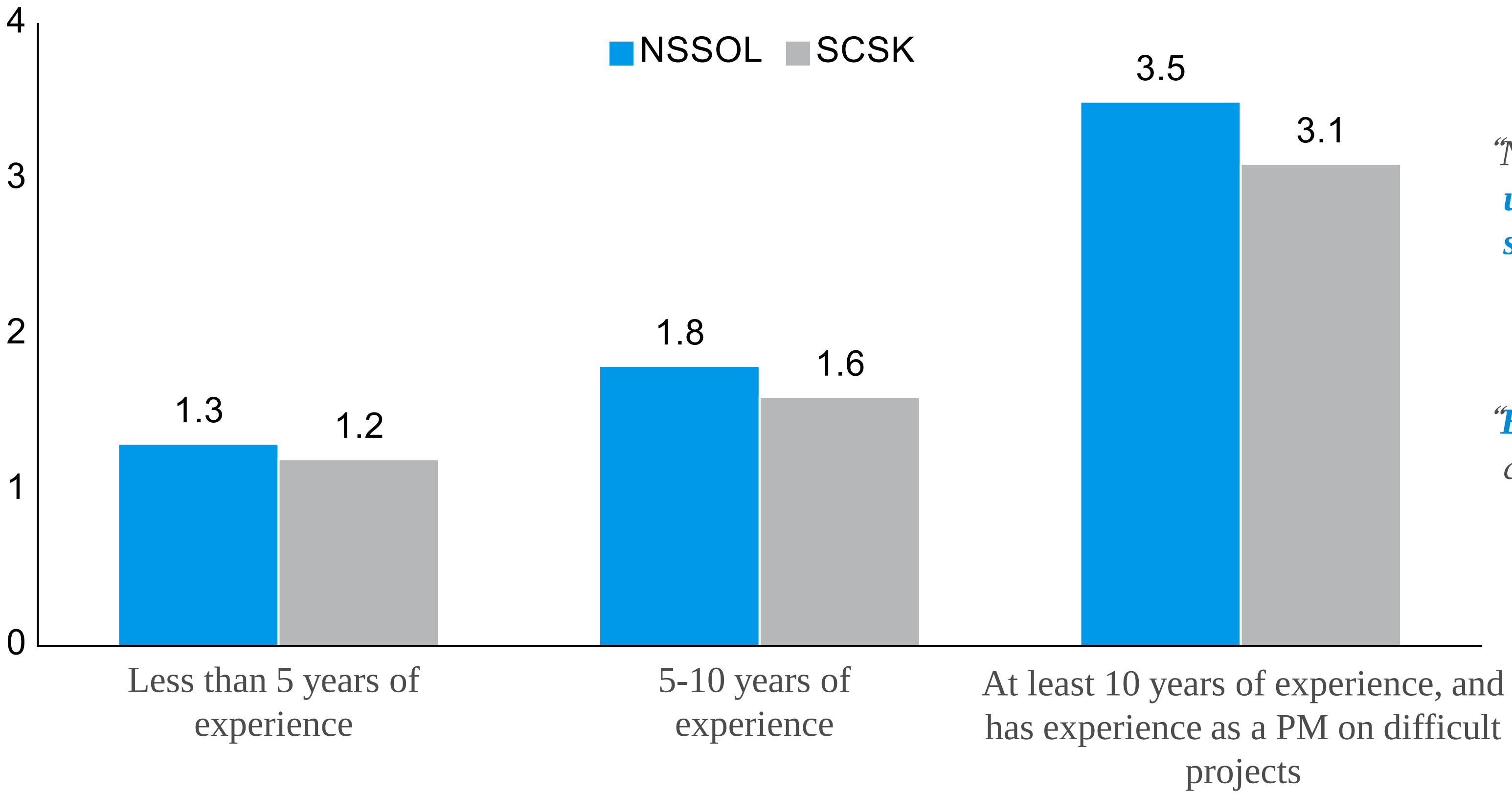


Note: Undisclosed
Source: Interviews with market participants

 | On the other hand, the same subcontractor has commented that "SCSK, which negotiates unit prices more rigorously, places orders for the same personnel at unit costs that are approximately 10% lower"

Same subcontractor Comparison of outsourcing unit costs based on experience at Company A (NSSOL vs. SCSK)

Outsourcing unit costs for the same subcontractor (millions of yen/month)



*"NSSOL **has a large budget for outsourcing costs, and the unit cost can be higher than SCSK even if people with the same skill set are dispatched**"*

*"**Both NSSOL and SCSK negotiate costs**, but the final unit cost that is settled is higher for NSSOL"*

Undisclosed

Source: Interviews with market participants

4c Reducing Outsourcing Costs for Subcontractors | Compared to SCSK, which achieves a lower unit cost per project, NSSOL does not adequately implement the "essentials of unit cost negotiations with outsourcing partners"

Factors for success in unit cost negotiations in the SI industry

	Thorough **information gathering** necessary for negotiations	**Preparation** of the appropriate **"carrot-and-stick" approach**	**Persistent negotiations** over multiple rounds
	• Utilize networks within the industry to thoroughly gather information such as the status of outsourcing and transaction costs from other SIs • Based on the collected information, identify the minimum unit cost that can be negotiated	• Make the most of negotiation levers, such as suggesting an increase (or decrease) in future transaction volume as necessary – Example: Quantitative communication such as "If x% is reduced, x% of orders will be increased"	• Set up regular opportunities of negotiations for each development project and for long-term contracts • Persistently negotiate over multiple rounds, not just once
SCSK	✓ *"Although it was not explicitly stated, it appeared that the trading prices of our company (subcontractor) with other SIs were also **negotiated after being obtained within the industry**"* Undisclosed	✓ *"Of course, there were no negotiations that violated the Subcontract Act, but it was common for **the cost of current projects to be reduced in exchange for a guarantee of future transactions**"* Undisclosed	✓ *"A one-time price reduction usually doesn't end the negotiations, and **it almost always takes multiple rounds of negotiations** to reach a conclusion"* Undisclosed
NSSOL	*"It seemed that they were making general competitive bids, but **I don't have the impression that they were collecting information on transactions with other SIs**"* Undisclosed	*"The trade-off between trading volume and cost reduction **has never been explicitly presented**"* Undisclosed	*"NSSOL does not negotiate prices very often to begin with, and I have the impression that **they will accept if the price is reduced by one level**"* Undisclosed

Source: Interviews with market participants

Reducing Outsourcing Costs for Subcontractors | General approach to unit cost negotiation (1/2): The first step is to understand "why we are getting higher costs"

GENERAL EXAMPLE

Categories of typical reasons why negotiations fail			Explanation	Typical pattern
Typical reasons why negotiations fail	Lose by logic	Difference in amount of information	• **Vendors are aware of their own costs and market prices** (contract terms with other customers). On the other hand, our company is only aware of our own contract terms. We are **overwhelmingly at a disadvantage in the amount of information** on which negotiations are based	• Trying to persuade our company by saying, "**Market prices are like this**" • Hesitating to negotiate by saying, "**If you lower the price any further, the price will go below cost**"
		Logic building skills	• Vendors who are used to negotiating will **include "numbers and reasons that are difficult to verify from the outside"** in their explanations	• Explaining in a plausible way, such as "**Because XX is special, XX is expensive**"
	Lose by awareness	Difference in awareness/mind	• For the employees of vendors, **maintaining profits is a top priority**. Due to their position, **they will take every possible measure**	• **Using relationships with** our company's **senior executives to exert control** • Persuading [at an unexpected time] through "night attacks" and "dawn raids"
		Existence of lending and borrowing	• **Vendors have a history of creating "obligations."** This is nothing more than an "upfront investment" to give them an advantage when negotiating in the future. As a result, there may be cases where **there is no escape route left**	• By saying "**We will cooperate with you as an exception this time**," creating an obligation for the future • Hesitating to negotiate, saying "**You cooperated then, didn't you?**"

Source: Global consulting firm

Reducing Outsourcing Costs for Subcontractors | General approach to unit cost negotiation (2/2): Benchmarks for cost to aim for are obtained by collecting information from a combination of multiple sources

/GENERAL EXAMPLES

	External report	Cost estimation	Interview	Best practice
	• Cost estimation materials • Industry journal, statistics	• Financial information (IR, Teikoku Databank, etc.) • Job information, land prices, average prices, etc.	• Experts • Calls to industry and associations or vendors	• Accumulation of knowledge • Database/knowledge of consultants, etc.
Market average	✓	✗	(✓)	✓
Lowest market price	✗	(✓)	(✓)	✓

✓ : Relatively easy to obtain, requiring minimal scrutiny

(✓) : Relatively easy to obtain, but requires ingenuity/verification for scrutiny

✗ : Difficult to obtain, etc., and therefore unsuitable

Source: Global consulting firm

4c **Reducing Outsourcing Costs for Subcontractors** | Large subcontractors with which NSSOL has long-standing relationships account for 30% of outsourcing costs.

Large-Scale Subcontractors

They are more receptive to cost reductions because the impact on earnings due to cost reductions is low (and are generally less dependent on NSSOL)

"If it is a large subcontractor, even if NSSOL requests a cost reduction, ***the bar for cost reduction would be low*** *because sales from other SIs are quite high."*

Undisclosed

"In the case of small-scale subcontractors with sales of around 100 to 200 million yen, the proportion of sales accounted for by NSSOL tends to be high, and since the performance of the subcontractor in question is greatly affected by NSSOL's pricing, ***there is likely to be strong resistance to cost reductions****"*

Undisclosed

Subcontractors with long-standing transactional relationships with NSSOL

Subcontractors with a long history of transactions have a low bar to start negotiations, and it is also easy to use future business expansion as a negotiation lever

"I have the impression that ***communication costs are low*** *with subcontractors that we have had long relationships with in the past, and that it is easy to get them to participate in negotiations"*

Undisclosed

"Most of the subcontractors that we have worked with for a long time are likely to continue transactions with NSSOL in the future. Since future outsourcing requests are easy to use as a bargaining chip during unit cost negotiations, ***accordingly, I think they will be subject to cost reductions"***

Undisclosed

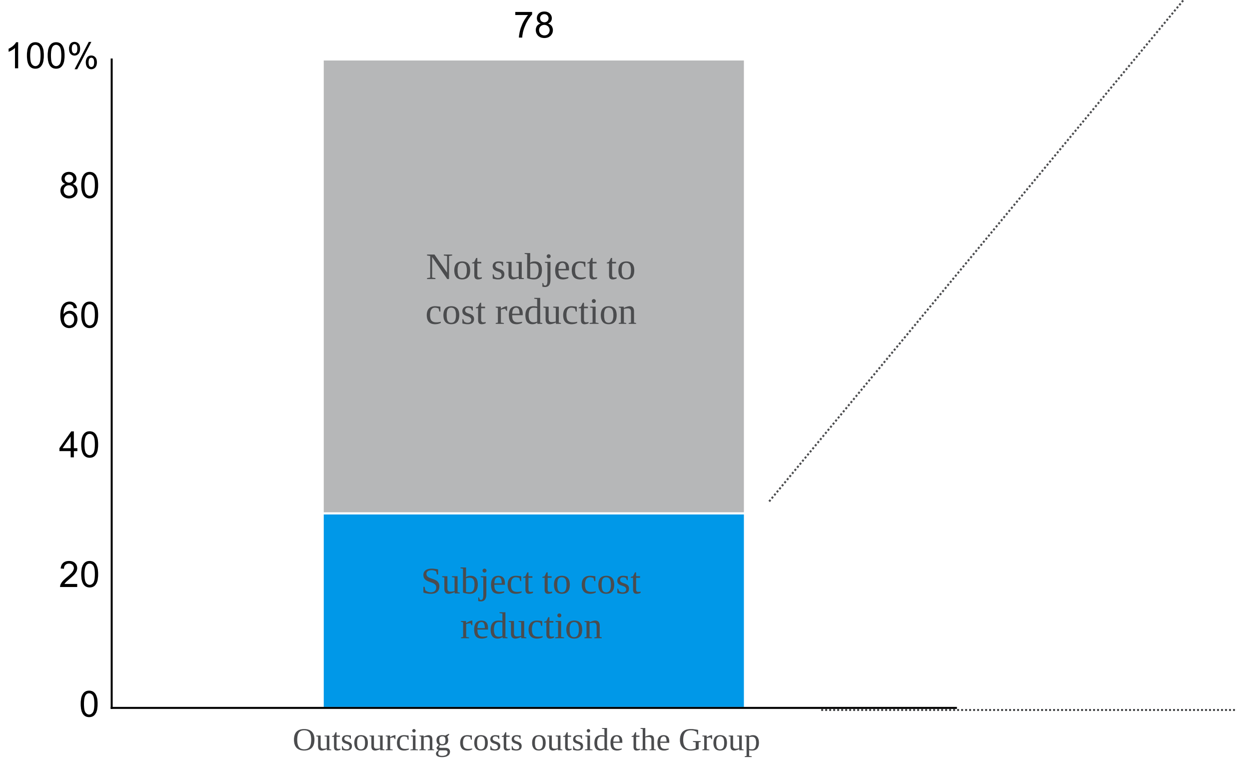
This applies to approximately 30%* of outsourcing outside the NSSOL Group

*Interviewed about the ratio of outsourcing costs to subcontractors with sales of 1 billion yen or more and transactional relationships with NSSOL of 5 years or more

4c Reducing Outsourcing Costs for Subcontractors | EBITDA impact of 1.2-2.3 billion yen can be expected from negotiations of lower prices with subcontractors.

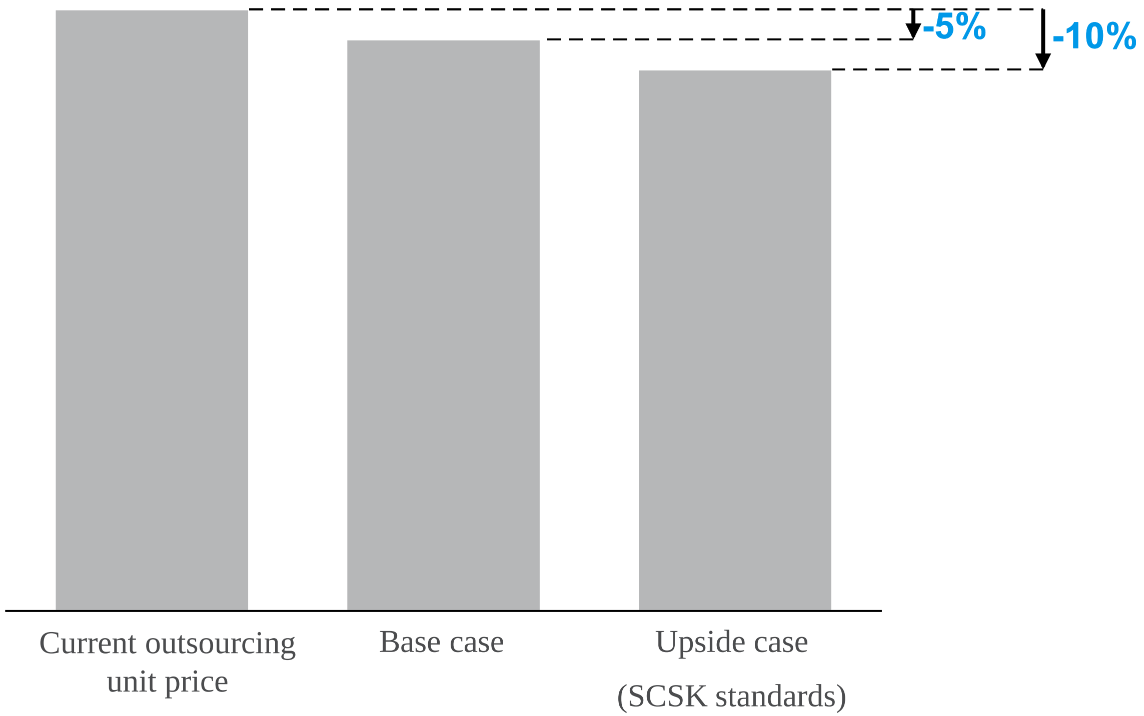
Approximately 30% of the outsourcing costs outside the Group can be reduced

Outsourcing costs outside the Group (billions of yen)



There is potential for improvement in the outsourcing unit price by approximately 5-10%

Range of improvement in outsourcing unit cost (image)



We expect the amount of financial effects of measures to be 1.2 billion yen (base case, in the case of 5% unit cost reduction) to 2.3 billion yen (upside case, in the case of 10% unit cost reduction)

4 Reducing Outsourcing Costs for Subcontractors | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case			
Consolidated outsourcing costs (including outsourcing within the group)	~117.2 billion yen	The percentage of outsourcing cost (105.5 billion yen) to the cost of sales of the parent company (203.1 billion yen) (52%) was applied to the cost of sales on a consolidated basis (225.8 billion yen)	Calculations, company IR
Outsourcing ratio based on the number of personnel (within the group : outside the group)	~25% : ~75%	Calculated based on interviews with multiple experts	Estimation based on interviews with multiple experts
Ratio of outsourcing unit price (within the group : outside the group)	100% : ~67%	Calculated based on interviews with multiple experts	Estimation based on interviews with multiple experts
Outsourcing ratio based on cost (within the group : outside the group)	~33% : ~67%	The outsourcing ratio based on cost was calculated by multiplying the above outsourcing ratio based on the number of personnel by the ratio of outsourcing unit price	
Outsourcing costs to parties outside the group	~78.2 billion yen	Calculated from the above outsourcing ratio based on cost (117.2 billion yen × (~62% + ~5%))	
× Ratio of outsourcing costs subject to price reduction	~30%	The ratio of outsourcing cost subject to price reduction (large subcontractors with a long history of transactions with NSSOL) was adopted based on interviews	Estimation based on interviews with multiple experts
× Reduction in outsourcing unit price	~5%	Assumes that a price reduction of approximately 50% is possible for the difference in outsourcing unit costs with SCSK based on interviews with subcontractors	Estimation based on interviews with multiple experts
= Financial Impact (EBITDA)	**1.2 billion yen**		
Upside case			
= Outsourcing costs to parties outside the group	~78.2 billion yen	Calculated by the same method as above	Company IR; estimation based on interviews with multiple experts
× Ratio of outsourcing costs subject to price reduction	~30%	The ratio of outsourcing cost subject to price reduction (large subcontractors with a long history of transactions with NSSOL) was adopted based on interviews	Estimation based on interviews with multiple experts
× Reduction in outsourcing unit price	10%	The difference in outsourcing unit costs with SCSK based on interviews with subcontractors was adopted.	Estimation based on interviews with multiple experts
= Financial Impact (EBITDA)	**2.3 billion yen**		

4 Reducing Outsourcing Costs for Subcontractors | Approach for examining and implementing measures

Determination of preferred subcontractors to contact based on the information collected

- Create a list of subcontractors and an outline of their **transactions with NSSOL, financial results, etc.**
- **Investigate the details of the subcontractors' transactions with other SIs, order volume, prices, etc.** through interviews with former employees, etc. Understand the status of NSSOL's transactions to the extent possible.

Determination of **target outsourcing unit price** after revision for each subcontractor

- Determine the **target outsourcing unit price** based on the information collected.
  - Whether the price is higher than that of other SIs that outsource similar development projects to the subcontractor
  - Whether the price is higher than that of other subcontractors that handle similar development projects
  - Based on the financial results of the subcontractor, whether there is capacity to accept a price reduction

Formulation of negotiation strategies with subcontractors for unit price revision

- Decide **when to negotiate a price reduction** with each subcontractor
  - Give priority to subcontractors with good recent financial results
  - Give priority to subcontractors that have received large orders or are scheduled to receive orders in the near future
- Prepare a plan for **negotiation that uses a "carrot and stick" approach**, such as implying an increase (or decrease) in future transaction volume as necessary

Execution of **the negotiation process**

- Begin negotiations with subcontractors **in order of expected success rate and impact**
- Share successful negotiation cases internally from time to time across departments and utilize them for negotiations with other customers

⑤ Increase Offshore Share of Outsourcing

5

Increase Offshore Share of Outsourcing

Current issues

- The offshore share of NSSOL's outsourcing is lower than that of its competitors, and NSSOL **does not currently take full advantage of the cost benefits of offshore outsourcing** (generally lower than domestic outsourcing by approximately 20-30%).
- Although NSSOL was quick to enter the Chinese market and it outsources to subcontractors in China, it has **lagged behind in finding partners in Southeast Asia,** which is becoming the main outsourcing destination for SIs in recent years due to the region's greater cost benefits and lower geopolitical risk. In addition, **the shortage of bridge system engineers (BSEs) and other personnel** is becoming a bottleneck.

Proposed Direction

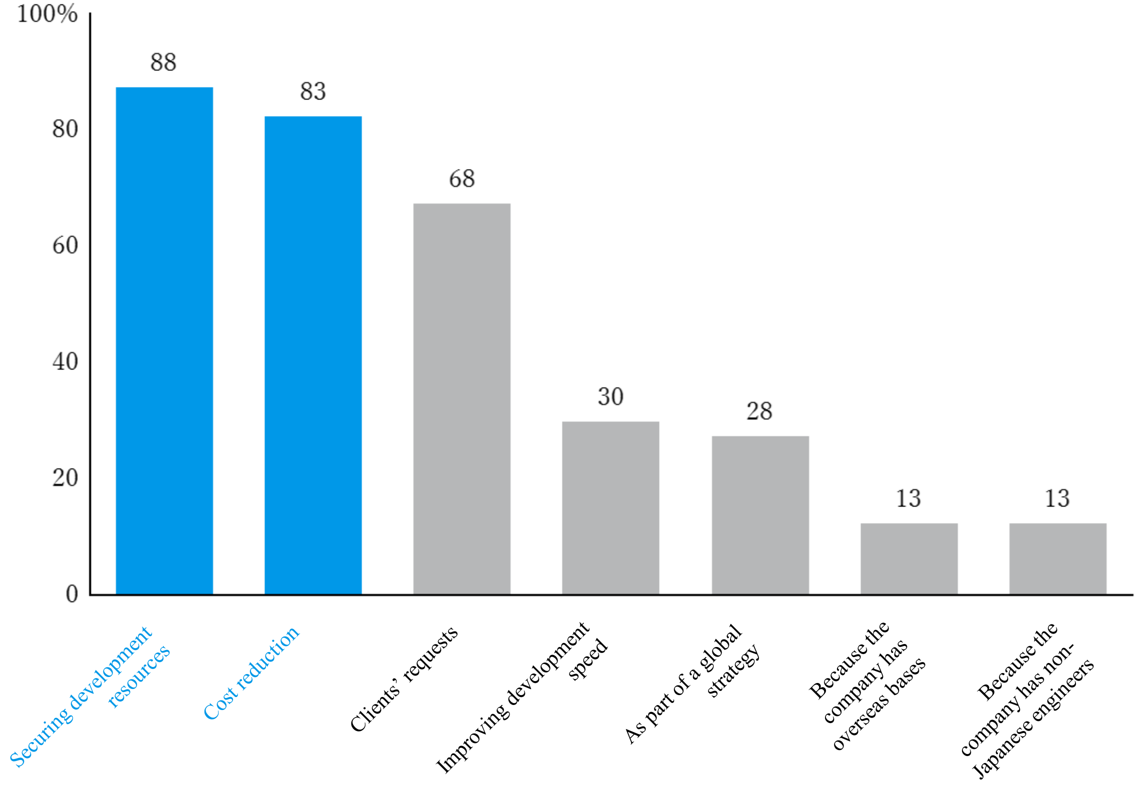
- By expanding outsourcing in Southeast Asia, the offshore share of outsourcing could be **raised to the level of its competitors' best practice** (NSSOL's current level is estimated to be around 10%, while its competitors' best practice is approximately 20%)
- In addition, **shifting** NSSOL's primary offshore development location from China to **Southeast Asia, where prices and geopolitical risk are lower,** is expected to result in further cost improvements.
- However, the **hiring of human resources** to implement the above change, such as BSEs and local supervising SEs, and the additional costs involved, require further evaluation.

5 Increase Offshore Share of Outsourcing | Offshore outsourcing has significant cost benefits. Costs are typically about 20-30% lower compared to domestic outsourcing

In general, the main reasons why SIs use offshore outsourcing are to reduce costs and secure development resources

Reasons for considering offshore development
(The Offshore Development White Paper survey of 100 companies considering or requesting offshore development in January 2023)

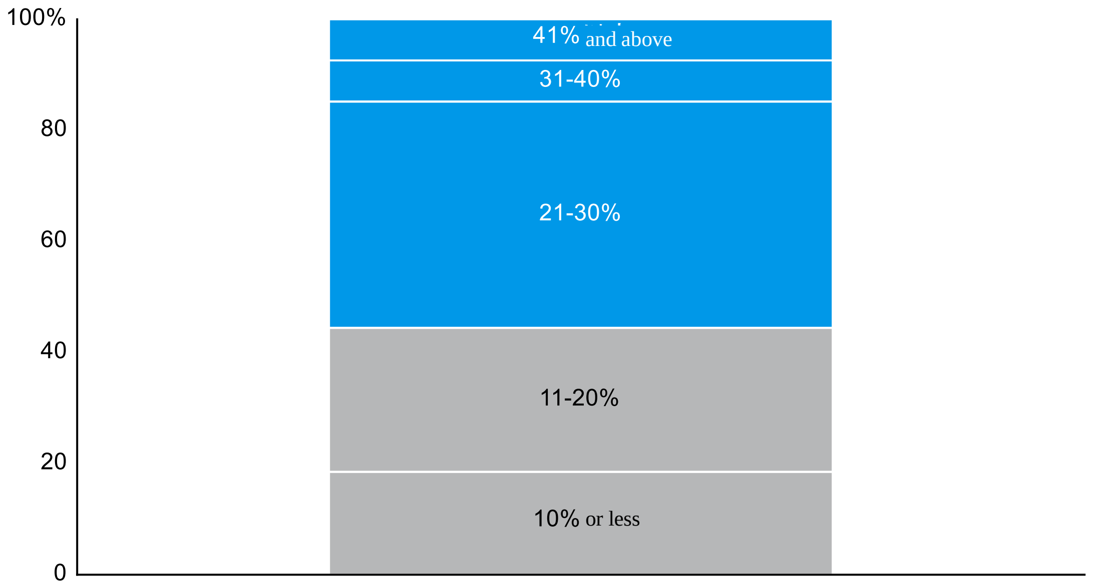
Reasons for considering offshore development (percentage of selection, %)



Compared to domestic outsourcing, offshore outsourcing can reduce costs by an average of approximately 20-30%

Cost reduction effect of offshore development compared to domestic outsourcing
(The Offshore Development White Paper survey of 100 companies considering or requesting offshore development in January 2023)

Cost reduction effect of offshore development compared to domestic outsourcing



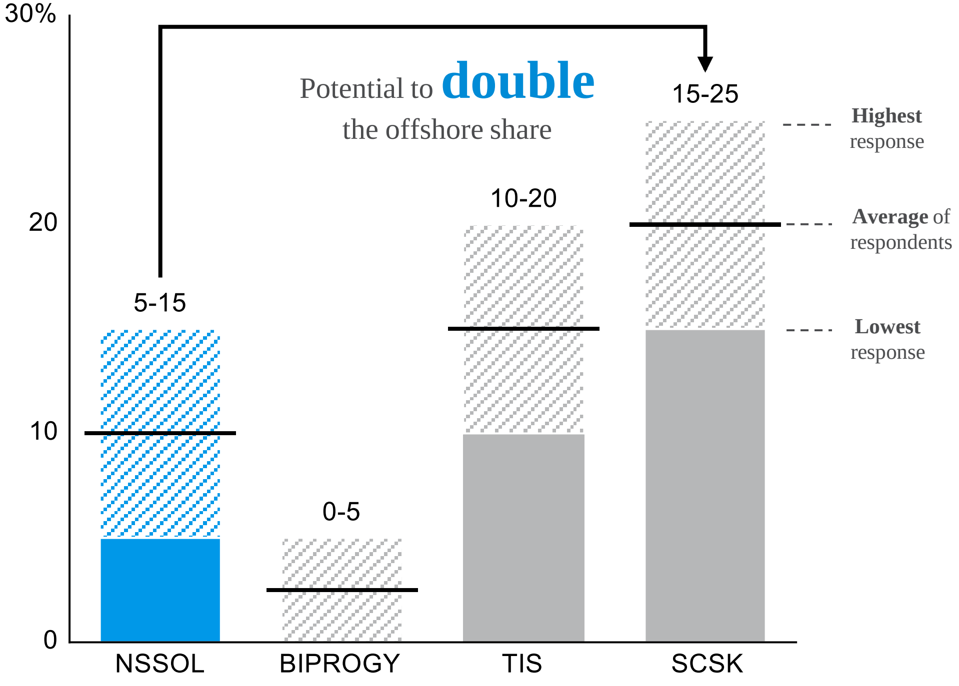
Average cost reduction of approximately 20-30%

Note: Offshore development includes service-related web system development, smartphone app development, operations-related web system development, AI development, core system development, etc.
Source: "Questionnaire Survey on Offshore Development," Offshore Development White Paper (2023 Edition)

5 Increase Offshore Share of Outsourcing | The offshore share of NSSOL's outsourcing is lower than that of its main competitors, and there is potential to double the offshore share

The level of utilization of offshore outsourcing to parties outside the group is lower than that of competitors

The level of utilization of offshore outsourcing to parties outside the group (%, based on number of people)



Interviews with former employees

There is potential for offshore expansion in the coding and testing process

	Design	Coding	Testing	Maintenance and operation
Comparison of NSSOL's offshore utilization to that of competitors*	Opportunities are limited, as are competitors	Comparable to or slightly lower than competitors	Comparable to or slightly lower than competitors	Comparable to competitors

*"I do not have the impression at all that NSSOL's offshore development is more advanced than that of its competitors. Even for the coding and testing processes, **it seems to be limited to the outsourcing of very simple tasks.**"*

Undisclosed

*"As for maintenance and operation, NSSOL **utilizes overseas bases as appropriate** for systems such as those that require 24-hour operation and monitoring."*

Undisclosed

*SCSK, BIPROGY, and TIS are assumed to be the competitors.
Source: Interviews with market participants

5 Increase Offshore Share of Outsourcing | The reasons for the low offshore share of NSSOL are the delay in finding offshore partners and the shortage of bridge SEs

Delay in finding offshore partners

- Although overseas expansion is progressing in terms of service bases for existing customers, **NSSOL lags behind its competitors in finding offshore development partners.**
- At present, there are few regular partner companies and NSSOL has not been able to increase the number of partner companies that understand NSSOL, and as a result, **offshore development has not been achieved on a substantial scale.**

*"NSSOL's overseas bases mostly accommodate the needs of existing clients (e.g. bases in Thailand are for steel manufacturing and automobiles and those in Indonesia are for iron and steel). **I have the impression that the sourcing of local companies undertaking offshore development is lagging behind."***

Undisclosed

*"There are few regular development partner companies, and in order to expand the scale, it will be necessary to **communicate 'NSSOL's methods' each time**. Considering this cost and quality risk, the benefits of actively pursuing offshore development are limited from the perspective of the front line."*

Undisclosed

Shortage of bridge SEs

- There is a **shortage of personnel who meet the requirements for bridge SEs,** such as language skills, technical skills, and high-level management skills.
- In addition, **efforts** to develop bridge SEs, such as **dispatching personnel overseas and interacting with overseas personnel, are insufficient.**

*"In order to utilize offshore outsourcing, **in addition to basic English skills, the ability to manage people by taking into account differences in working styles and culture** is necessary. (At NSSOL,) it is difficult to develop human resources that have these qualities, so NSSOL is unable to expand its offshore outsourcing even if it wants to.*

Undisclosed

*"In order for subcontractors to understand Japanese-standard project management and execution systems, **it is necessary to provide continuous education and training, such as exchange programs between Japan and the local country, but NSSOL has not been able to put efforts in this area."***

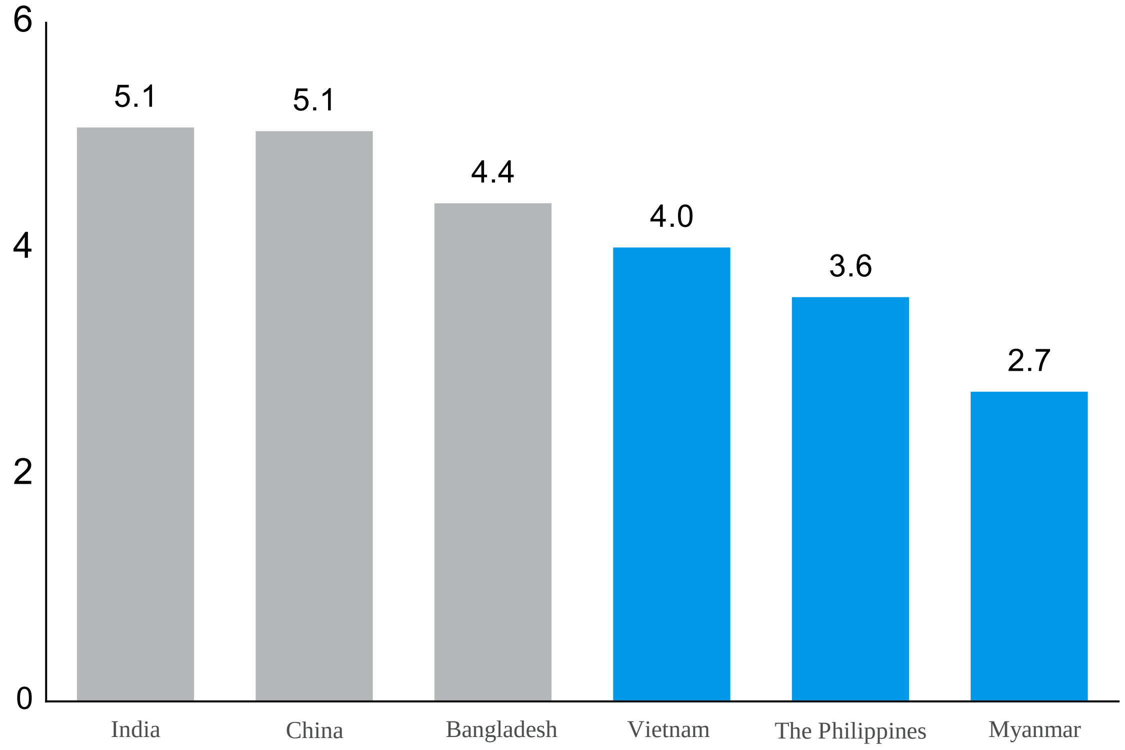
Undisclosed

Source: Interviews with market participants

Increase Offshore Share of Outsourcing | In addition, NSSOL lags behind in expanding into Southeast Asia, where there are significant cost benefits in offshore outsourcing

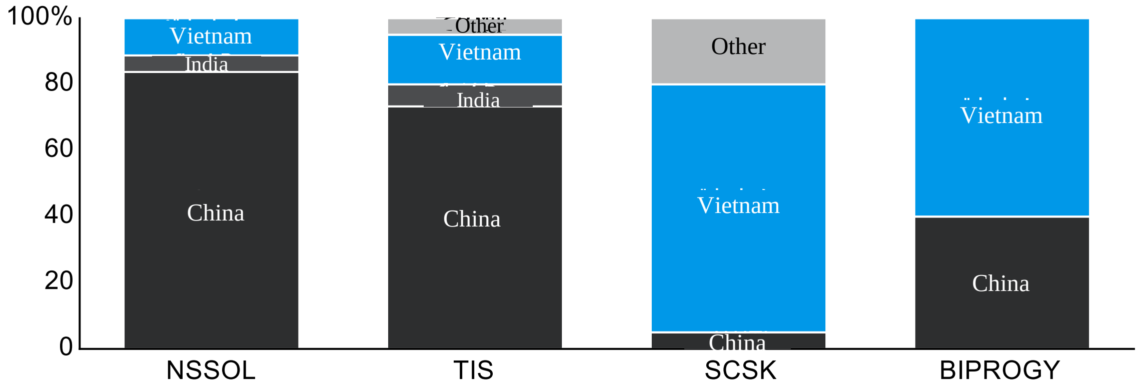
The cost per engineer is lower in Southeast Asia

Average monthly cost per engineer (2022, in million yen)



NSSOL lags behind in expanding into Southeast Asia, where there are significant cost benefits in offshore outsourcing

Share of each outsourced country in total outsourcing to offshore partners (%)



- NSSOL **expanded into China in the early 2000s**, and has been working with local outsourcing partners.
  - *"We have been doing business in China for a long time, and have a certain number of partner companies (a local subsidiary was established in 2002).* ***We also conduct personnel dispatch and exchange.****"*

    Undisclosed

- On the other hand, as other companies shift their outsourcing destinations to Southeast Asia due to rising engineering personnel costs and geopolitical risk, **NSSOL is lagging behind in its expansion into Southeast Asia.**
  - *"The latest offshore trend is Southeast Asia. In some cases, personnel costs can be higher if we outsource to China, and from the perspective of security risk,* ***offshore outsourcing to China is on the decline****."*

    Undisclosed

  - *"In the past, NSSOL tried to expand its offshore outsourcing in Vietnam, but due to language barriers and cultural differences,* ***it was unable to manage the local staff and quality issues arose, resulting in the suspension of the expansion.****"*

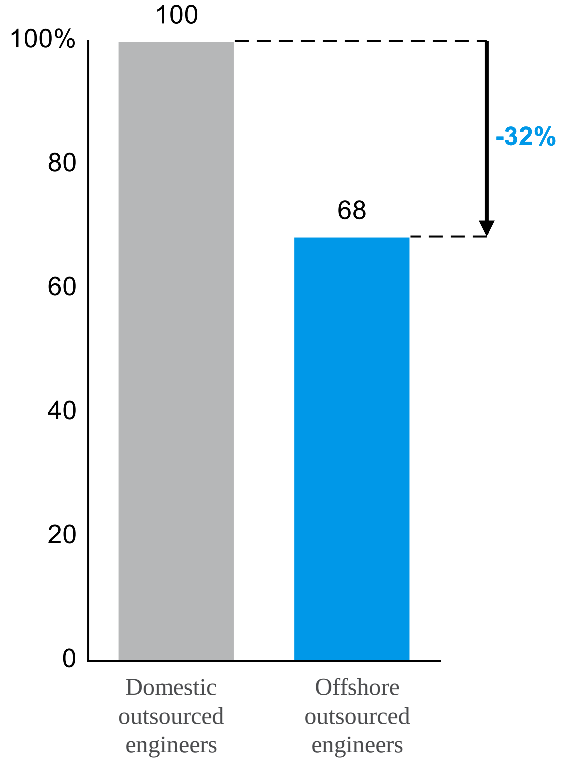
    Undisclosed

Source: "Questionnaire Survey on Offshore Development," Offshore Development White Paper (2023 Edition); interviews with market participants

5 Increase Offshore Share of Outsourcing | The base case assumes raising the offshore share in outsourcing to the level of the best practices of its competitors by utilizing Southeast Asia, while the upside case assumes shifting projects currently outsourced to China and India to Southeast Asia as well

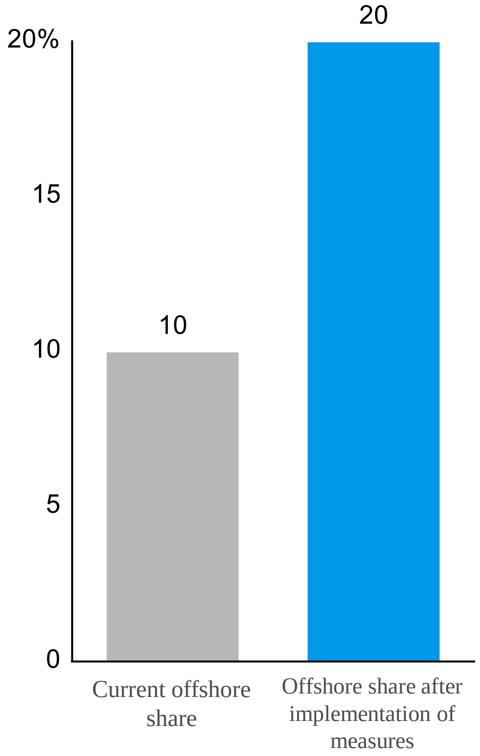
There is a difference of approximately ~32% between the unit costs of outsourced engineers in Japan and overseas

Difference in unit cost per outsourced engineer



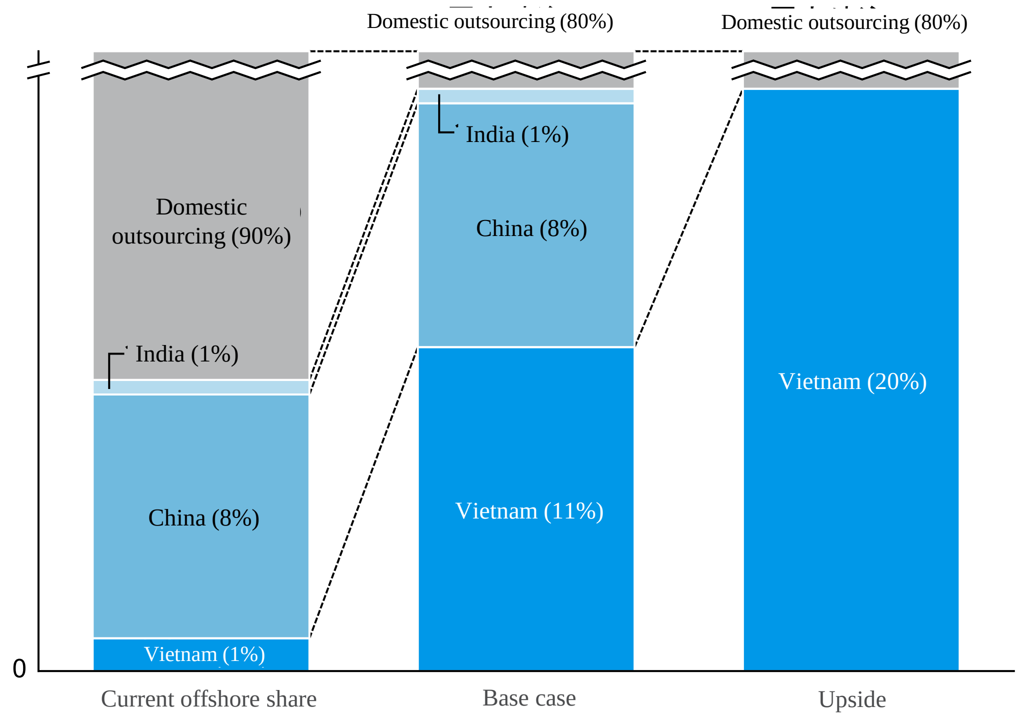
The case where the offshore share in outsourcing rises to the level of SCSK

Offshore share in outsourcing
(based on number of personnel)



The base case assumes that the increase in the offshore share will be covered by utilizing Southeast Asia, while the upside case assumes that outsourcing to China and India will also be shifted to Southeast Asia

Offshore share in outsourcing (based on number of personnel)



An EBITDA impact of approximately 2.5-3.5 billion yen

Source: Interviews with market participants

Increase Offshore Share of Outsourcing | Financial Impact and Calculation Methodology (1/2): Base case

Financial Impact **2.5 billion yen** = (a) Cost of outsourcing to parties outside the group (78.2 billion yen) − ((b) **Domestic** outsourcing cost after implementation of measures (~64.6 billion yen) + (c) **Offshore** outsourcing cost after implementation of measures (~10.0 billion yen)) − (d) Additional costs resulting from implementation of measures (~1.1 billion yen)

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a = Consolidated outsourcing cost (117.2 billion yen) — The ratio of outsourcing costs to total sales costs of the parent company is applied to the consolidated sales costs × Percentage of outsourcing to parties **outside** the group **based on cost** (~67%) — Calculated by weighting the personnel ratio and unit price ratio

b = Current **domestic** outsourcing cost (~72.7 billion yen) — Calculated based on the cost ratio calculated by weighting the personnel ratio and unit price ratio × (Percentage of **domestic** outsourcing to parties outside the group **after** implementation of measures (~80%) — Decrease due to the rise in the ratio of overseas outsourcing ÷ Percentage of **domestic** outsourcing to parties outside the group **before** implementation of measures (~90%) — The interview-based ratio is used)

c = Current **offshore** outsourcing cost (~5.5 billion yen) — Calculated based on the cost ratio calculated by weighting the personnel ratio and unit price ratio × (Percentage of **offshore** outsourcing to parties outside the group **after** implementation of measures (~20%) — Based on competitors' BDP level ÷ Percentage of **offshore** outsourcing to parties outside the group **before** implementation of measures (~10%) — The interview-based ratio is used) × Ratio of unit price of outsourcing to Vietnam to the current unit price of offshore outsourcing (~81%) — Calculated using unit price by country based on reference document research

d = (Increase in overseas outsourcing cost due to implementation of measures (~4.5 billion yen) — Calculated as described above × Cost ratio of **bridge SEs** to offshore outsourced engineers (~420%) — The interview-based ratio is used ÷ Number of outsourced engineers per **bridge SE** (~25 engineers) — The interview-based number of personnel is used) + (Increase in offshore outsourcing cost due to implementation of measures (~4.5 billion yen) — Calculated as described above × Cost ratio of **local supervising SEs** to offshore outsourced engineers (~175%) — The interview-based ratio is used ÷ Number of outsourced engineers per **local supervising SE** (~25 engineers) — The interview-based number of personnel is used)

5 Increase Offshore Share of Outsourcing | Financial Impact and Calculation Methodology (2/2): Upside case

Financial effects of measures 3.5 billion yen = Financial effect of measures in base case (2.5 billion yen) + (a Current cost of outsourcing to China (~4.7 billion yen) + b Current cost of outsourcing to India (~0.3 billion yen)) − (c Outsourcing cost after shifting from China to Vietnam (~3.8 billion yen) + d Outsourcing cost after shifting from India to Vietnam (~0.2 billion yen))

---

a = Current **offshore** outsourcing cost (~5.5 billion yen) × Percentage of outsourcing to China **based on cost** (~86%)
Calculated by weighting the personnel ratio by country and unit price ratio

b = Current **offshore** outsourcing cost (~5.5 billion yen) × Percentage of outsourcing to India **based on cost** (~5%)
Calculated by weighting the personnel ratio by country and unit price ratio

c = Current cost of outsourcing to **China** (~4.7 billion yen)
Calculated by a. × Percentage of unit price of outsourcing to Vietnam to that of outsourcing to China (~80%)
Calculated using unit price by country based on reference document research

d = Current cost of outsourcing to **India** (~0.3 billion yen)
Calculated by b. × Percentage of unit price of outsourcing to Vietnam to that of outsourcing to India (~79%)
Calculated using unit price by country based on reference document research

5 Increase Offshore Share of Outsourcing | Approach for examining and implementing measures

Identification of **potential areas for transition to offshore outsourcing** within existing domestic outsourcing	Search for and selection of **offshore partners**	**Development of a plan for shifting** to offshore outsourcing	**Implementation of transition to offshore outsourcing**

Identification of potential areas for transition to offshore outsourcing within existing domestic outsourcing

- Identifying the **areas** within domestic outsourcing **that can be shifted to offshore outsourcing,** based on the difficulty of development of outsourcing, the industry, the type of customer, etc.
  - Development that is relatively easy
  - Industry characteristics (e.g. mission-critical financial systems should be kept in Japan)
  - Customer requests (e.g. some customers do not prefer to use offshore development)

Search for and selection of offshore partners

- Selecting **offshore development contractors** by using existing subcontractors in Vietnam as a foothold
  - Expanding development capacity of existing outsourcing partners in Vietnam
  - Finding new subcontractors by using local networks, such as introductions from existing subcontractors
  - Utilizing existing bases of NSSOL (in Thailand) near Vietnam as needed

Development of a plan for shifting to offshore outsourcing

- Developing a **concrete action plan** for shifting to and expanding offshore outsourcing
  - Timeline for shifting to offshore outsourcing, projects to which the plan is applied
  - Communication with the client side (if necessary)
- **Hiring and training** of bridge SEs necessary for offshore expansion

Implementation of transition to offshore outsourcing

- Gradually shifting to offshore outsourcing starting from **new development projects**
- Implementing **development status and quality monitoring** at offshore
  - Implementing information sharing across projects to share information internally before serious quality issues, etc. arise
  - If no quality management or other issues arise, gradually applying the plan to other projects

⑥Reduce Headcount and Personnel Expenses in General Management

6

Reduce Headcount and Personnel Expenses in General Management

Current issues

- NSSOL's general management personnel expenses (compared to the total number of employees, including the cost of using external resources through outsourcing) are **at a level that is comparable to or lower than the average of its major competitors.**
- However, when looking at the number of personnel by function, while the planning/management functions are more efficient than those of competitors, there is **potential to reduce numbers in other functions (general affairs, HR, IT/system, finance, legal, etc.) compared to the best practices** of competitors.
- There is also a slight difference in the number of general management personnel per employee when comparing NSSOL's subsidiaries. There is **potential to reduce numbers to the level of the best practice of subsidiaries.**

Proposed Direction

- Based on competitive and internal benchmarking analyses, we estimate that there is **potential to reduce the number of general management personnel** on a consolidated basis by approximately 208-270 persons (**approximately 21-27%** of the number of general management personnel). It will be necessary to first conduct a **further examination of the potential for reduction of headcount**, taking into account internal headcount and utilization rates, etc.

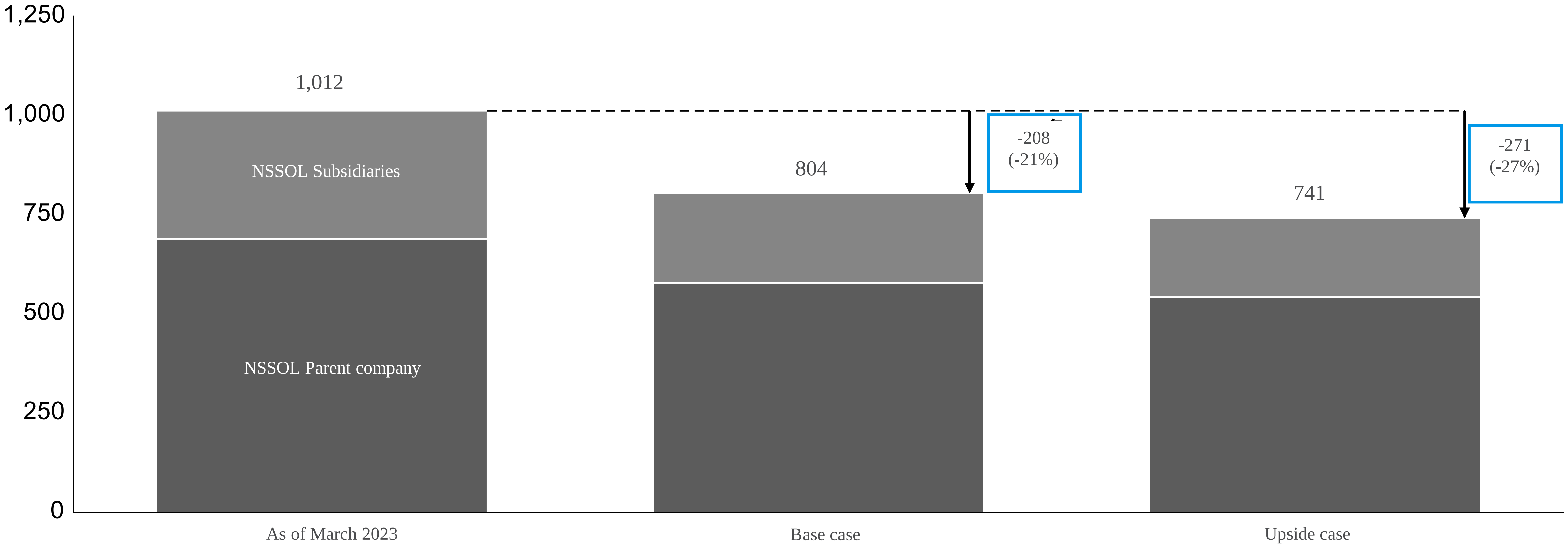
6 Reduce Headcount and Personnel Expenses in General Management | Financial Impact calculated based on competitive benchmarks after identifying opportunities for reduction through two approaches

	Used to calculate the effects of the measures **Approach 1 : Competitive benchmarking**		Used to verify the reasonableness of the calculation results on the left **Approach 2 : Internal benchmarking**	
	Base case	Upside case	Comparison of departments	Comparison of subsidiaries
Verification approach	For functions of NSSOL where the ratio of general management personnel to the total number of employees is higher than that of competitors, it is assumed that such ratio can be reduced to the **average level of competitors.**	For functions of NSSOL where the ratio of general management personnel to the total number of employees is higher than that of competitors, it is assumed that such ratio can be reduced to the **level of best practice of competitors (i.e. the most efficient competitor)**.	Parent company: It is assumed that the ratio of general management personnel to the total number of employees can be reduced to the level of **the lowest ratio among the business departments of NSSOL.**	Only subsidiaries: It is assumed that the ratio of general management personnel to the total number of employees can be reduced to the level of **the lowest ratio among the subsidiaries of NSSOL.** The estimated reduction rate based on a comparison of five major regional subsidiaries is applied to other subsidiaries.
Number of personnel covered by the benchmark	Number of general management personnel on a consolidated basis **1,012 people**		Number of the parent company's general management personnel with functional roles by department **269 people**	Number of the subsidiaries' general management personnel **323 people**

6 Reduce Headcount and Personnel Expenses in General Management | Based on a benchmark analysis, there is room to reduce the number of general management personnel by approximately 208-270 people

Approach 1 : Competitive benchmarking

Optimization of headcount in general management of NSSOL (consolidated)



Percentage of general management personnel (consolidated) (%)*	14%	11%	10%

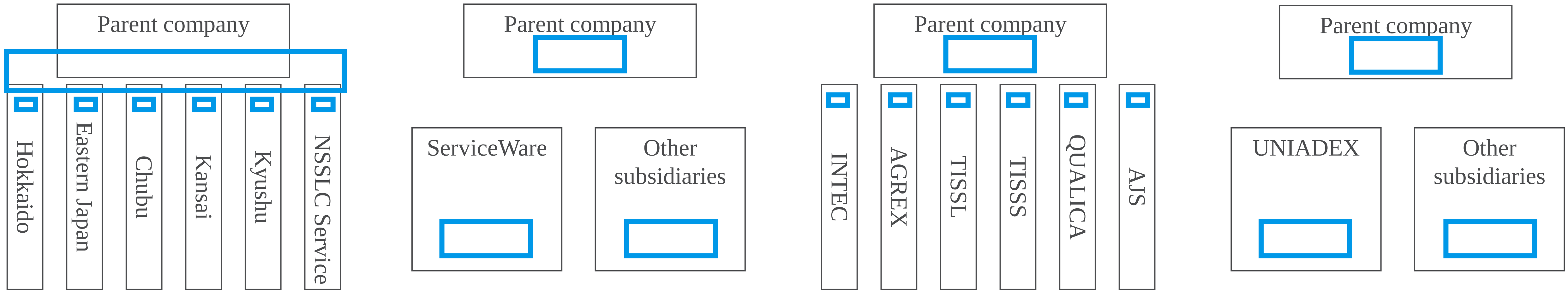
Note: All ratios are based on the number of personnel on a consolidated basis as of March 2023; the number of personnel is calculated by rounding up to the nearest whole number.
Source: Third party research institution; interviews with market participants

6 Reduce Headcount and Personnel Expenses in General Management | (For reference) In this analysis, NSSOL on a consolidated basis is compared with its competitors on a standalone basis, taking into account the difference in organizational structure where NSSOL and its subsidiaries are "effectively one entity"

Approach 1 : Competitive benchmarking

Corporate functions

Subsidiary "integration" model	**Subsidiary "separation" model**		
NSSOL	**SCSK**	**TIS**	**BIPROGY**



NSSOL

- Although subsidiaries have their own corporate functions, **the parent company serves as the main control tower** and manages them as a whole
- **Most of the subsidiaries' sales come from internal transactions,** and the structure is such that the parent company outsources work to the subsidiaries

SCSK

- **Both the parent company and the subsidiary have corporate departments,** and each functions separately
- Compared to NSSOL, subsidiaries have a **higher proportion of sales from external sources, and there are also many operations that are separated**

TIS

- **Both the parent company and the subsidiary have corporate departments,** and each functions separately
- The group has switched to a subsidiary "integration" model, but **only 10% or less of its systems are actually integrated**

BIPROGY

- **Both the parent company and the subsidiary have corporate departments,** and each functions separately

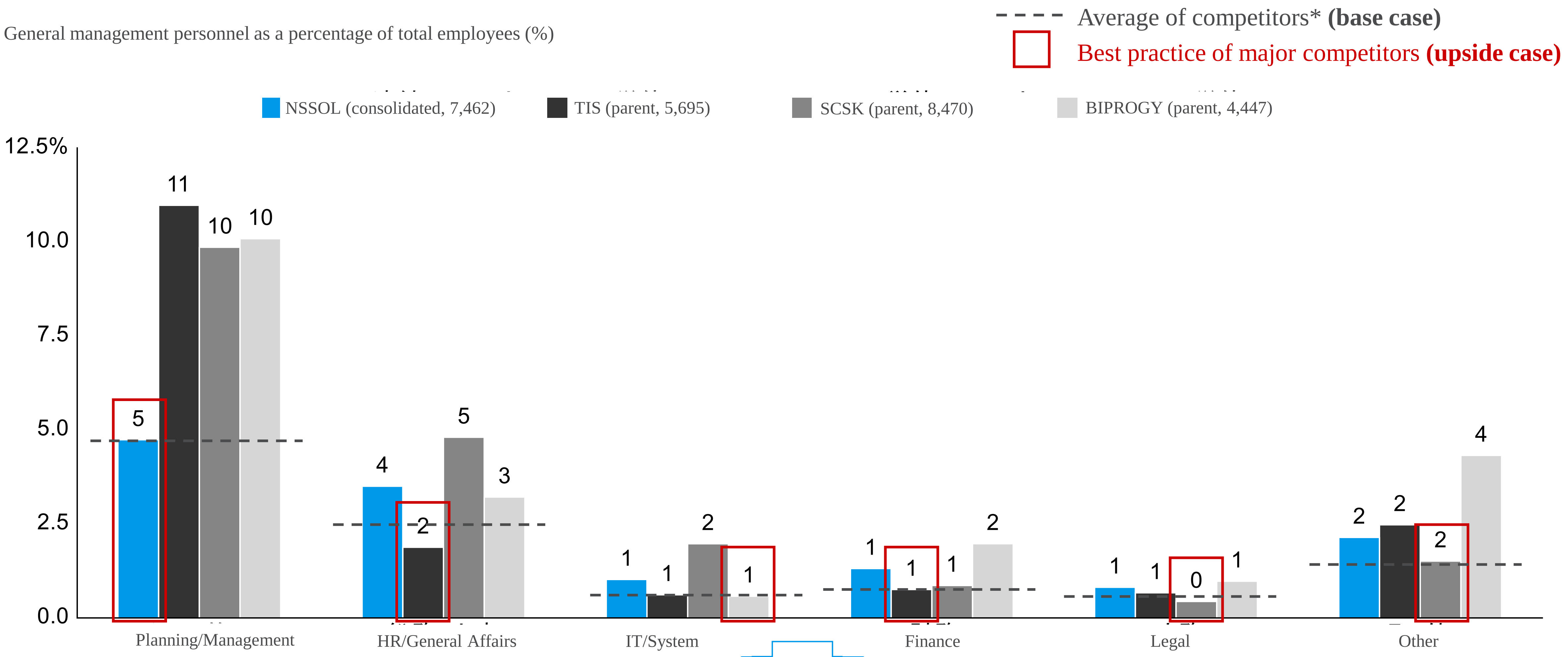
Comparisons should be made between NSSOL on a consolidated basis, including its subsidiaries, and the competitors on a standalone basis, separating the parent and its subsidiaries

Source: Interviews with market participants

6 Reduce Headcount and Personnel Expenses in General Management | Looking at the number of staff by function, while the planning and management functions are efficient, there is room for optimization in other functions compared to the best practice of competitors

Approach 1: Competitive benchmarking

General management personnel as a percentage of total employees (%)



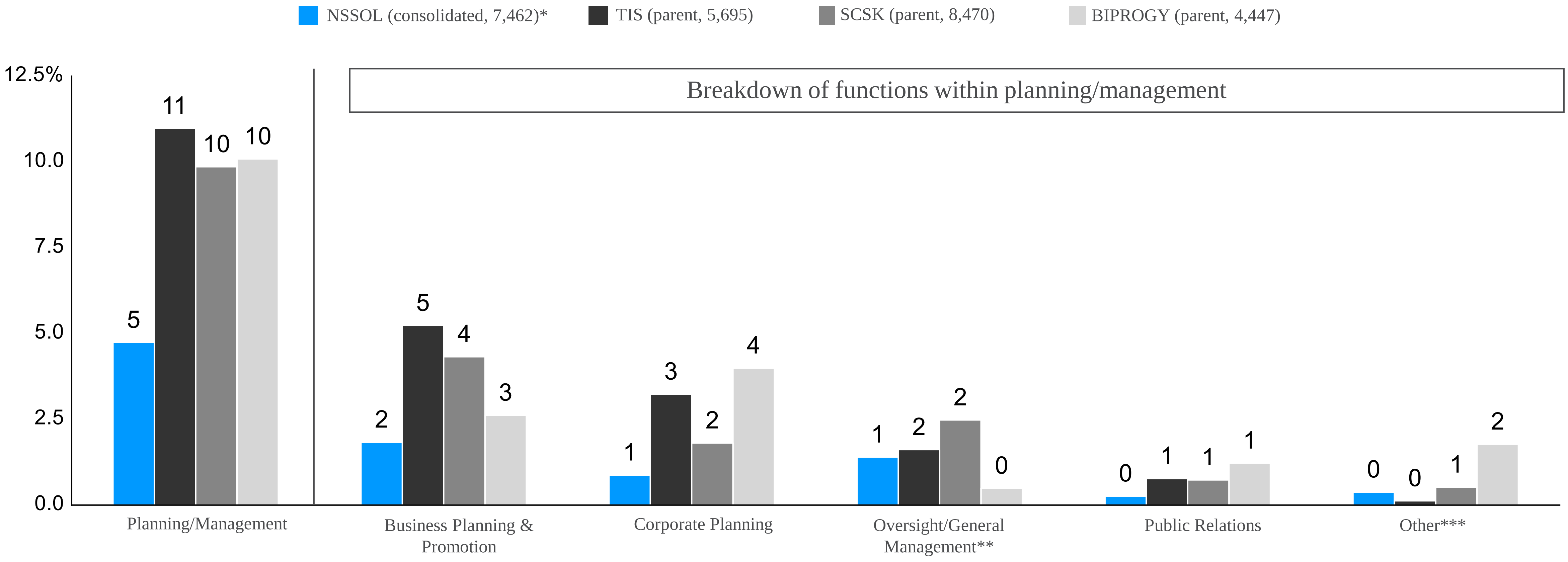
Potential reduction is 208 positions if reduced to the average of competitors (base case), and 271 positions if reduced to the best practice of competitors (upside case).

*The average of competitors is the average of only those companies with a lower level than NSSOL, and if NSSOL is the BDP, the value of NSSOL is used.
Source: Third-party research institution; interviews with market participants

6 Reduce Headcount and Personnel Expenses in General Management | (Reference) With regard to planning and management, NSSOL's business planning/promotion and management planning functions are smaller than those of its competitors

Approach 1: Competitive benchmarking | Planning/Management

Percentage of personnel by function within Planning/Management (%, of total number of employees)

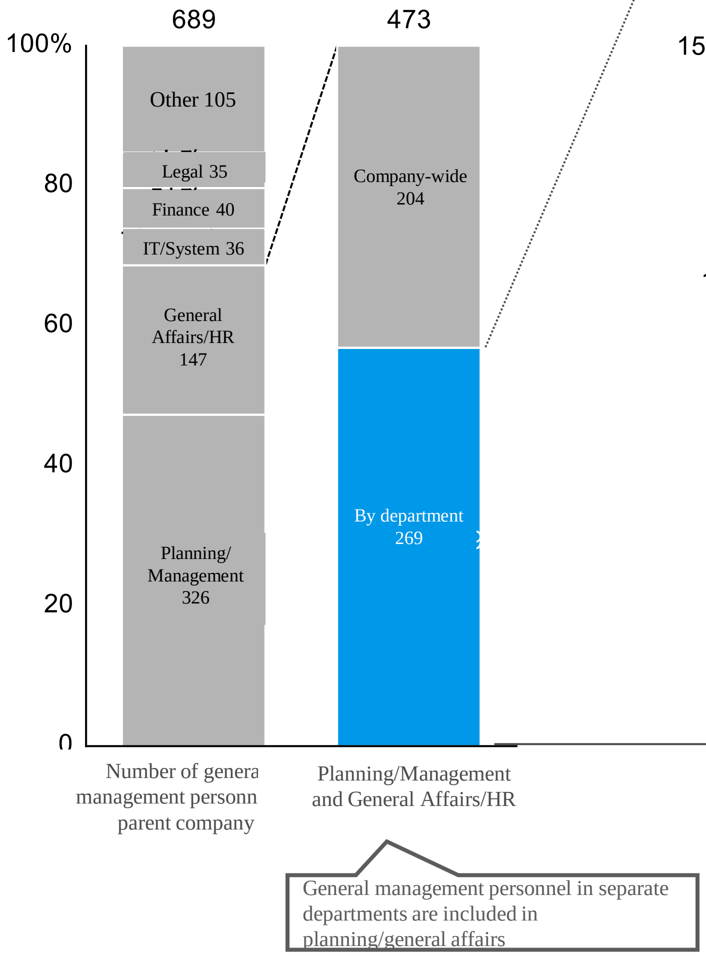


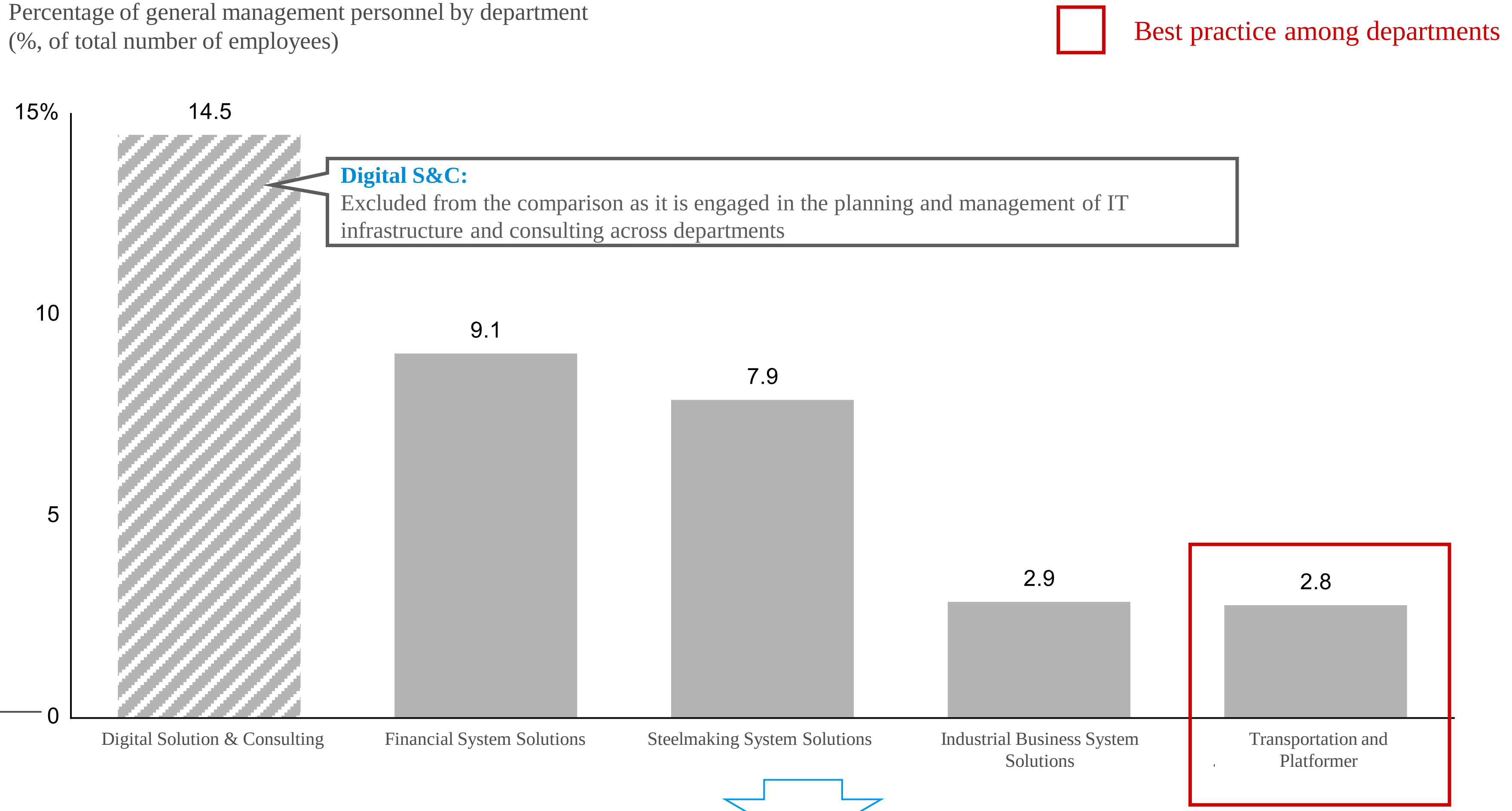
*The breakdown of NSSOL's planning/management into detailed functions on a consolidated basis is calculated by applying the ratio of each detailed function in the parent company; **general/administrative operations include company-wide audits and risk management; ***"other" mainly includes business planning/management

Source: Third-party research institution; interviews with market participants

6 Reduce Headcount and Personnel Expenses in General Management | Based on internal benchmarking by department, the proportion of general management personnel in the Financial System and Steelmaking System Solutions Units is high

Approach 2B: Internal benchmarking | Comparison of departments





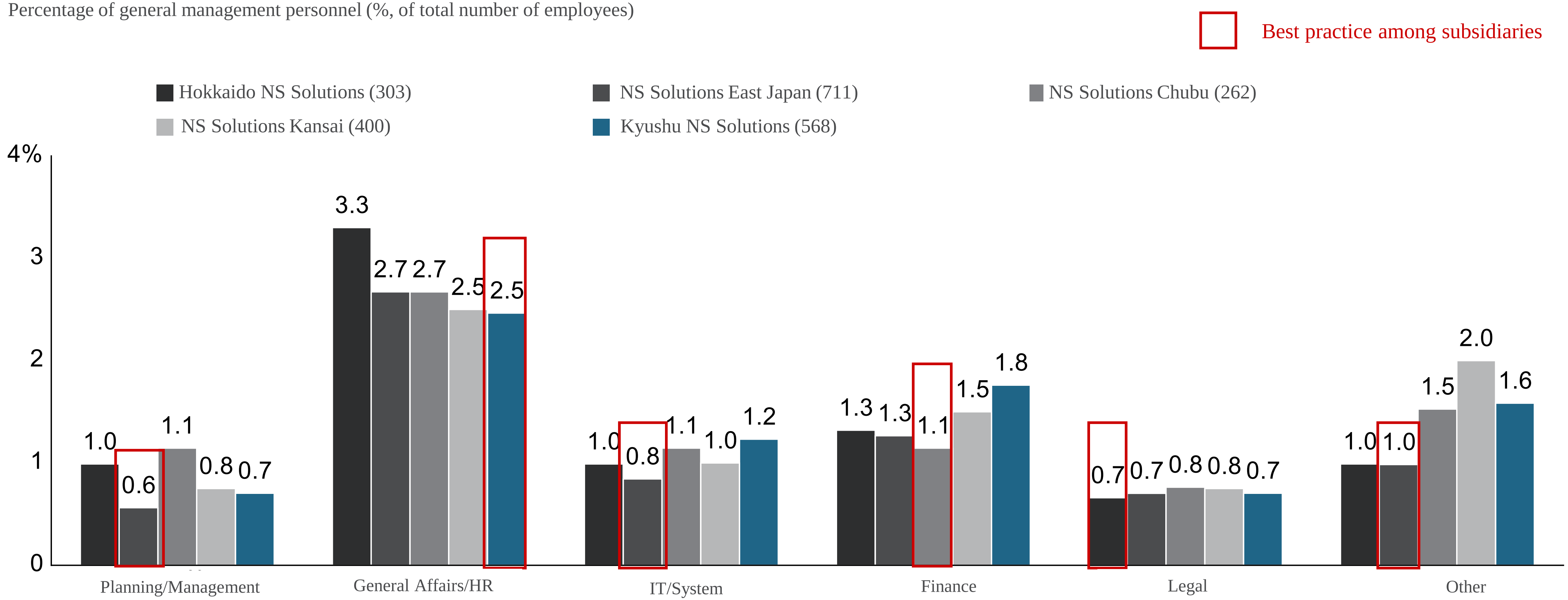
If Financial System, Steelmaking System, and Industrial Business System Solutions personnel are reduced to the level of Transportation and Platformer, **the room for reduction would be 64 positions (24% of the 269 positions with functions by department)**

Source: Third-party research institution; interviews with market participants

6 Reduce Headcount and Personnel Expenses in General Management | Even when comparing the subsidiaries of NSSOL, there may be potential for optimization, as there are differences in the number of general management personnel per employee

Approach 2B: Internal benchmarking | Comparison of subsidiaries

Percentage of general management personnel (%, of total number of employees)



If it is possible to reduce personnel to the lowest level among subsidiaries within NSSOL, **the potential reductions would be 52 positions**

Source: Third-party research institution

6 Reduce Headcount and Personnel Expenses in General Management | Potential for reduction of general management positions is generally the same for all benchmarks (approximately 20-27%)

Current general management headcount

Consolidated General management: 1,012

Parent company General management: 689 — By department (269); Company-wide (420)

Subsidiaries General management: 323

Room for optimization of headcount

Approach 1: Competitive benchmarking

- 1A **Base** (average of competitors): **-208** Reduction rate compared to consolidated general management headcount: **-21%**
- 1B **Upside** (best of competitors): **-271** Reduction rate compared to consolidated general management headcount: **-27%**

Approach 2: Internal benchmarking

- 2A Comparison of departments: **-64** Reduction rate compared to general management headcount of the relevant department: **-24%**
- 2B Comparison of subsidiaries: **-52** Reduction rate compared to general management headcount at subsidiaries: **-16%**

	Parent: Planning/ Management (326)	Parent: HR/General Affairs (147)	Parent: IT (36)	Parent: Finance (40)	Parent: Legal (35)	Parent: Other (105)	Subsidiaries: Planning/ Management (28)	Subsidiaries: HR/General Affairs (115)	Subsidiaries: IT (41)	Subsidiaries: Finance (58)	Subsidiaries: Legal (26)	Subsidiaries: Other (55)
1A Base	-0	-40	-15	-15	-11	-30	-3	-31	-17	-22	-8	-16
1B Upside	-0	-68	-15	-17	-16	-30	-3	-53	-17	-24	-12	-16
2A Comparison of departments	-64 (-24%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2B Comparison of subsidiaries	NA	NA	NA	NA	NA	NA	-3	-17	-6	-11	-0	-15

Note: The headcount after optimization is calculated by rounding up to the nearest whole number; the headcount to be reduced under Approach 1 is allocated between the parent company and subsidiaries in proportion to the current ratio of the parent company's headcount to the subsidiaries' headcount in each function; the headcount to be reduced at subsidiaries is based on Approach 2B if it is greater than that based on Approach 1; Source: Third-party research institution; interviews with market participants; company IR

Reduce Headcount and Personnel Expenses in General Management | Through the reduction of general management headcount, we expect a financial impact of approximately 1.9 billion yen in the base case and approximately 2.4 billion yen in the upside case

Financial Impact and Calculation Methodology

		Number of personnel reduced (calculated by function)		× Personnel expenses	= Financial effects of measures	
Base case	**Parent company**	Number of personnel reduced (consolidated) 208	× Ratio of parent company 54%	× Average personnel **expenses** 10.2 million yen	= Effect on parent company 1.1 billion yen	Effects of measures on EBITDA (consolidated) **1.8 billion yen**
	Subsidiaries		× Ratio of subsidiaries 46%	× Average personnel **expenses** 7.3 million yen	= Effect on subsidiaries 0.7 billion yen	
Upside case	**Parent company**	Number of personnel reduced (consolidated) 271	× Ratio of parent company 54%	× Average personnel **expenses** 10.2 million yen	= Effect on parent company 1.5 billion yen	Effects of measures on EBITDA (consolidated) **2.4 billion yen**
	Subsidiaries		× Ratio of subsidiaries 46%	× Average personnel **expenses** 7.3 million yen	= Effect on subsidiaries 0.9 billion yen	

Note: The headcount after optimization is calculated by rounding up to the nearest whole number; the headcount to be reduced under Approach 1 is allocated between the parent company and subsidiaries in proportion to the current ratio of the parent company's headcount to the subsidiaries' headcount in each function; the headcount to be reduced at subsidiaries is based on Approach 2B if it is greater than that based on Approach 1; Source: Third-party research institution; interviews with market participants; company IR

6 Reduce Headcount and Personnel Expenses in General Management | Financial Impact and Calculation Methodology (1/3)

Calculation Methodology							Basis	Source
Base case	Planning/Management	HR/General Affairs	IT	Finance	Legal	Other		
Number of personnel reduced (parent company)	Total: 111 people						-	-
Number of personnel reduced (consolidated)	3	71	32	37	19	46	-	-
Difference between (number of general management personnel in each function (consolidated)	354	262	77	98	61	160	Number of general management personnel by function on a consolidated basis for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants)
×average ratio of general management personnel by function at competitors) and the current number	1%	27%	42%	38%	31%	29%	The average ratio of competitors* is applied by function (If NSSOL's ratio is lower, NSSOL's ratio is used)	Third-party research organization (partially refined through interviews with market participants), company IR, literature research
×Ratio of parent company	92%	56%	47%	41%	57%	66%	The ratio of the number of personnel of the parent company by function for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants), company IR, reference document research
×Average personnel expenses (parent company)	10.2 million yen/person						Average salary level is ~8.3 million yen, and with the addition of other personnel expenses (retirement benefits, welfare, etc.) it is ~24% higher at ~10.2 million yen	Estimation based on interviews with multiple market participants
+ Number of personnel reduced (subsidiaries)	Total: 97 people						-	-
Number of personnel reduced (consolidated)	3	71	32	37	19	46	Same as the "Number of personnel reduced (consolidated)" for the parent company	Third-party research organization (partially refined through interviews with market participants)
×Ratio of subsidiaries	8%	44%	53%	59%	43%	34%	The ratio of the number of personnel of the parent company by function for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants), company IR, reference document research
×Average personnel expenses (subsidiaries)	7.3 million yen/person						Average salary level is ~6.6 million yen, and with the addition of other personnel expenses (retirement benefits, welfare, etc.) it is ~11% higher at ~7.3 million yen	Estimation based on interviews with multiple market participants
= Financial Impact (EBITDA)	1.8 billion yen						-	-

*Average for competitors with a smaller ratio of general management personnel than NSSOL; the headcount to be reduced at subsidiaries is based on Approach 2B (BDP based on comparison of subsidiaries within the group) if it is greater than that based on Approach 1; the headcount after optimization is calculated by rounding up to the nearest whole number; Source: Third-party research institution; interviews with market participants; company IR

6 Reduce Headcount and Personnel Expenses in General Management | Financial Impact and Calculation Methodology (2/3)

Calculation Methodology							Basis	Source
Upside case	Plannin g/Mana gement	HR/Gen eral Affairs	IT	Finance	Legal	Other		
Number of personnel reduced (parent company)	Total: 146 people						-	-
Number of personnel reduced (consolidated)	3	121	32	41	28	46	-	-
Difference between (number of general management personnel in each function (consolidated)	354	262	77	98	61	160	The number of general management personnel by function on a consolidated basis for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants)
×average ratio of general management personnel by function at competitors) and the current number	1%	46%	42%	42%	46%	29%	The BDP ratio of competitors* is applied by function (If NSSOL's ratio is lower, NSSOL's ratio is used)	Third-party research organization (partially refined through interviews with market participants), company IR, literature research
×Ratio of parent company	92%	56%	47%	41%	57%	66%	The ratio of the number of personnel of the parent company by function for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants), company IR, literature research
×Average personnel cost (parent company)	10.2 million yen/person						Average salary level is ~8.3 million yen, and with the addition of other personnel costs (retirement benefits, welfare, etc.) it is ~24% higher at ~10.2 million yen	Estimation based on interviews with multiple market participants
+ Number of personnel reduced (subsidiaries)	Total: 125 people						-	-
Number of personnel reduced (consolidated)	3	121	32	41	28	46	Same as the "Number of personnel reduced (consolidated)" for the parent company	Third-party research organization (partially refined through interviews with market participants)
×Ratio of subsidiaries	8%	44%	53%	59%	43%	34%	The ratio of the number of personnel of the parent company by function for the fiscal year ended March 2023	Third-party research organization (partially refined through interviews with market participants), company IR, literature research
×Average personnel cost (subsidiaries)	7.3 million yen/person						Average salary level is ~6.6 million yen, and with the addition of other personnel costs (retirement benefits, welfare, etc.) it is ~11% higher at ~7.3 million yen	Estimation based on interviews with multiple market participants
= Financial Impact (EBITDA)	2.4 billion yen						-	-

*Average for competitors with a smaller ratio of general management personnel than NSSOL; the headcount to be reduced at subsidiaries is based on Approach 2B (BDP based on comparison of subsidiaries within the group) if it is greater than that based on Approach 1; the headcount after optimization is calculated by rounding up to the nearest whole number; Source: Third-party research institution; interviews with market participants; company IR

6 Reduce Headcount and Personnel Expenses in General Management | Financial Impact and Calculation Methodology (3/3)

Calculation Methodology		Basis	Source
(Reference) Temporary retirement cost in the base case			
Temporary retirement cost for parent company's personnel in the base case	**1.9 billion yen**	-	-
Number of personnel reduced (parent company)	111 people	Number of personnel reduced in the base case	-
× Temporary retirement cost per personnel of parent company	17.3 million yen	-	-
(Base retirement allowance of parent company	9 million yen	Assumes employees who have been with the company for 20 years	Estimation based on interviews with multiple market participants
＋ Additional retirement allowance of parent company)	8.3 million yen	Assumes that the average salary for one year will be added (excluding personnel costs other than salary)	Estimation based on interviews with multiple market participants, company IR
＋ Temporary retirement allowance for subsidiaries' personnel in the base case	**1.3 billion yen**	-	-
Number of personnel reduced (subsidiaries)	97 people	Number of personnel reduced in the base case	-
× Temporary retirement cost per personnel of subsidiaries	13.8 million yen	-	-
(Base retirement allowance of subsidiaries	7.2 million yen	Assumes employees who have been with the company for 20 years; the base retirement allowance of subsidiaries is calculated by applying a salary level discount to the base retirement allowance of the parent company	Estimation based on interviews with multiple market participants
＋ additional retirement allowance of subsidiaries)	6.6 million yen	Assumes that the average salary for one year will be added (excluding personnel costs other than salary)	Estimation based on interviews with multiple market participants, company IR
＝ Temporary retirement cost in the base case	**3.3 billion yen**		

Source: Third-party research institution; interviews with market participants; company IR

6 Reduce Headcount and Personnel Expenses in General Management | Approach for examining and implementing measures

Examine the extent to which the workforce can be optimized	Consider the policy and target employees for workforce reduction	Consider in detail how to proceed with workforce reduction and various conditions	Communicate workforce reduction internally
• Examine the extent to which the workforce can be optimized in each function, division and subsidiary, based on internal data on headcount by organization and function, and interviews about jobs and working conditions.	• Determine the purpose of the workforce reduction and the target number of headcount reductions to be achieved; • Establish criteria for selecting positions for elimination and the initial policy regarding the target employees based on these criteria; and • Consider ways to reduce the workforce in light of the above (soliciting voluntary retirements, layoffs, etc.).	• In the case of a voluntary retirement program) Consider the details of the solicitation for voluntary retirement, including the target employees for voluntary retirement, their planned retirement date, and the terms of an additional retirement allowance; • Consider the details of the explanations and procedures or personal interviews with target employees; and • Consider the details of the organizational structure and staffing after workforce reduction.	• Announce the solicitation for voluntary retirement internally; and • Communicate through internal briefings and personal interviews with target employees.

⑦ Reduction of Other Costs

7

Reduction of other costs

Current issues

- "Other costs" (i.e., costs other than labor and outsourcing costs) in the cost of goods sold are high compared with competitors.
- Among other costs, the rent for the head office (about 3 billion yen) is the largest cost item, accounting for approximately 20% of "other costs of goods sold." The land price per tsubo in Toranomon, where NSSOL is headquartered, is high compared with competing SIs, and there is room to reduce the rent by relocating the head office.
  - The rent for NSSOL's head office and other offices has increased by 1.5 billion yen since the Toranomon office was opened.
  - In addition, the rent per employee can be reduced by approximately 60% compared to SCSK, which is headquartered in Toyosu.
- Furthermore, based on past cost reductions in the industry, other overhead costs can be reduced by 8-12%.

Proposed Direction

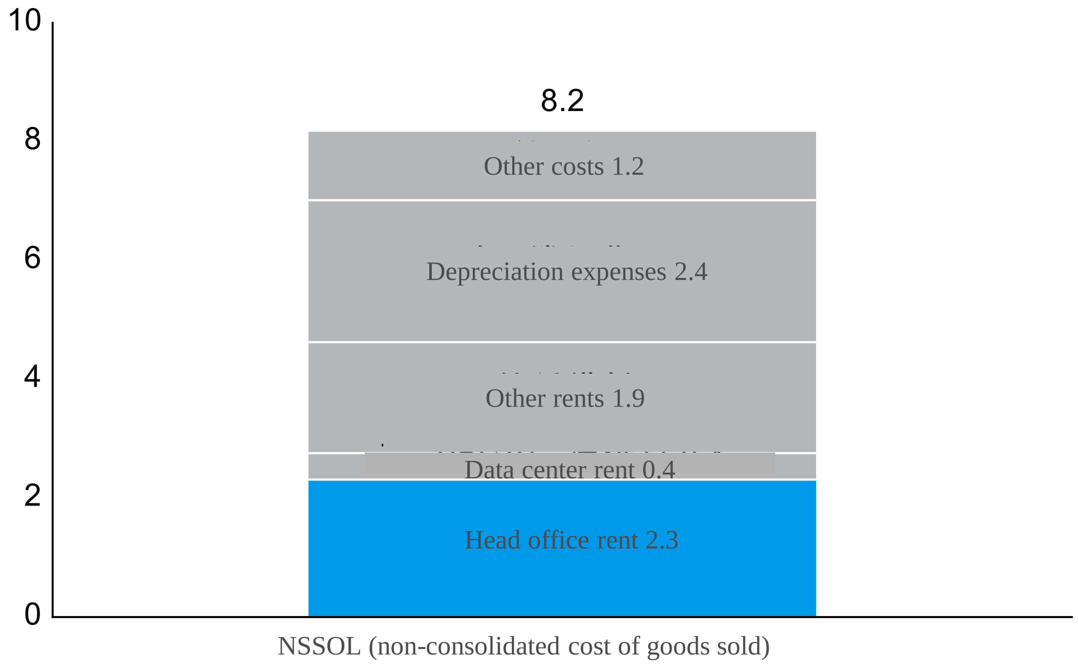
- (If economically reasonable in light of lease terms and relocation costs) Consider relocating the head office to a location with a lower land price per tsubo.
- Reduce other overhead costs on a company-wide basis after conducting a zero-based review of improvement opportunities.

7 Reduction of Other Costs | Rent for the head office (which accounts for approximately 20% of "other costs of goods sold") and "other selling, general and administrative expenses" can be reduced.

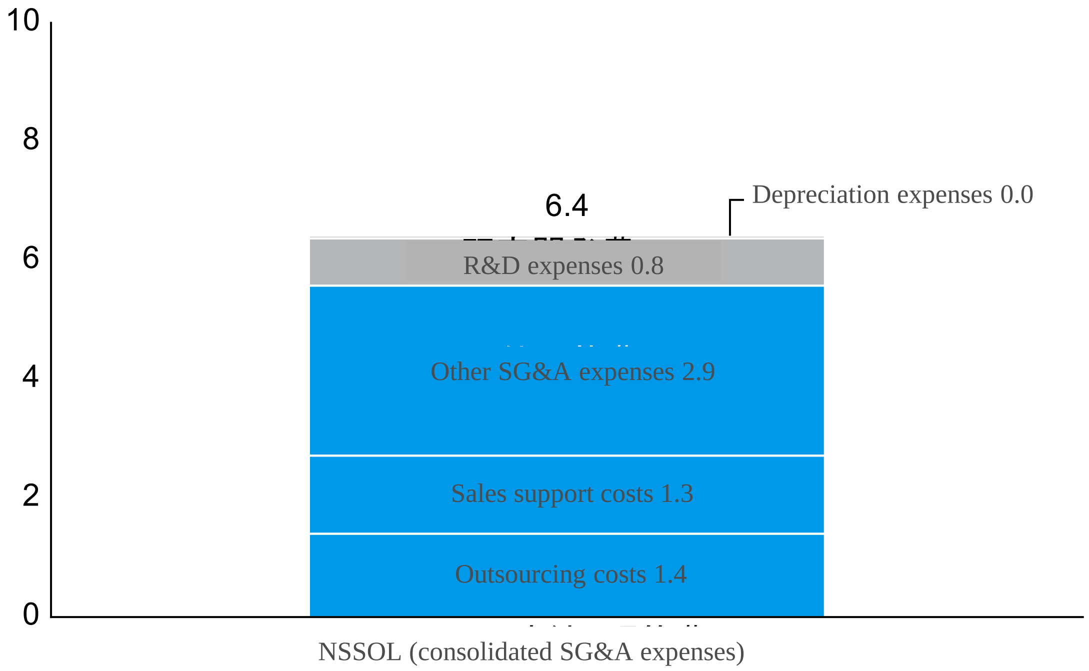
Other Cost of Sales ：There is room for reduction in head office rent out of costs excluding personnel costs and purchase costs.

Other SG & A Expenses ： Of SG & A expenses other than personnel expenses, other SG & A expenses other than R & D expenses and depreciation expenses may have opportunities to reduce

Other costs (non-consolidated) as a percentage of sales (non-consolidated)*(%)



Other SG&A expenses (consolidated) as a percentage of sales (consolidated)**(%)



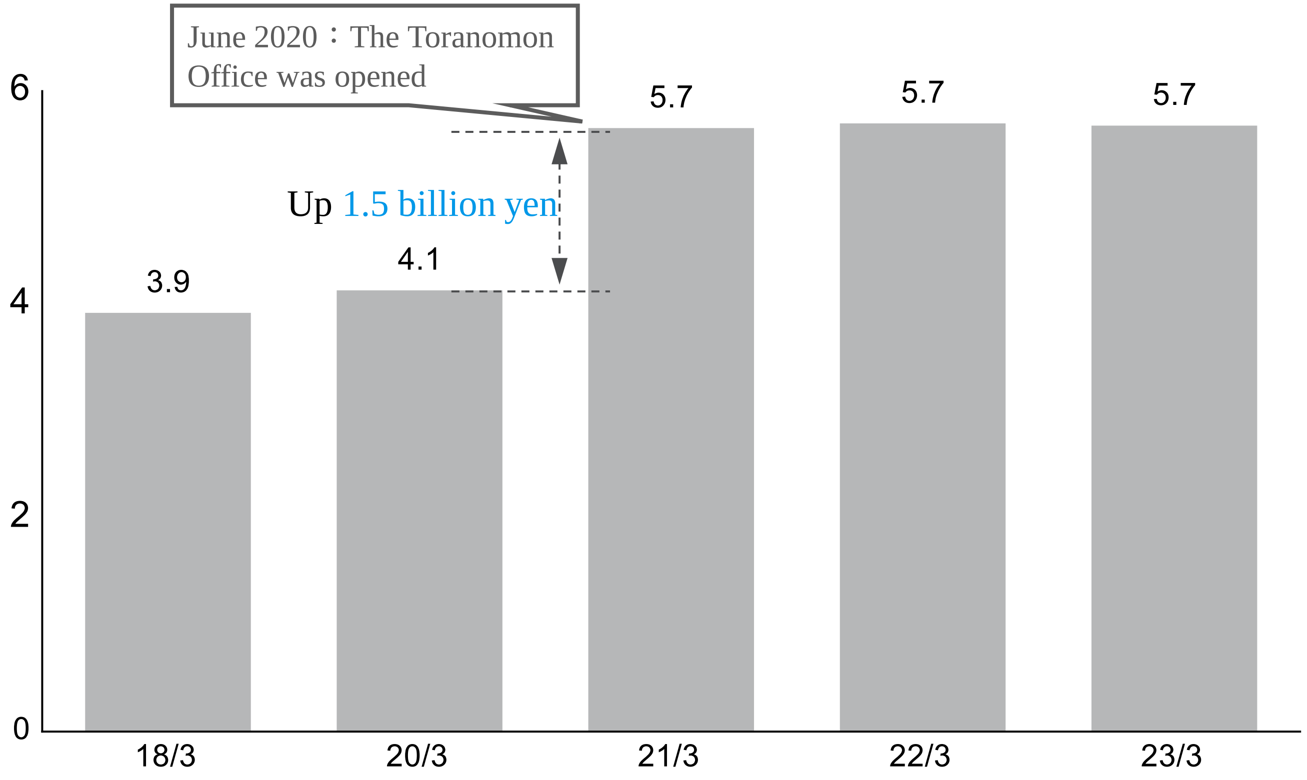
Cost items that can be reduced

*Other costs is the figure obtained by subtracting the labor costs, outsourcing costs and product purchase costs from the cost of goods sold;**Other selling, general and administrative expenses is the figure obtained by subtracting the employee benefit costs from the selling, general and administrative expenses. Source: Corporate IR

7 Reduction of Other Costs-Rent | Rent for the head office and other offices has increased by 1.5 billion yen since the Toranomon office was opened.

The rent for the head office and other offices has increased by 1.5 billion yen since the Toranomon office was opened.

Rent for the head office and other offices (billion yen)



The significance and benefits of establishing an office in a prime location are limited.

- NSSOL's explanation of why the head office needs to be established in Toranomon, a prime location is unclear.

"The purpose (of opening the Toranomon office) is to reduce the business continuity risk from a major natural disaster by having two main offices, and to improve communication among employees, promote collaboration, and realize a highly productive, creative work style by revamping and improving the work environment. "

NSSOL's press release

- Former employees do not see a clear business advantage to having an office in Toranomon.

"Considering our daily operations, I can't think of any particular reason for having an office in Toranomon."

Undisclosed

"I heard that during the COVID-19 pandemic, remote working became popular and the number of people coming to work was not that high. I went to the office around the summer of 2022, and found that there was no one in the office and 80% of the seats were empty, partly due to the pandemic."

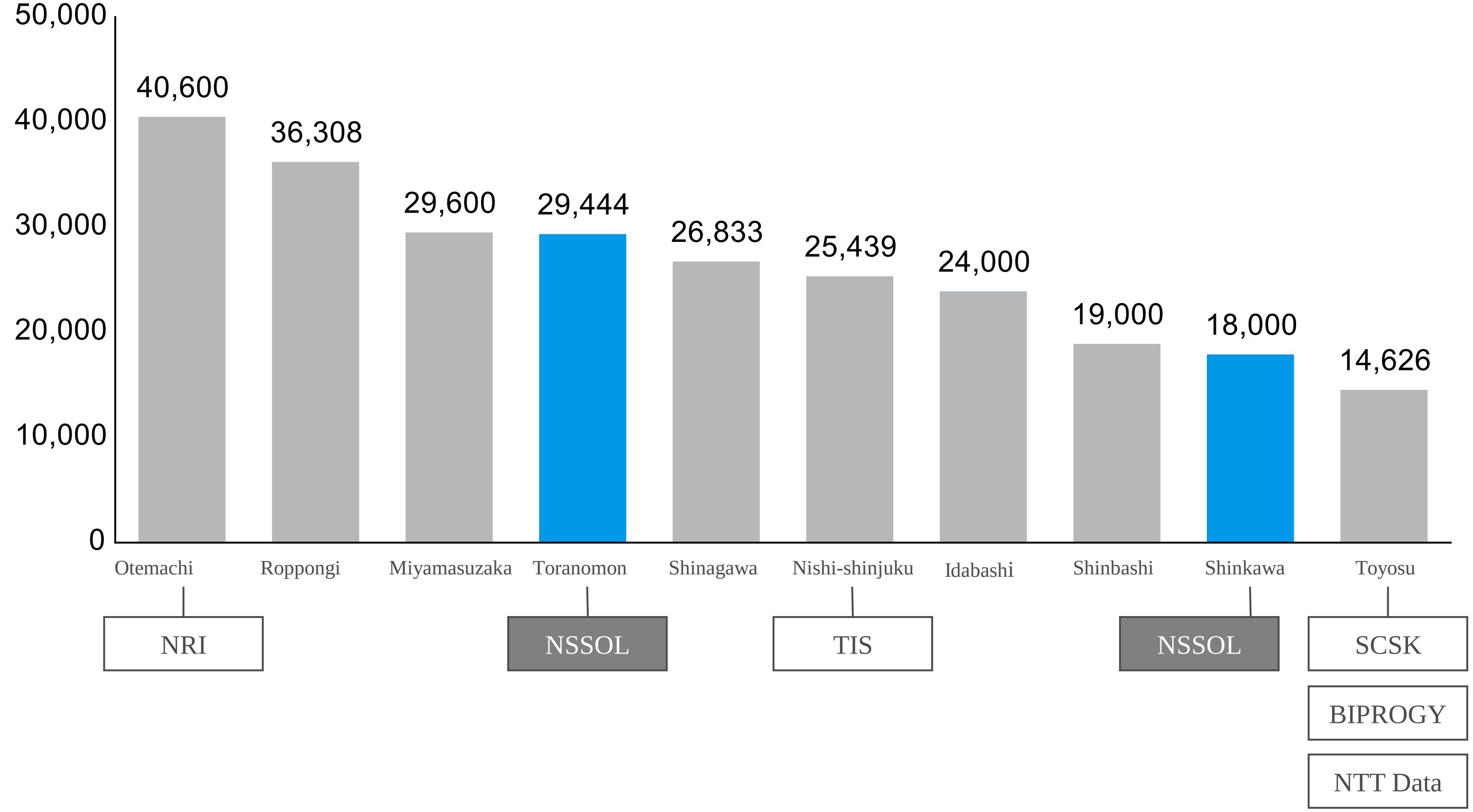
Undisclosed

Source: Company IR; interviews with market participants

7 Other Cost Savings - Rent | Compared to competitors, NSSOL ’ s headquarters is located in a location where rents are high and there may be room for savings

The head office is located in a location where rent is higher than competitors

Average land price per tsubo for leased office buildings of 300 tsubo or more (yen/tsubo)



*“As SI work **can be done remotely and is often stationed at customer sites, there is no particular problem with the office in Toyosu.**”*

Undisclosed

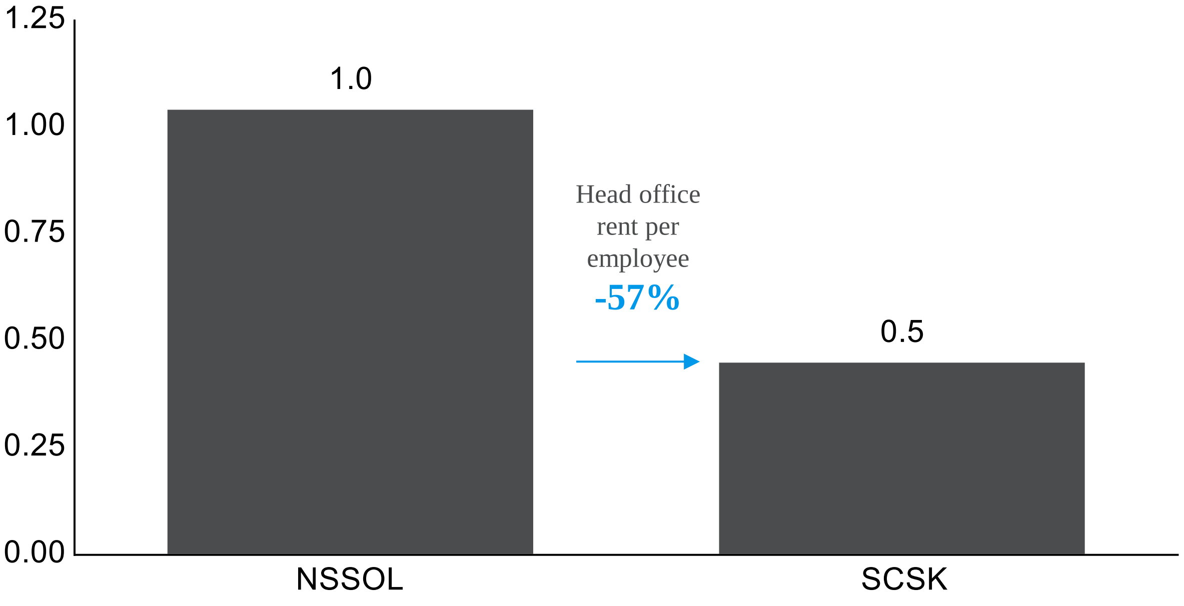
Sources: document research, corporate IR

Reduction of Other Costs-Rent | If NSSOL's rent per employee is reduced to the level of its competitor SCSK, the reduction will be approximately 57%.

After implementation of the measures, NSSOL's rent per employee is expected to fall to the level of its competitor SCSK.

- The measures are expected to reduce NSSOL's rent per employee (approximately 1.04 million yen) to the level of its competitor SCSK(approximately 0.45 million yen) (a reduction of approximately 57%).

Head office rent per employee (estimated figures; million yen)



	NSSOL	SCSK
Head office rent (million yen)	3,719	2,869
Number of employees	3,563	6,348

Method of calculating the rent per employee for the head office

		NSSOL		SCSK	
		Toranomon Hills Business Tower	Tokyo Sumitomo Twin Building East	Toyosu Front	Toyosu Foresia
Rent (million yen)	Land price per tsubo (ten thousand yen / tsubo)	29,444	18,000	14,626	
	× Standard floor area (tsubo)	900	532	1,533	1,361
	× Number of floors	7	12	8	3
	=	2,226	1,493	2,153	717
		3,719		2,869	
÷ Number of employees at the head office (person)		3,563		6,348	
= Rent per employee (million yen / employee)		1.0		0.5	

Source: document research, Company IR

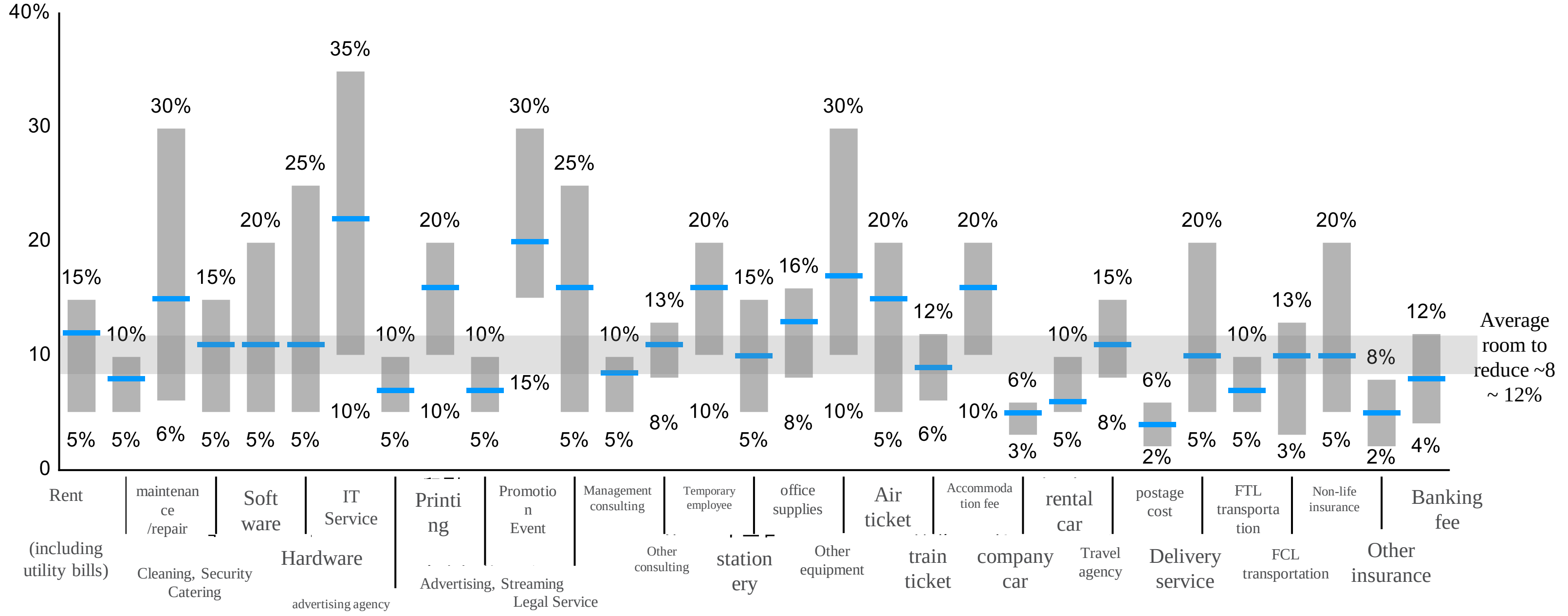
7 Reduction of Other Costs-Rent | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case/Upside case			
Current estimated rent for the head office	3.7 billion yen		Company IR
Estimated rent for the Toranomon Office	2.2 billion yen	Calculated using the following formula: office rent in the Toranomon area for a floor area of 300 tsubo or more (approximately 30,000 yen/tsubo) × standard floor area of Toranomon Hills (900 tsubo)×number of floors* (7 floors).	document research; interviews with market participants
＋Estimated rent for the Shinkawa Office	1.5 billion yen	Calculated using the following formula: office rent in the Shinkawa area for a floor area of 300 tsubo or more (approximately 18,000 yen/tsubo)× standard floor area of Tokyo Sumitomo Twin Building (532 tsubo) × number of floors*(13 floors).	document research; interviews with market participants
×Rent reduction rate	57%		
Difference in the rent per employee for the head office between SCSK and NSSOL	590,000 yen		
SCSK’s rent per employee for the head office	450,000yen	Calculated by dividing SCSK's estimated rent for the head office* (approximately 3.2 billion yen) by the number of employees at the head office (6,348 persons).	Corporate IR; document research; interviews with market participants
－NSSOL's rent per employee for the head office	1.04 million yen	Calculated by dividing NSSOL's estimated rent for the head office (approximately 2.9 billion yen) by the number of employees at the head office (3,563 persons).	document research; interviews with market participants
÷NSSOL's rent per employee for the head office	1.04 million yen	Same as above	
＝ Amount of the financial effects of measures (EBITDA)	**2.1 billion yen**		
(Reference information) other figures			
One-time relocation expenses	0.09 billion yen	The cost of maintaining the office in 2020, excluding the additional cost of extending the office lease contract for the office to be vacated	Company IR
Early termination fee payable if the contract has not expired	0.6 billion yen	Three months' rent, as the early termination fee is typically equal to three months' rent	document research; interviews with market participants

The number of floors and the rent for the head office (estimated) include the rent for the subsidiaries located in the head office building.

7 Reduced Other Costs - Overhead | Based on historical industry savings, there may be 8 ~ 12% room to reduce other overhead costs

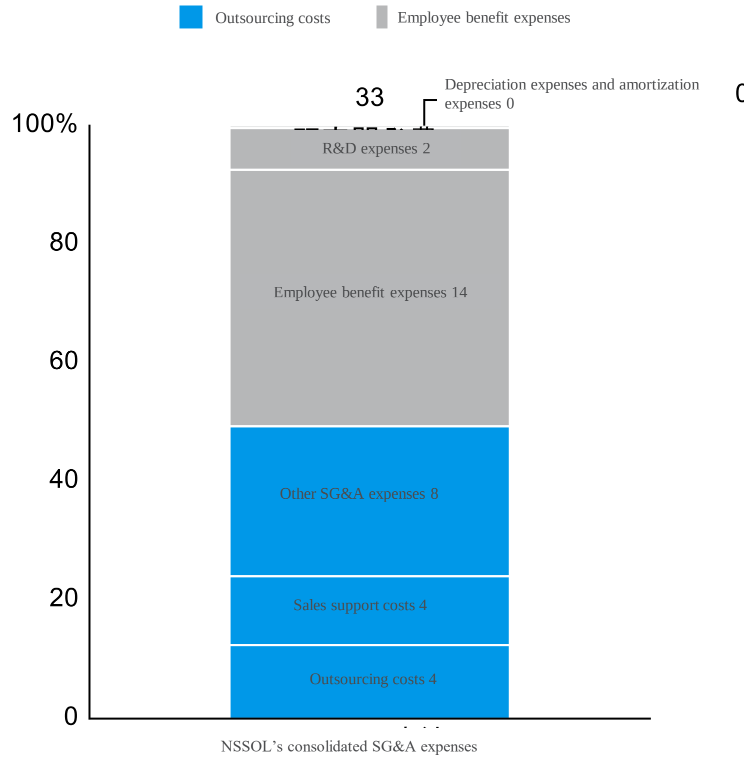
Typical reduction of 8 ~ 12% in industry cost reduction projects



Category	Facility management	IT & Technology	Marketing	Professional/HR Services	Office equipment and services	Business trip	Logistics	Financial services
Average reduction ratio	8-15%	10-15%	7-13%	7-14%	7-13%	6-12%	5-10%	5-10%

Applicable to NSSOL overhead ~ 16.3 billion yen

Breakdown of NSSOL's consolidated SG&A expenses (for the fiscal year ended March 2023; billion yen)



Reduction in overhead cost efficiency is ~13-2 billion yen

Note: N=10~20 for general reduction data
Source: Corporate IR; Global Consulting Firm

7 Reduction of Other Costs-Overhead Costs | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case			
NSSOL's overhead costs to be reduced	16.3 billion yen	Other general and administrative expenses other than personnel expenses, research and development expenses and depreciation expenses for the fiscal year ended in March 2023	Company IR
×Reduction rate	8%	Adopted the lower of the 8 to 12% impact of overhead cost reductions that are typical of past cost reductions in the industry.	global consulting firms
＝ **Financial Impact (EBITDA)**	**1.3 billion yen**		
Upside case			
NSSOL's overhead costs to be reduced	16.3 billion yen	Other general and administrative expenses other than personnel expenses costs, research and development expenses and depreciation expenses for the fiscal year ended in March 2023	Company IR
×Reduction rate	12%	Adopted the higher of the 8 to 12% impact of overhead cost reductions that are typical of past cost reductions in the industry.	global consulting firms
＝ **Financial Impact (EBITDA)**	**2.0 billion yen**		

7 Reduction of Other Costs-Overhead Costs | Approach for examining and implementing measures

a Understand the details of overhead costs and **identify cost items to be reduced**

- **Break down the overhead costs in each procurement unit** and understand the amounts.
  - Facility maintenance costs: repair costs, outsourcing costs (cleaning and security), electricity rates, etc.
  - Logistics costs: transportation costs, storage costs, etc.
  - …
- **Identify cost items to be reduced** from the following perspectives:
  - **The amount is not small;**
  - **The reduction is likely to be achievable; and**
  - **The risk of lost sales** as a result of the reduction is low.

b **Prioritize measures** based on target reduction amounts and the level of difficulty of implementing measures.

- Determine **reduction measures** for cost items to be reduced and **target reduction amounts.**
- **Clarify the level of difficulty** by classifying reduction measures into **"measures already determined," "measures to be negotiated," and "measures to be coordinated internally."**
  - Measures already determined (level of difficulty: low): costs that do not require negotiation with suppliers and that can be reduced through **internal decision-making**
  - Measures to be negotiated (level of difficulty: medium): costs that require in-depth **negotiations with suppliers** to reduce
  - Measures to be coordinated internally (level of difficulty: high): **costs that require collaboration with subsidiaries** to reduce
- **Prioritize measures** based on **target reduction amounts and the level of difficulty of implementing measures**.

c **Implement** reduction measures

- "Measures already determined": Make a decision through **discussions in the division/section in charge**.
  - Decide to switch to less expensive materials, equipment and supplies that meet requirements.
- "Measures to be negotiated": **Negotiate with suppliers.**
  - Determine the scope (subject) of negotiation;
  - Select suppliers based on requirements and pricing;
  - Obtain competitive quotes; and
  - Conduct negotiations and determine the preferred supplier based on the results of the negotiations.
- "Measures to be coordinated internally": Make a decision through discussions **involving relevant subsidiaries**.

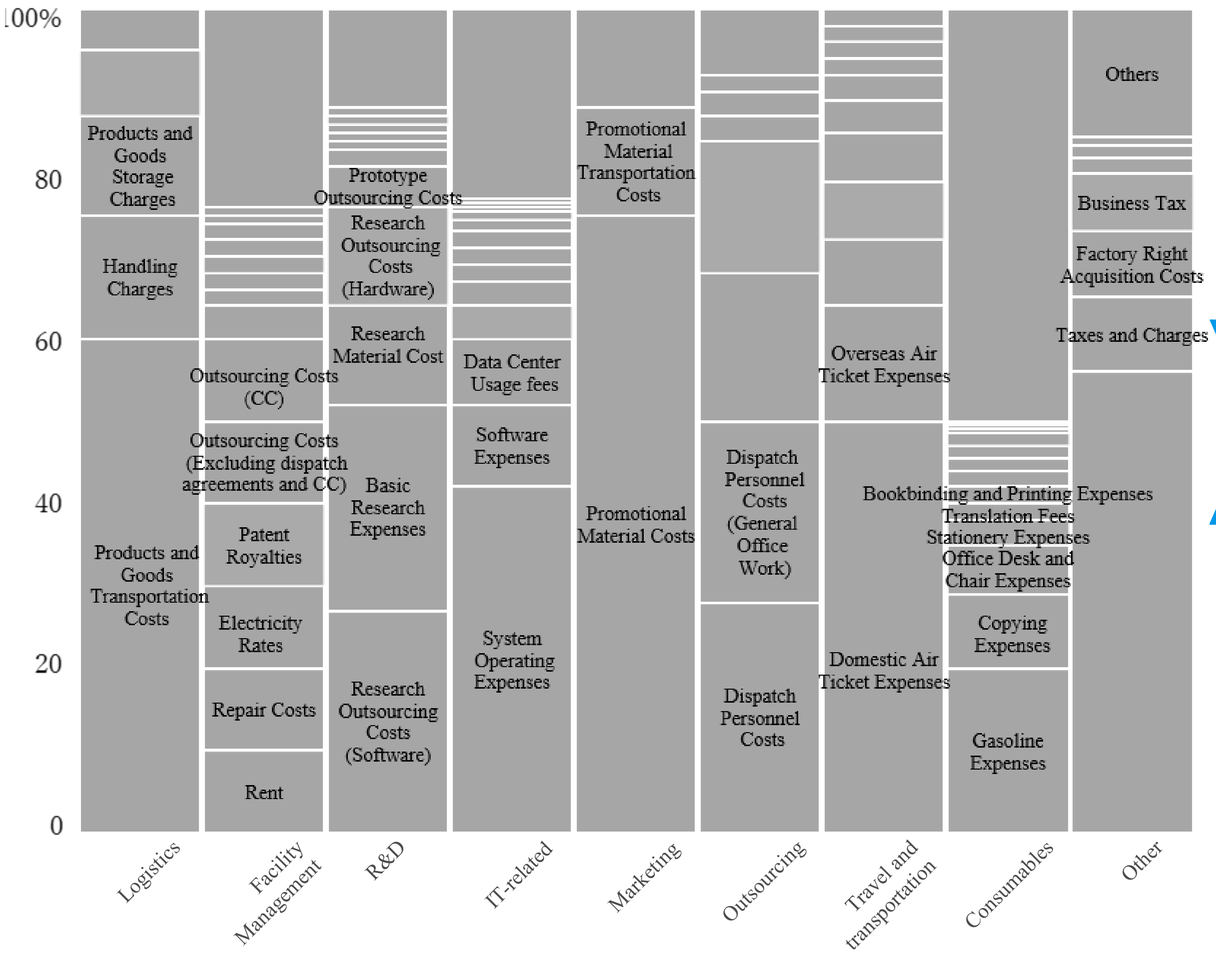
d Establish **internal guidelines** to control costs after reduction

- **Establish guidelines** to ensure that a new **cost governance system** created during the implementation of overhead cost reduction measures is maintained in the future.
  - **Visualize costs;**
  - **Strengthen cost governance through specialized organizations; and**
  - **Optimize processes,** etc.

7a Reduction of Other Costs-Overhead Costs | (Case Introduction) We will visualize and organize the amounts spent for each cost item to reach a common understanding of the amounts spent.

/ Project example

Visualize the broad outlines of the amounts spent for each cost item and prioritize those amounts



Aggregate payment vouchers and create a detailed database (Image)

Order date	Ordering division/ section	Category of items purchased	Details of items purchased	Supplier	Purchase quantity	Unit price (yen)
July 28	Sales	Promotional materials	banners for events	Company A	5	1,000
July 28	Sales	Promotional materials	flyers	Company B	500	200
July 28	Sales	Promotional materials	business cards	Company C	30,000	10
July 29	Sales	Promotional materials	catalogues	Company A	500	2,500
July 29	Sales	Promotional materials	samples of product XX	Company D	3	8,000
July 29	Sales	Promotional materials	digital advertising	Company E	10,000	50
July 29	Sales	Promotional materials	flyers	Company B	1,000	200
July 29	Sales	Promotional materials	equipment for events	Company F	8	5,000

Source: global consulting firms

7b Reduction of Other Costs-Overhead Costs | (Case Introduction) Reduction Measures for Other Typical Cost Items

Project example

Cost items			Examples of specific measures to reduce amounts
Marketing & sales	Advertising and promotion	Media	Reviewing area allocations based on target recognition rates
		Advertising creation	Since the amount of production depends on the frequency of campaigns, it is difficult to consider without reviewing the advertising strategy.
		Sponsor	Reviewing the need for sponsorship
		Market research	Rationalizing the scope of research, reviewing reporting and other extra services that are unnecessary
	Marketing supplies	Over-the-counter materials	Setting budget limits based on comparisons with competitors' levels, reducing materials to be discarded
	Sales promotion	Promotional activities	Reviewing budgets, including the need for campaigns, etc., fundamentally, and tightening internal decision-making processes and ordering rules
Supply & logistics	Freight transport	Warehousing and storage	Network optimization (reviewing sites, insourcing, etc.), reducing product lines, reducing inventory holding time, simplifying management, etc.
		Road transport	Network optimization (route optimization, etc.)
	Capital investment	Outsourced manufacturing	Reviewing outsourcing volumes, including considering insourcing, etc.
		Other	Tightening capital investment standards, using equipment for multiple purposes
		Mechanical repair and maintenance	Reviewing the frequency of periodic inspections, performing simple repairs in-house
	Utility		Negotiating unit prices by obtaining competitive quotes
Corporate service	General service	Property management	Implementing relocations, standardizing the area per employee, introducing remote working and hot-desking systems
		Facility management	Negotiating unit prices by obtaining competitive quotes
		Vehicle-related	Switching to the least expensive vehicles for each use, substituting public transport for vehicles
		Business-related	Keeping per-employee spending at the lowest level among business divisions
		Other	Assessing the need for mailing, considering digitization
	Information and communications technology	IT service	Optimizing contract packages and additional options
		NW service	Making contract terms (equipment specifications, maintenance details) appropriate
	Business trip expenses		Tightening air ticket classes and rules, reducing fees, reducing the number of business trips
	HR service		Negotiating unit prices by obtaining competitive quotes

Source: global consulting firms

7b Reduction of Other Costs-Overhead Costs |(Case Introduction) Identifying improvement measures and making the necessary business decisions for their implementation.

/ Project example

Current state of spending and issues

- **Definition**: Cost of air tickets for overseas business trips
- **Amount spent**: [ ]billion yen
- **Main recipients:**
  - Employees: [ ] billion yen ([ ]%)
- **Issues:**
  - Non-managerial employees fly business class.
  - Airline tickets are arranged through high-commission agencies.
  - Efforts to fully switch to Teams for internal meetings are halfway through the process and may not continue to reduce travel costs after the Covid-19 pandemic.

Improvement measures and room for improvement

- **Improvement measures:**
  - **Designation of class by job position/route**: Expand the use of economy class by defining the scope of coverage by job position/route.
  - **Use of the lowest-cost carrier**: Promote the use of the lowest-cost carrier, including the use of LCCs on some routes.
  - **Reduction of agency commissions**: Negotiate reductions of commissions with an eye to switching to the lowest-commission agency.
  - **Reduction in the number of business trips**: Reduce the number of business trips by holding internal meetings via Teams in principle.
- **Room for improvement**: **[ ]-[ ] billion yen ([ ]-[ ]%)**
  - **Designation of the class by job position/route**: an improvement of approximately **[ ] billion yen ([ ]%)** by ensuring that non-managerial employees fly economy class when traveling to Asia, and approximately **[ ] billion yen ([ ]%)** when managerial employees also fly economy class
  - **Use of the lowest-cost carrier**: an improvement of approximately **[ ] billion yen ([ ]%)** by promoting the use of LCCs on major travel routes in Asia.
  - **Reduction of agency commissions**: an improvement of approximately **[ ] billion yen ([ ]%)** by shifting to JTB, which has lower commissions.
  - **Reduction in the number of business trips**: an improvement of approximately **[ ]billion yen ([ ]%)** by reducing the number of business trips for internal meetings.

Necessary business decisions

- Notify the entire company that non-managerial employees must fly economy class;
- Notify the entire company that designated travel agencies must be used to book overseas air tickets, and that LCCs must be used in Asia; and
- Suspend business trips for internal meetings in principle.

Source: global consulting firms

Reduction of Other Costs-Overhead Costs | (Case Introduction) Other Potential Cost Reductions

Project example

The need for in-depth negotiations with suppliers

Total reduction potential: [ ]-[ ] billion yen

Necessary

Level of difficulty: middle

[ ]-[ ] billion yen

"measures to be negotiated"

- Negotiate the unit cost of transportation
- Negotiate the unit cost of call centers
- Negotiate the unit price of personnel for contract research
- Negotiate the unit price of dispatching

Unnecessary

Level of difficulty: low

[ ]-[ ] billion yen

"measures already determined"

- Reduce phone calls
- Reduce the number of multi-functional printers
- Consolidate offices
- Reduce the specifications of personal computers
- Drastically reduce promotional materials

Level of difficulty: high

[ ]-[ ] billion yen

"measures to be coordinated internally."

- Negotiate unit prices with contractors/service providers on a consolidated basis
- Negotiate unit prices and optimize specifications related to systems on a consolidated basis

Can be decided a non-consolidated basis

Need to decide in collaboration with subsidiaries

Level of difficulty in making decisions

Source: global consulting firms

7c Reduction of Other Costs-Overhead Costs | Reducing overhead costs requires an uncompromising review of all expenditures, leaving no area untouched.

"Review the purchasing process"
Optimize price negotiations with suppliers

Sophisticated price negotiation

- **Nationwide centralized purchasing**
  Prohibit independent negotiations, such as setting purchase prices and agreeing to share logistics costs at a site's own discretion.
- **Internal price benchmark**
  Standardize procurement prices across purchasing sites, and identify and negotiate corrections to irrational price differences for similar products.
- **External price benchmark**
  Thoroughly negotiate prices using competitive quotes and external benchmark information.
- **Reasonable price calculation**
  Analyze the impact of fluctuations in raw material, outsourcing, transportation and other costs to provide a "right price" for negotiation.

Volume control

- **Execute, extend the scope of, and upgrade long-term contracts**
  Maximize impact by locking in price reductions through multi-year, fixed-volume procurement contracts and setting terms for reductions due to expansion of covered items and volume fluctuations.
- **Increase minimum order quantity**
  Reduce prices by demonstrating to suppliers that they will benefit from increased order lot sizes.

- **Consolidate suppliers by category**
  Consolidate suppliers of similar products into one supplier, and demand lower prices by increasing procurement volume.
- **Consolidate suppliers across categories**
  Consolidate suppliers across procurement items, and demand lower prices to increase overall procurement volume.

"Review usage"
Optimize specifications and operations

Optimize specifications of equipment, etc.

- **Change specifications**
  Change specifications of tools and other items used in sales and marketing activities.
- **Standardize procurement items**
  Standardize products to be purchased and increase procurement volume to obtain volume discounts.
- **Reconsider specifications**
  Downgrade the specifications of products to be purchased to reduce unit costs.

Operational Compliance

- **Control demand**
  Reduce usage, reduce and standardize the frequency of delivery and other service levels and the number of products to be handled.
- **Strictly adhere to spending criteria**
  Establish uniform national purchasing criteria to prevent indiscriminate purchases, and regularly monitor budget standards

Source: global consulting firms

Reduction of Other Costs-Overhead Costs | Reducing overhead costs requires a careful strategic negotiation approach.

	Negotiating partner	Negotiating stance	Competitive environment among vendors
Common mistakes	Offer to negotiate with **a person in charge who has no decision- making authority**, as in previous years.	Conduct negotiations that only impose an unsupported target amount, resulting in "owing" the vendor and not being able to negotiate aggressively.	Select a usual vendor without a strategic perspective and fail to create a competitive environment.
Effective approach	1 **Offer to negotiate between presidents** to establish a negotiation scheme involving **high- level individuals with decision- making authority.**	2 Negotiate "skillfully" by making terms concrete and breaking them down. – Close the information gap with vendors by clarifying the cost structure. – Clarify the issues for negotiation by comparing each company's quote, leading to user-driven negotiations.	3 **Intentionally create** and **fully exploit** competitive relationships between vendors. – Select a vendor with a low-cost structure. – Communicate with an awareness of competitive perspectives among vendors. – Carrot-and-stick strategic allocation

4 Obtain immediate feedback and incorporate it into a rigorous and detailed negotiation script.

Source: global consulting firms

7d Reduction of Other Costs-Overhead Costs | Developing a cost governance structure and process.

	Conventional method	Alternative method
Visualization	• Promotional materials: The cost of the products to be purchased is unknown from all-inclusive quotes. • Cleaning costs: Most bases do not have a written cleaning standard, and the unit price for cleaning areas is unknown.	• Products to be purchased will be broken down into 1,700 items and unit prices will be agreed upon with preferred vendors, making future quotes transparent. • Cleaning costs will be broken down into the hours required for each base/work and the hourly rate for each base (over 200 items) and unit price will be agreed upon with preferred vendors.
Strengthening governance through a dedicated organization	• Temporary staffing costs: Orders are placed by the person in charge in each business office based on different standards, resulting in high unit prices and compliance concerns. • Call center costs: Subsidiary A, Subsidiary B and Subsidiary C place orders separately, not leveraging the volume of the three companies.	• A preferred vendor system and a contract unit pricing system by rank and region will be introduced. A dedicated organization will be established to consolidate contracts and negotiations with preferred vendors. • A team will be established to enable the three subsidiaries to place business orders jointly, and orders will be consolidated to be placed with preferred vendors, leveraging the volume of the three companies to reduce unit prices.
Process optimization	• Promotional materials: Increases in the number of revisions and proofreading have become the norm due to costs that are unknown from all-inclusive quotes (these costs are included in normal unit prices).	• Revision and proofreading costs will be clarified. In addition, these costs will be minimized by reviewing the workflow, ensuring thorough cost awareness, and establishing rules for divisions that bear the costs.

Source: global consulting firms

⑧ Development of Domestic Steel Manufacturer Customers

8

Development of Domestic Steel Manufacturer Customers

Current issues

- At present, NSSOL's customers include by JFE, KOBELCO and other domestic steel manufacturers other than Nippon Steel. NSSOL serves as a subcontractor for part of the system development, maintenance and operation, but the estimated transaction share is extremely limited at 1% or less.
- This is because there are "factors on the customer's side" (i.e., customers are concerned about the risk of technology leakage to Nippon Steel), and also "factors on NSSOL's side" (i.e., human resource capacity and internal approval processes when working with other manufacturers).
  - With a large number of engineers needed for the parent company's project, there is a shortage of personnel to work on other steel projects.
  - In addition, there is a cumbersome internal approval process when working on projects for Nippon Steel competitors.
- However, JFE and KOBELCO highly value NSSOL's understanding of business operations in the steel industry and its ability to handle large projects, and they intend to use NSSOL to renovate their core systems "if there are no concerns about the relationship with Nippon Steel.

Opportunities for large projects that should have been won are being lost.

Proposed Direction

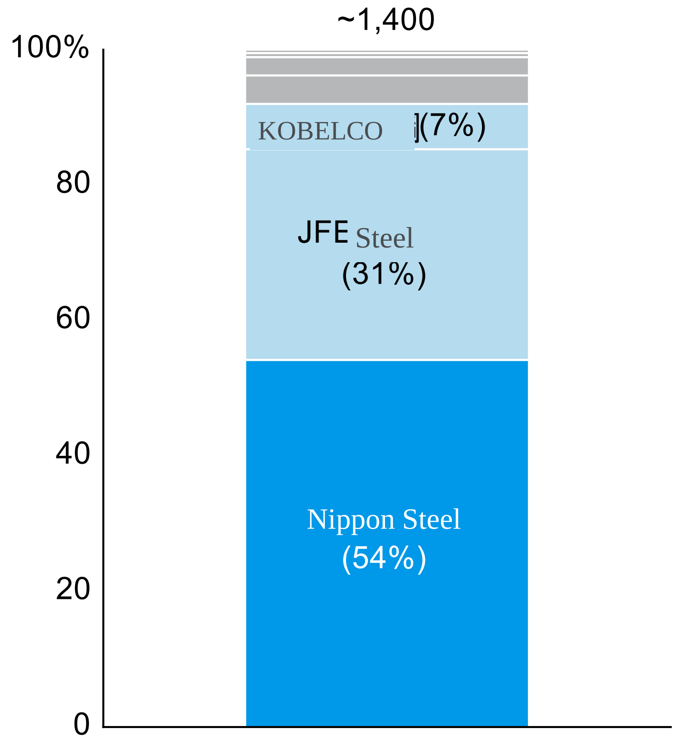
- Diversify relationships with domestic steel manufacturers. NSSOL should aim to position itself as one of the top 3 or 4 external SIs for JFE and KOBELCO.
- Specifically, the goal should be to renovate their core systems, which is expected to require an annual investment of 20 billion yen or more by 2030 (when JFE and KOBELCO are combined).
  - Taking JFE as an example, the renovation of its core system at its steel plants in western and eastern Japan is underway, and some users say, "We are very likely to choose NSSOL."

8 Development of Domestic Steel Manufacturer Customers | Currently, transaction relationships with steel manufacturers other than Nippon Steel (JFE/KOBELCO) are limited

NSSOL is the main SI of Nippon Steel

Main SI   Limited transaction relationship (transaction share＜1%)

Domestic steel production share
(in 10,000 tons, 23/3)



Meanwhile, trading with JFE/KOBELCO is limited

XX% ：Percentage within IT investment / expenditure

IT investment amount of each company in FY22		NIPPON STEEL	JFE	KOBELCO
Develop-ment (~70%)	Business computers (~15%)	Transaction share with NSSOL: 95%	Transaction share with NSSOL: <1%	Transaction share with NSSOL: <1%
	Process computers and their renewal (~40%)	Transaction share with NSSOL: 60%		
	Infrastructure (~15%)	Transaction share with NSSOL: 70%		
Maintenance and operation (~30%)		Transaction share with NSSOL: 85%	Transaction share with NSSOL: <1%	Transaction share with NSSOL: <1%
Total		~60 billion	~43 billion	~20 billion

~40% is process computers: subsidiary **Nippon Steel Texeng is in charge**

~15% is process computers: subsidiary **Nippon Steel Texeng is in charge**

Note: Market share of three companies, i.e. Nippon Steel, JFE Steel, and KOBELCO are defined as 80% (market participant basis)
Source: Company IR; interviews with market participants; reference document research

8 Development of Domestic Steel Manufacturer Customers | Limited transaction relationships are also due to NSSOL's "internal factor," i.e. Nippon Steel is NSSOL's parent company

Factors explaining why transaction relationships with JFE/KOBELCO are limited

***Customer-side** factors*

Customer's concern over technology leakage to Nippon Steel

*"Certain core system is already outsourced to NSSOL, but **we are concerned with the risk that outsourcing any service related to information control system, etc. that require disclosure of information control parameters may lead to a leakage of information to Nippon Steel**"*

Undisclosed

***NSSOL-side** factors*

Shortage of engineers who are capable of handling steel projects

*"Since engineers of the steel business department of NSSOL **are basically assigned to Nippon Steel-related projects**, there are cases where no engineers are available for other steel manufacturer customers"*

Undisclosed

Complex **internal approval process**

*"When considering any projects with steel manufacturers that are competing with Nippon Steel, **legal check at both within Nippon Steel and within NSSOL is essential in order to avoid leakage of confidential information of Nippon Steel**. This may take several months, and requires a significant amount of man-hour and time"*

Undisclosed

Source: Company IR; interviews with market participants; reference document research

8 Development of Domestic Steel Manufacturer Customers | Target projects should be core system renewal projects in terms of potential project scale, profitability, and NSSOL's competitive advantage

	Core system renewal projects	Other outsourced projects (mainly upgrades and additional developments of existing systems)
Potential project scale	Investments in core system renewal are gaining momentum, with their scale being **approximately 20 billion** *"Although we are falling behind JFE Steel which has completed the renewal of various systems used in ironworks, we are also aware of the importance of the system renewal and we **plan to proceed with the renewal within the next 2~3 years**"* Undisclosed	Projects are mainly partial outsourcing of upgrades and additional developments of existing systems that are mainly engaged by subsidiaries of steel manufacturers, and **their scale is relatively small**
Profitability of projects	There are large projects and direct outsourcing from the parent company, and **gross margin rate is 30~40%** *"Projects last several years and there is a need to consider risks of any system-related problems, so we expect a very high gross margin. **In the case of system renewals, it will be around~40%**"* Undisclosed	The scale of projects is relatively small and they are outsourced from subsidiaries of Systems. Thus, the gross margin rate is **around 20%** *"Since subsidiaries are also outsourcing to entities where costs are lower than in-house, an outsourcee's **gross margin rate seemingly does not reach 25% or higher**"* Undisclosed
NSSOL's competitive advantage	Development capacity based on understanding of business process and business-related challenges of the steel industry is crucial, **NSSOL has a competitive advantage over its competitors**	**An understanding of existing system and the past performance of projects** are more important than an understanding of the steel industry. Manufacturer subsidiary's SI and existing SI have advantage

Core system renewal projects should be the target projects in terms of potential project scale, profitability, and NSSOL's competitive advantage

Source: Interviews with market participants

8 Development of Domestic Steel Manufacturer Customers | While outsourcing demands from steel manufacturers are high, there is a high preference to engage NSSOL for core system renewals if concerns related to its relationship with Nippon Steel are resolved

Due to a lack of human resource capacity in their own SI subsidiaries, steel manufacturers are **proactively outsourcing the core system renewals**

*"JFE Systems are recently putting emphasis on the recruitment of project managers, and there is a shortage of engineers. Since there are insufficient resources to conduct core system renewals for all works of JFE Steel, JFE **needs to outsource a certain portion of this service to others**"*

Undisclosed

*"Since core system renewals for each of the works (of KOBELCO) cannot be processed by resources of its subsidiary (KOBELCO SYSTEMS) alone, **we have no other choice but to outsource the service**"*

Undisclosed

*"In 2021, when the opening up of Sendai core system main frame was planned, (JFE Steel) had decided to engage TIS, which is an outside SI, **due to the shortage of staff at Systems subsidiary alone** "*

Undisclosed

Among outsourcee candidates, with respect to NSSOL, which has extensive expertise in the steel industry, **there is high preference if there are no concerns related to its relationship with the parent company**

*"For example, NEC and Fujitsu do not offer much guarantee or countermeasures if the machines stop at works, and if there is any breakdown in the machines, they will handle the matter only in accordance with the manual and make replacements. Since NSSOL is a steel industry expert and is technically capable of adjusting the machines instead of replacing them, **they are able to handle speedily and probably minimize the loss of operating ratio. From the steel manufacturer's point of view, NSSOL is an ideal party to engage for core system renewal** "*

Undisclosed

*"Given the expertise and project performance in the steel industry, and comparing with Tier 1 such as Fujitsu and NEC, **NSSOL is predominantly stronger in Japan. If we can borrow NSSOL's intelligence, we would like their support for our core system renewal** "*

Undisclosed

*"NSSOL has advantage over Fujitsu, etc. in terms of steel industry core system renewal projects. (If it separates from Nippon Steel) **we would be able to engage NSSOL for such projects**"*

Undisclosed

Source: Interviews with market participants

8 Development of Domestic Steel Manufacturer Customers | High preference to engage NSSOL is due to its distinctive feature in "understanding steel industry business" which is a significant indicator for core system renewal in the steel industry in comparison to competing SIs

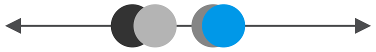
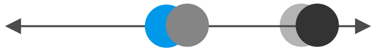
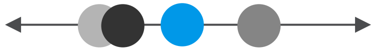
Core system renewal

Competing SIs who have accepted many outsourcing of core system renewal projects from JFE/KOBELCO

NSSOL TIS Fujitsu NEC

Low — Evaluation — High

High priority → Low priority: Customer's key purchase criteria(KPC)

Requirements/KPC for core system renewal projects in steel industry	Overview	NSSOL's competitive power (N=4 average score)	Comments from steel manufactures (other than Nippon Steel)
Understanding business process and business challenges in the steel industry	Industry-related knowledge required for customization and interface designing phase after core system installation		*"NSSOL's business know-how and accumulated expertise as a steel manufacturer are **top-ranking in the industry**"*
Past performance of core system renewal projects	Past performance of core system renewal projects		*"Compared to Tier 1 SI, **NSSOL's past performance in core system design and development is modest**"*
Proposal of infrastructure-related solutions	Technology to build the base environment on which core system is operated (servers, networks, etc.)		*"Since NSSOL has a specialized IT infrastructure department and collects infrastructure-related expertise of each industry, **infrastructure installation is also their strength**"*
Knowledge and understanding of **existing legacy systems**	Understanding existing systems upon system renewals and transition to open systems		*"Many works systems tend to be based on legacy technology and are complicated, and **NSSOL has an advantage due to its experience in actually having developed these systems"***
Capacity to handle major projects (SE, project managers)	Capacity to handle long-term projects requiring large amount of resources for core system renewal		*"Comparing the capacity, **NSSOL's capacity is smaller than other Tier 1 SIs"***
Competitive pricing	Price for major projects lasting few years(>1 billion)		*"Unit price stated in proposals of NSSOL's same projects **is cheaper compared to other Tier1 but is slightly higher than TIS, etc.**"*

Source: Interviews with market participants; reference document research

8 Development of Domestic Steel Manufacturer Customers | (Reference) Importance of KPC and each SI's evaluation

Low — Priority — High

Importance of KPC

Evaluation items	Expert 1	Expert 2	Expert 3	Expert 4
Industry expertise	1	1	1	2
Performance of core system renewals	2	2	2	1
Proposal of infrastructure solutions	3	4	3	4
Understanding of existing legacy systems	4	3	4	3
Capacity to handle major projects	5	5	5	5
Competitive pricing	6	6	6	6

Low — Evaluation — High

Score of each SI based on interviews

Evaluation items	NS Solutions	FUJITSU	TIS (TIS INTEC Group)	NEC
Industry expertise	5.00	3.25	3.50	2.25
Performance of core system renewals	3.00	4.50	3.00	3.50
Proposal of infrastructure solutions	3.75	4.25	4.00	3.50
Understanding of existing legacy systems	3.25	2.25	3.25	2.50
Capacity to handle major projects	3.25	5.00	3.50	5.00
Competitive pricing	2.25	2.00	3.25	1.50

Source: Interviews with market participants (N = 4)

8 Development of Domestic Steel Manufacturer Customers | In the case of JFE Steel, approx. up to 13 billion yen per year in business mainly related to its core system renewal could be acquired by NSSOL.

JFE

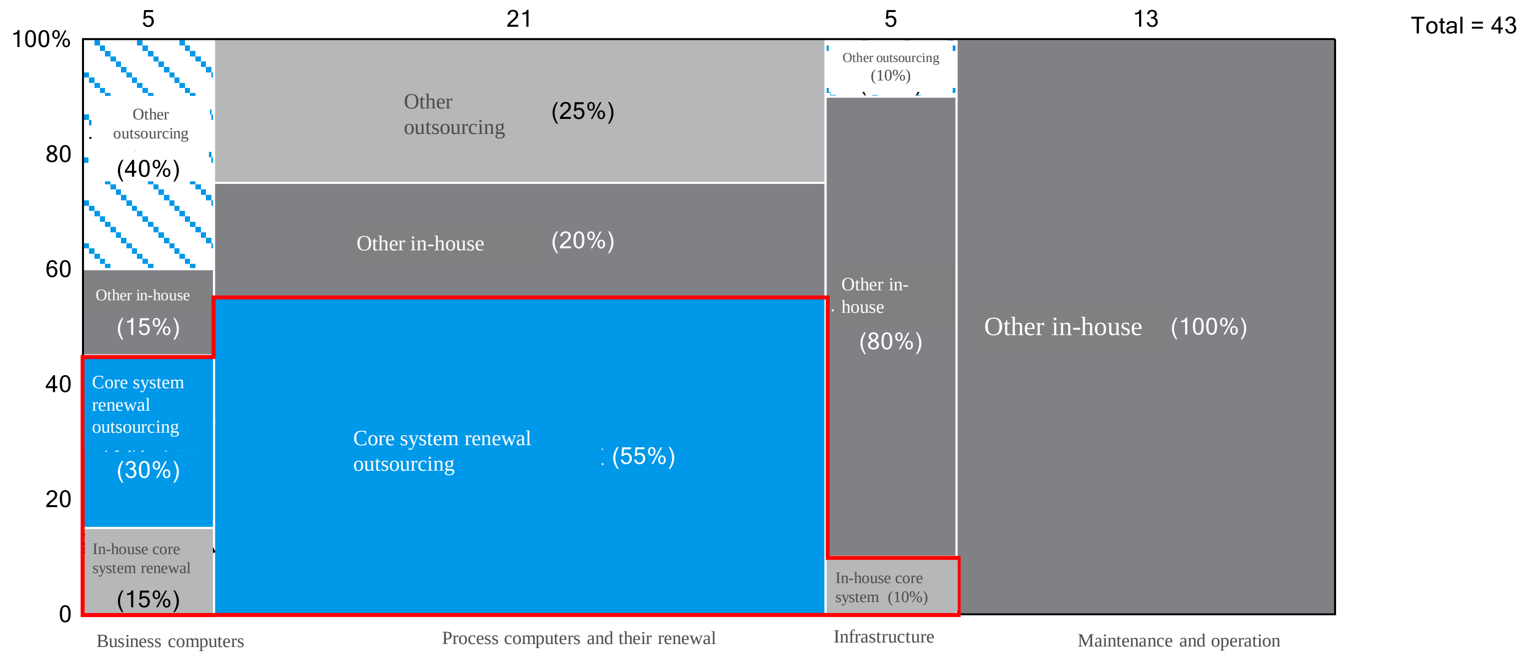
Breakdown of JFE Steel's annual IT investments /expenses (FY22/Estimate based on interviews)

Core system renewal area where there is a large entry opportunity for NSSOL

Other areas with entry opportunities but where **NSSOL's advantage is limited**

Investments for **core system renewal**

Breakdown of JFE Steel's IT investments/expenses (FY22, in billion yen)



NSSOL's presence is limited in existing process computers, but there are renewal opportunities

"In 2022, JFE Systems invested 16 billion yen in core system renewal. The core system renewal investments are expected to increase continuously, and ***expected to reach ~20 billion yen basis per year by 2030*** *"*

Undisclosed

"While system renewals at Sendai Works and Chita Works are almost complete, ***system renewals are still ongoing at East Nippon Works and West Nippon Works****, and they are not necessarily progressing well. Additional SI may be engaged"*

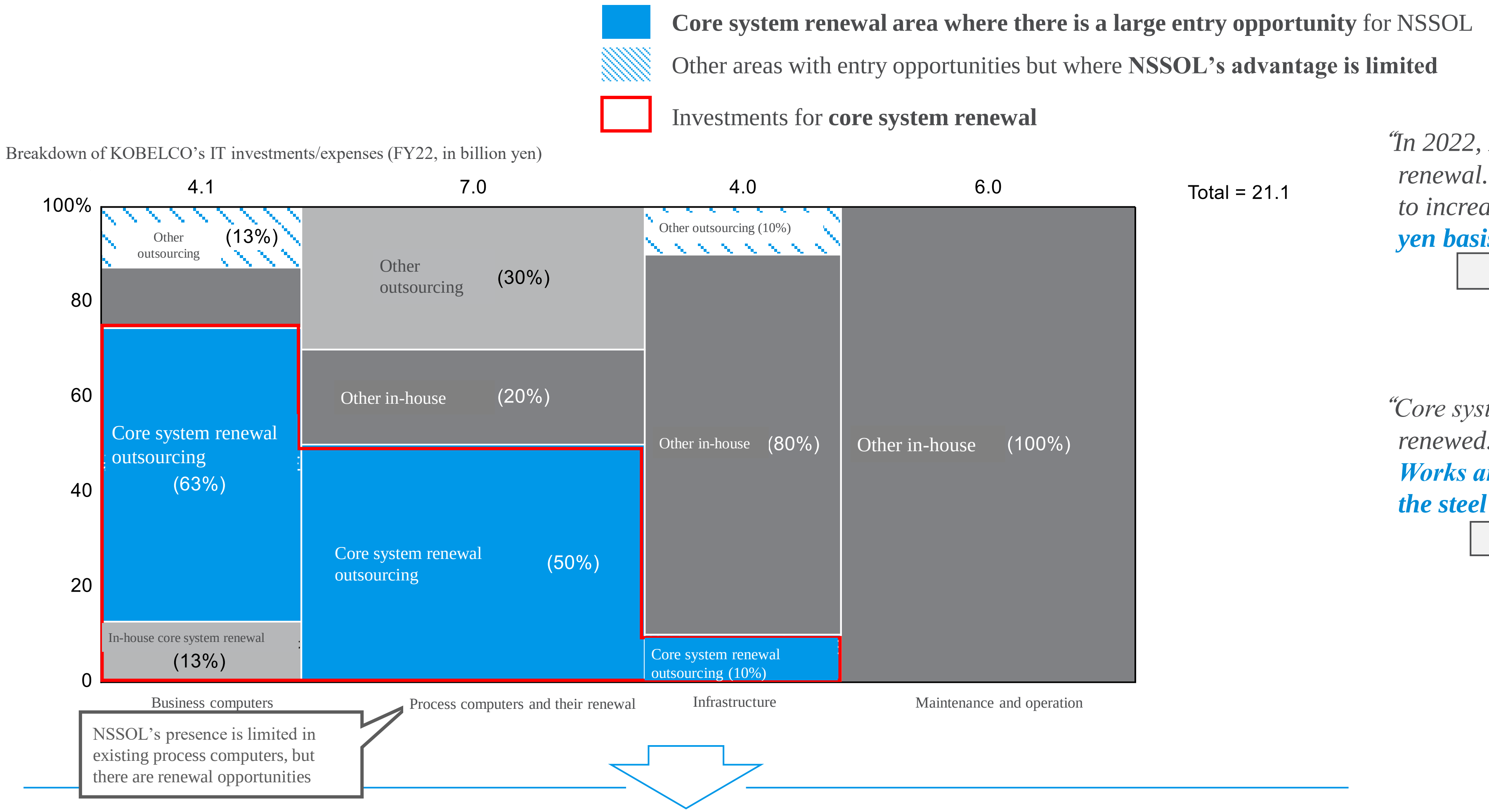
Undisclosed

Approximately 13 billion yen is largely available for NSSOL's entry

Note: JFE Steel's annual IT development investments are estimated to be 10% of JFE's consolidated capital expenditure (based on interviews with market participants); Estimated ratio of IT development investments and Maintenance and operation is 7:3 (based on interviews with market participants);Breakdown of IT development investment is based on interviews with market participants; Core system renewal and other in-house/outsourcing ratio are based on interviews with market participants; Source: Company IR; interviews with market participants; reference document research

Development of Domestic Steel Manufacturer Customers | There is also an entry opportunity with KOBELCO for approximately 6 billion yen per year mainly in core system renewal-related investments

Breakdown of KOBELCO's annual IT investments /expenses (FY22/Estimation based on interviews)



"In 2022, KOBELCO invested 7 billion yen in core system renewal. The core system renewal investments are expected to increase continuously, and ***expected to reach ~10 billion yen basis per year by 2030*** *"*

Undisclosed

"Core systems of (KOBELCO's) works have not yet been renewed. Especially, ***Kakogawa Works, Moka Works , Chofu Works are like to highly appreciate NSSOL's knowledge in the steel industry*** *"*

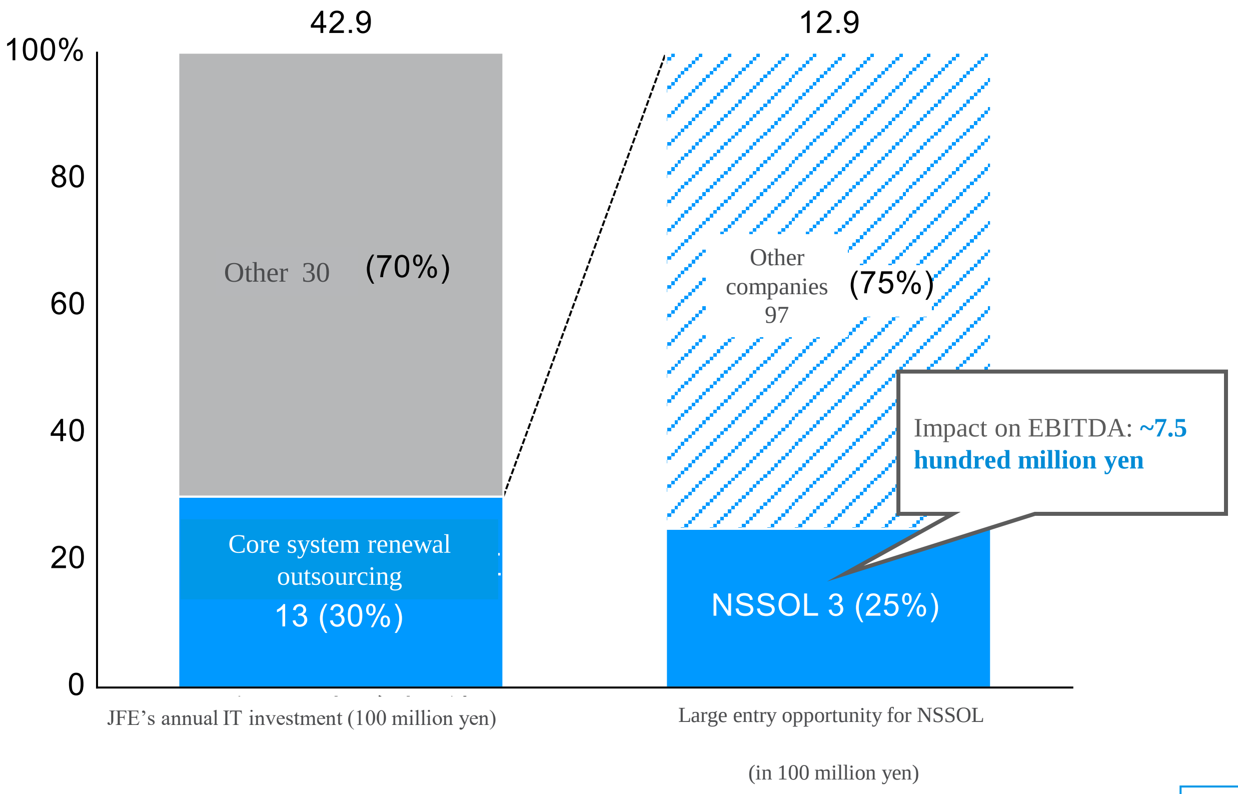
Undisclosed

Approximately 6 billion yen is largely available for NSSOL's entry

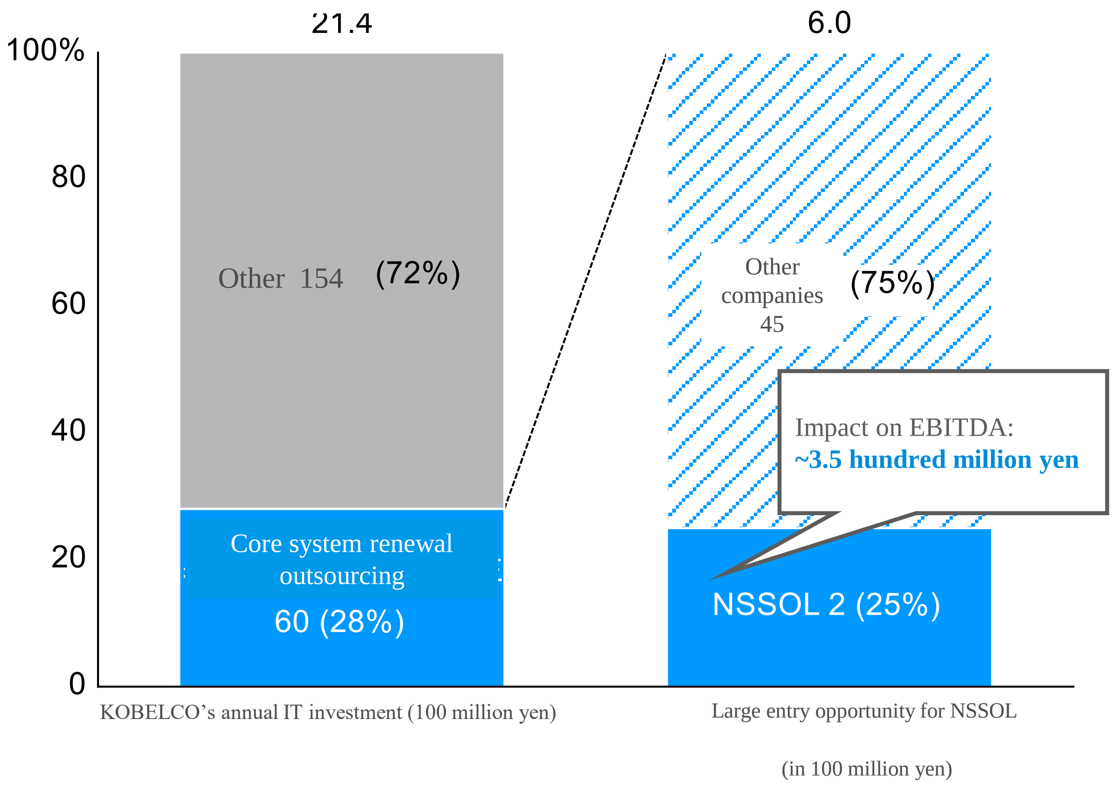
Note: KOBELCO's annual IT development investments are estimated to be 15 billion yen based on the medium-term business plan; Estimated ratio of IT development investments and Maintenance and operation is 7:3 (based on interviews with market participants); Breakdown of IT development investment is based on interviews with market participants; Core system renewal and other in-house/outsourcing ratio are based on interviews with market participants; Source: Company IR; interviews with market participants; reference document research

8 Development of Domestic Steel Manufacturer Customers | Through acceptance of outsource of core system renewal project from JFE/KOBELCO, financial impact approximately 4.7 billion yen of sales, and 1.1 billion yen (EBITDA basis) are expected

Impact on NSSOL's sales (in billion yen) by having **JFE Steel** as customer



Impact on NSSOL's sales (in billion yen) by having **KOBELCO** as customer



Development of domestic steel manufacturer customers, impacts worth 4.7 billion yen of sales and approximately 1.1 billion yen of EBITDA are expected (base case)

Source: Company IR; interviews with market participants; reference document research

8 Development of Domestic Steel Manufacturer Customers | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case			
Initial cost for 1st year	18.9 billion yen	Annual outsourcing investments for core system renewal among estimated IT development investments of JFE and KOBELCO, respectively	Estimation based on Company IR, and interviews with multiple experts
× NSSOL's winning percentage	25%	Assuming to become one of top 3-4 outsourcees serving as PM of core system renewal	Estimation based on interviews with multiple experts
× Expected gross margin rate	30%	General gross margin rate in major core system renewal projects in the steel industry	Same as above
− Sales expenses for development of new customers	0.35 billion yen	Ratio of sales expense required for development of new customers (including personnel expenses of sales personnel and sales support costs) to revenue is ~7.2%, i.e. double of company-wide average sales expense-to-revenue (~3.6%)	Estimation based on interviews with multiple experts
= Financial Impact (EBITDA)	**1.1 billion yen**		
Upside case			
Amount of competing steel manufacturer's core system outsourcing investment	18.9 billion yen	Same as above	Same as above
× NSSOL's winning percentage	50%	Assuming to become one of top 1-2 outsourcees serving as PM of core system renewal	Estimation based on interviews with multiple experts
× Expected gross margin rate	30%	Same as above	Same as above
− Sales expenses for development of new customers	0.68 billion yen	Same as above	Same as above
= Financial Impact (EBITDA)	**2.2 billion yen**		

Note: It is assumed that measures for the development of domestic steel manufacturer customers do not require the opening of new offices and that no additional office operation costs are accrued. NSSOL already has branches and offices adjacent to works of JFE Steel and KOBELCO, and there are office spaces also within the works (based on interviews with market participants) Source: Interviews with market participants

Development of Domestic Steel Manufacturer Customers | (Reference) Calculation methodology of initial costs required to implement the measures

Calculation Methodology		Basis	Source
Base case (initial costs)			
Engineer recruitment/training costs	**0.29 billion yen**		
= Mid-career personnel recruitment agent costs	0.13 billion yen	Required number of engineers (88) × percentage of mid-career engineers (used 51% which is the percentage of mid-career staff among consolidated recruited staff in FY23/3) × company-wide consolidated average engineer salary level (7,420,000 yen) × agent fees (~40% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＋ New graduates training costs	0.16 billion yen	Required number of engineers (88) × percentage of new graduate engineers (49% which is the percentage of new graduate staff among consolidated recruited staff in FY23/3) ×company-wide consolidated average engineer salary level (7,420,000 yen) × training costs (~50% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＋ Sales personnel recruitment costs	**0.03 billion yen**		
= Mid-career personnel recruitment agent costs	0.03 billion yen	Required number of sales personnel (23) × percentage of mid-career staff (51% which is the percentage of mid-career staff among consolidated recruited staff in FY23/3) ×company-wide consolidated average sales personnel salary level (7,450,000 yen) × agent fees (~40% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＝ Initial costs	**0.33 billion yen**		
Upside case (initial costs)			
Engineer recruitment and training costs	**0.57 billion yen**		
= Mid-career personnel recruitment agent costs	0.26 billion yen	Same as above. Calculated based on the required number of engineers (175)	
＋ New graduates training costs	0.32 billion yen	Same as above. Calculated based on the required number of engineers (175)	
＋ Sales personnel recruitment costs	**0.07 billion yen**		
= Mid-career personnel recruitment agent costs	0.07 billion yen	Same as above. Calculated based on the required number of sales personnel (46)	
＝ Initial costs	**0.7 billion yen**		

Source: Interviews with market participants

8 Development of Domestic Steel Manufacturer Customers | Minimal impact on the existing businesses with the parent company (Nippon Steel) is expected if NSSOL deepens its relationships with JFE and KOBELCO

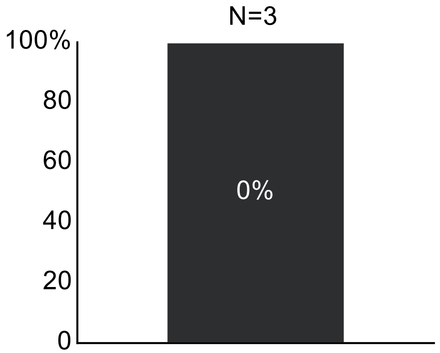
Business computers | **Process computers and their renewal** | **Infrastructure** | **Maintenance and operation**

If **NSSOL deepens its business relationships with JFE/KOBELCO,** what is **the percentage of business shares that may be transferred to other SIs** (due to information leakage risk, etc.) **(based on interviews with former employees of Nippon Steel)?**

Business computers

0%

Percentage of business transferred to other SIs



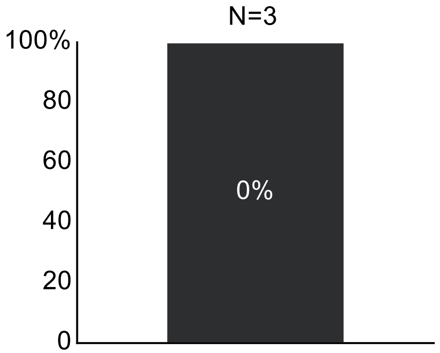
*"Among the steel-related services which Nippon Steel engages NSSOL, **we do not want exclusive system** that manage complex manufacturing process (rolling, etc.) **to be leaked to other companies. However, this risk may be mitigated by separating the divisions in charge of the projects within NSSOL, and as a result, Nippon Steel will also not be concerned**"*

Undisclosed

Process computers and their renewal

0%

Percentage of business transferred to other SIs



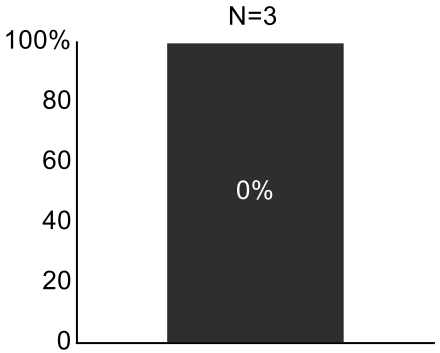
*"Since the technology used in process computers is for general purposes, **Nippon Steel is not concerned with information leakage even if NSSOL develops any competing customers**"*

Undisclosed

Infrastructure

0%

Percentage of business transferred to other SIs



*"Infrastructure deals with machinery itself such as servers and storages, and even if NSSOL becomes in charge of installation of infrastructure of other steel manufacturers, **I believe Nippon Steel will have no concerns**"*

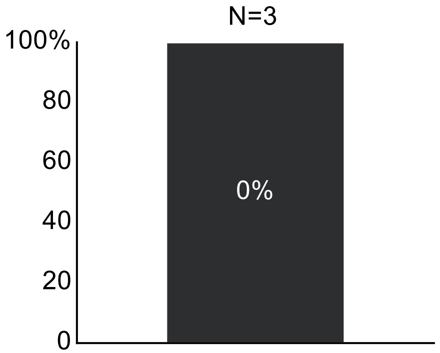
Nippon Steel, former Head of Machinery & Materials

Undisclosed

Maintenance and operation

0%

Percentage of business transferred to other SIs



*"Even if NSSOL accepts outsource of projects from competitors, Nippon Steel **is very unlikely to engage** any entities other than NSSOL for system maintenance and operation"*

Undisclosed

Source: Interviews with market participants

8 Development of Domestic Steel Manufacturer Customers | It is very common to trade with various major companies in the same industry given the status of competing SIs in the steel industry and NSSOL in other industry

TIS, the competing SI, already **transacts with both major steel manufacturers, JFE and KOBELCO**

Steel industry

JFE

KOBELCO

TIS
TIS INTEC Group

TIS is in charge of core system development projects of various steel manufacturers

- JFE：**Core system renewal at Sendai Works**
- KOBELCO: **Development and installation of standard accounting system at entities in China**

"TIS simultaneously transacts with competing steel manufacturers (i.e. JFE Steel and KOBELCO). NSSOL ***should also be able to accept projects of competing customers*** *by clearly separating the project teams"*

Undisclosed

In non-steel industries such as banking, NSSOL also transacts with multiple competing industry players

City Banks

MIZUHO

りそな銀行
RESONA

MUFG

NS Solutions

"NSSOL has multiple major companies within the same industry as its customers. Stringent regulations are set concerning how to handle internal data for each project, and projects are proposed after inspecting leakage risk and other risks. ***Therefore, it is realistic also in the steel industry for NSSOL to conduct projects with companies that compete with Nippon Steel****"*

Undisclosed

Source: Interviews with market participants; Reference document research

8 Development of Domestic Steel Manufacturer Customers | Approach for examining and implementing measures

Understanding target customer's **current status of core system renewal** and **investment plan**	Target development project's **priority and account plan**	Consideration and preparation of **internal team system** (sales personnel and engineers)	**Proposals** for development of new projects

- Conduct interviews with JFE and KOBELCO respectively concerning **the status of core system renewals** of works **and future investment plans**
- With regards to current or future core system renewal projects, to obtain better understanding of **customer's needs and NSSOL's business opportunities**

- With regards to the target projects that are chosen based on the descriptions on the left, NSSOL's priority will be determined from the viewpoint of **details of the projects, contract value, anticipated profitability, and timeline**
- Prepare an **account plan** of each customer based on the above (target project's contract value, profitability, etc.)

- Based on internal capacity, **allotment of human resources** (mainly sales personnel and engineers) for target projects is considered
- In the above case, additional allotment will also be considered to achieve the account plan including cross-divisional **personnel transfer or new recruitment**

- Start initiatives from management to work front for **multi-layered proposals and relationship building** (including discussions of initiative policies by management)

⑨ Development of Overseas Steel Manufacturer Customers

9 Development of Overseas Steel Manufacturer Customers

Current issues

- At present, NSSOL's main customers are Japanese companies. Despite of its deep industrial expertise, **business transactions with global steel manufacturers are limited.**
- However, global steel manufacturers are also working on their core system renewals just as domestic manufacturers, and **there is a demand to use NSSOL's know-how.** Potentially obtainable **opportunities for major projects are being lost.**
- Many global manufacturers seek foreign-owned SIs' know-how on efficient production control system, **and there is significant potential for expanding business opportunities, primarily in core system renewal projects.**
- Since the development of overseas steel manufacturer customers involves inherent uncertainty in capacity building, such as the development of branch systems and the recruitment of human resources, as well as the feasibility of acquiring transaction share, **the evaluation of financial impact is solely based on upside cases.**

Proposed Direction

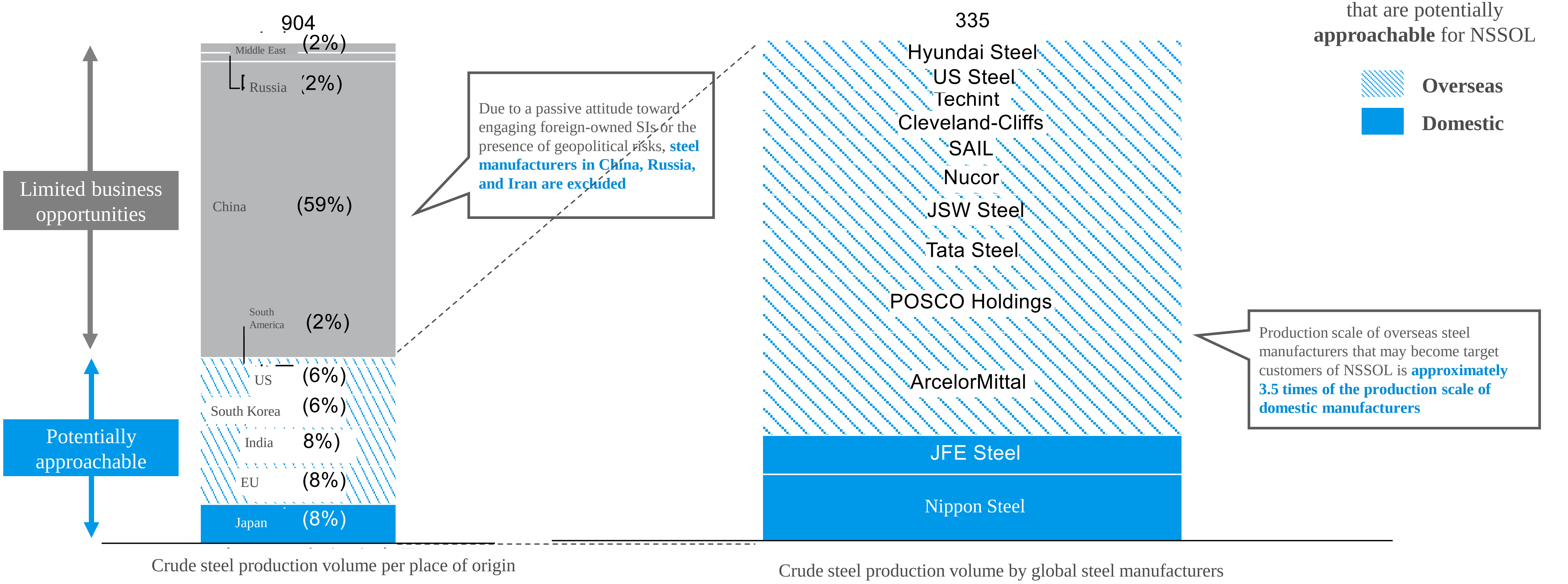
- Diversified relationships with global steel manufacturers. Especially, the targets are **core system renewals of manufacturers in South Korea, India, and the US that are open to conducting business with foreign-owned Sis.**
  - Among the top 30 global major steel manufacturers in terms of production volume, the business scale of South Korean, Indian, and the US steel manufacturers is approximately 2.5 times larger than the top 2 domestic steel manufacturers (Nippon Steel and JFE).
- In order to achieve the above, **acquiring and educating human resources** are necessary to ensure the capacity and capability to accept projects from global steel manufacturers.

9 Development of Overseas Steel Manufacturer Customers | Global steel manufacturers in India, South Korea, EU, and the US that are open to engaging foreign-owned SIs are potentially approachable

Crude steel production volume by country
国別粗鋼生産量
(2022, in million tons, top 30)
(2022年、百万トン、上位30社)

Crude steel production volume by global steel manufacturers

(2022, in million tons, **excluding China, Russia and the Middle East** among the top 30)



Source: World Steel Association; interviews with market participants

9 Development of Overseas Steel Manufacturer Customers | Business opportunities with manufacturers in China, Russia, and Iran are limited since they are generally passive toward foreign-owned SIs and there are geopolitical risks

Limited business opportunities | Potentially approachable

	China	Russia	Iran
Overview	• Chinese steel manufacturers have strong ties with the government, **and they are passive in engaging foreign-owned SIs for fear of information leakage risk.** • Generally, it is outsourced to local SI or **IT functions are brought in-house through acquisition.**	• Especially since the commencement of war in Ukraine, **transactions with foreign-owned SIs are very limited.**	• IMIDRO, a major steel manufacturer in the Middle East, is an Iranian state-owned company. **IT development is generally conducted in-house or by engaging local SIs.**
Major steel manufacturers (Top 30)	中信泰富 CITIC PACIFIC; ANSTEEL; HBIS 河钢集团 HBIS GROUP; BAOWU; 沙钢集团 SHAGANG GROUP	NLMK	IMIDRO IRANIAN MINES AND MINING INDUSTRIES DEVELOPMENT AND RENOVATION ORGANIZATION
Comments	*"Chinese steel manufacturers have strong ties with the government, and are especially cautious of foreign SI. Thus, **entry is difficult**"* Undisclosed *"In the first place, **overseas SIs are basically not engaged**"* Undisclosed *"When system development is outsourced, Chinese domestic SI may be engaged, **but even major companies such as IBM hardly ever use any overseas SI**"* Undisclosed	*"NLMK and other Russian steel manufacturers **currently do not trade with SIs other than Russian SIs** as a result of war with Ukraine"* Undisclosed	*"Details on IMIDRO are not discussed much within the industry. It seems that it is conducting its business on a highly confidential basis. Since it is an Iranian state-owned company, **it is extremely difficult for external SI to enter into business**"* Undisclosed

Source: World Steel Association; Interviews with market participants; Reference document research

9 Development of Overseas Steel Manufacturer Customers | On the other hand, manufacturers in EU, South Korea, India, and the US have a high demand for foreign-owned SIs who are experts in the steel industry driven by demand for core system investments

Limited business opportunities | Potentially approachable

	ArcelorMittal (EU)	POSCO (South Korea)	TATA STEEL (India)	NUCOR (US)
NSSOL's entry opportunity	**Mid** ArcelorMittal, the largest EU steel manufacturer, has a partnership with Infosys. There are potentially more opportunities with **voestalpine Group and other major EU steel manufacturers**	**High**	**Mid-High** TATA, an Indian major steel manufacturer, has TSC as its Group SI. There are potentially more opportunities with **other Indian steel manufacturers such as JSW/SAIL**	**High**
Comments	*"We engage Infosys, an Indian SI, to support our core system renewal, but **there may be a demand for SI such as NSSOL** among other EU steel manufacturers"* Undisclosed	*"Core system renewals have not been conducted as of date. Since local SIs are not equipped with both expertise in the steel industry and core system renewal capacity, **we are proactively searching for outsourcees**"* Undisclosed *"HYUNDAI STEEL and other South Korean manufacturers and we are **aware of the necessity of core system renewals**"* Undisclosed	*"(In the case of TATA)Most core system renewals are executed in-house by Group TATA Consulting Services. **7 or 8 other major Indian steel manufacturers are outsourcing IT system development to foreign SIs, so there may be a chance for NSSOL's entry**"* Undisclosed	*"Nucor is proactively promoting core system renewals, but there are only a few SIs in the US that are highly expertized in the steel industry. **There is a definite demand for SI such as NSSOL which is equipped with both expertise in the steel industry and system development capability**"* Undisclosed

Source: Interviews with market participants; Reference document research

9 Development of Overseas Steel Manufacturer Customers | (Reference) In the case of ArcelorMittal, a major EU steel manufacturer, it transacts with various foreign-owned SIs including Japanese NTT Data

Limited business opportunities | Potentially approachable

Japanese SI

Other foreign-owned SI

ArcelorMittal

NTT DATA

Support of transfer from SAP PI to SAP PO for ArcelorMittal Europe's business system

Capgemini

Development of works waste energy and reuse model jointly with the French government

Infosys

In 2021, a long-term strategic alliance for **IT BPM service and business application development** was announced

accenture

In 2022, it offered support service for company-wide **cloud-based staffing management system** (Oracle Cloud HCM Suite)

Source: Reference document research

9 Development of Overseas Steel Manufacturer Customers | However, there are comments from manufacturers other than those that have historically cooperated with Nippon Steel that "executing transactions with NSSOL is difficult given the relationship between NSSOL and the parent company"

Limited business opportunities | **Potentially approachable**

Global steel manufacturers that are concerned with the relationship between NSSOL and its **parent company**

Global steel manufacturers that have historically cooperated with Nippon Steel

ArcelorMittal (EU)

*"If the parent company of a SI is another steel manufacturer, **we do not outsource the service to it regardless of region**. In order to avoid any leakage of confidential information to competitors, (ArcelorMittal) engages Infosys, which is not from the steel industry"*

Undisclosed

*"Since other EU steel manufacturers are also concerned with the leakage of data to competitors, **we outsource system development projects to SI not from the steel industry**"*

Undisclosed

POSCO (Korea)

*"Due to concerns regarding internal data leakage, **we do not engage any SI affiliated with the competing steel manufacturers.** This applies even more to Nippon Steel, which is a competitor in the same Asia region"*

Undisclosed

*"If **production plan data or any other confidential data is leaked**, competitors may use it to offer more advantageous production plan and pricing"*

Undisclosed

TATA STEEL (India)

*"In 2011, Nippon Steel and TATA formed a JV and established an automobile equipment manufacturing plant in India. The transaction is not deemed as a risk since both companies have built a strong relationship and issues related to information leakage never occurred. **Projects are not refused because of the relationship with the parent company**"*

Undisclosed

*"If it is possible to be independent from the parent company, NSSOL will presumably be able to act more freely. **Perhaps it may also be able to obtain development projects from other Indian manufacturers**"*

Undisclosed

NUCOR (USA)

*"We had established an automotive steel sheet plant in Mexico jointly with JFE, and we have a long-term relationship with Japanese steel manufacturers. Therefore, **The fact that NSSOL is an affiliate of Nippon Steel will not cause any negative effects**"*

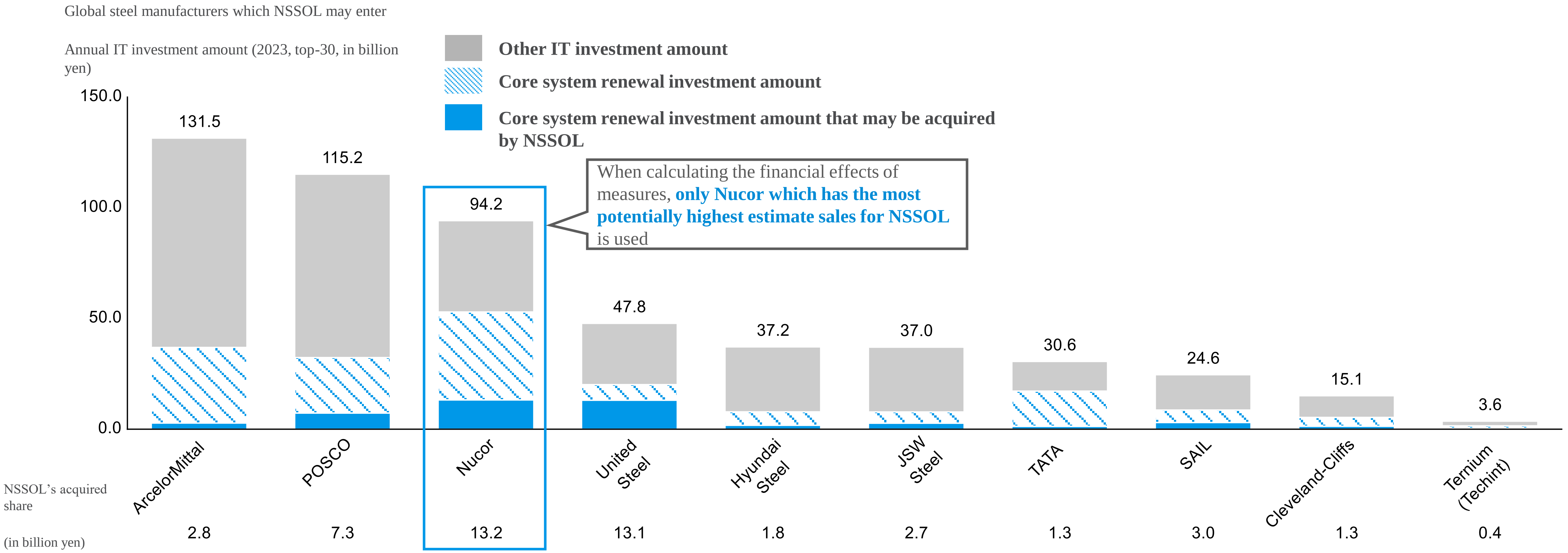
Undisclosed

*"Since other American steel manufacturers also have a long-term relationship with Japan, **there is little resistance to engaging NSSOL** (subsidiary of Nippon Steel)"*

Undisclosed

Source: Interviews with market participants

9 Development of Overseas Steel Manufacturer Customers | NSSOL's anticipated acquired share in IT investments of steel manufacturers to which NSSOL may approach is 20-25%. In the case of Nucor, financial effects of measures is approximately 2.2 billion yen (EBITDA basis)



If 25% of the transaction share is acquired by being in charge of Nucor's core system renewal, the amount of impact is 2.2 billion yen (EBITDA basis)

Note: Each steel manufacturer's core renewal investment ratio, of which NSSOL's winning percentage is based on interviews with market participants
Source: OMDIA; interviews with market participants

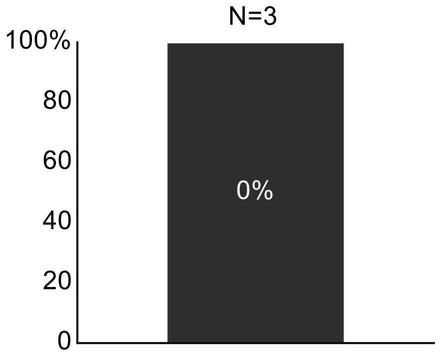
9 Development of Overseas Steel Manufacturer Customers | NSSOL's deepening transaction relationships with overseas major steel manufacturers will hardly affect the existing businesses with the parent company (Nippon Steel)

If **NSSOL deepens its business relationships with Nucor/Arcelor Mittal/US Steel and other overseas major steel manufacturers**, what is the **percentage of business shares that may be transferred to other SIs** (due to information leakage risk, etc.) **(based on interviews with former Nippon Steel employees)**

Business computers

0%

Percentage of business transferred to other SIs



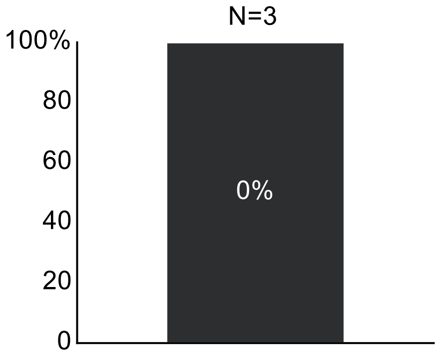
*"In the area of business computers, there is a risk that Nippon Steel data will leak. However, as in the case of domestic competing steel manufacturers, **Nippon Steel will not be concerned as long as NSSOL executes a stringent NDA and strictly separates the divisions in charge of projects** also for transactions with overseas steel manufacturers"*

Undisclosed

Process computers and their renewal

0%

Percentage of business transferred to other SIs



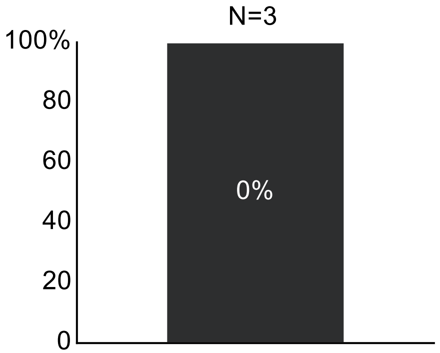
*"As with the case of domestic manufacturers, there is little risk of leakage of Nippon Steel's information due to process computers, so even if NSSOL transacts with overseas steel manufacturers, **this will have no impact on Nippon Steel**"*

Undisclosed

Infrastructure

0%

Percentage of business transferred to other SIs



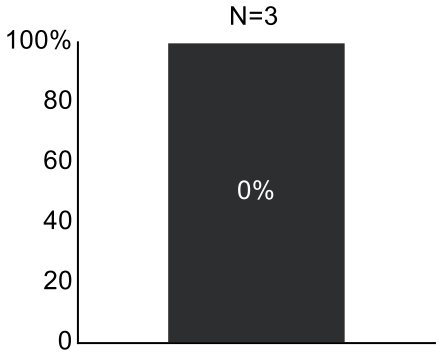
*"Since infrastructure deals with servers and other machinery and does not include Nippon Steel's information, there is hardly any information leakage risk. Thus, even if NSSOL conducts overseas transactions also in this area, **the transaction share with Nippon Steel is unlikely to decrease**"*

Undisclosed

Maintenance and operation

0%

Percentage of business transferred to other SIs



*"Even if NSSOL accepts overseas competitor projects, **it is technically difficult to transfer** the maintenance and operation of works system **to other SI** in the first place"*

Undisclosed

Source: Interviews with market participants

9 Development of Overseas Steel Manufacturer Customers | Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Upside case (Nucor only)			
Amount of core system outsourcing investment of competing steel manufacturers	52.9 billion yen	Annual outsourcing investments of core system renewal within the amount of IT development investments only for Nucor, which has the largest potential estimated sales for NSSOL	OMDIA (IT investment amount); Estimation based on interviews with multiple experts (core system renewal investment ratio)
× NSSOL's winning percentage	25%	Assuming to become one of top 3-4 outsources serving as PM of core system renewal	Estimation based on interviews with multiple experts
× Expected gross margin rate	30%	General gross margin rate in major core system renewal projects in the steel industry	Estimation based on interviews with multiple experts
− Sales expenses for development of new overseas customers	1.4 billion yen	Ratio of sales expense required for development of new overseas customers (including personnel expenses of sales personnel and sales support costs) to revenue is ~11%, i.e. triple of company-wide average sales expense-to-revenue (~3.6%)	Estimation based on interviews with multiple experts
− Overseas office operation costs	0.4 billion yen	Operation cost required for overseas business office (rent, utility expenses, general administration personnel costs) is defined as ~3% of the relevant office's sales	Estimation based on interviews with multiple experts
= Financial Impact (EBITDA)	**2.2 billion yen**		

9 Development of Overseas Steel Manufacturer Customers | (Reference) Initial costs required for implementation of measures

Logic used to calculate the financial effects of measures		Basis	Source
Upside case (initial costs)			
Engineer recruitment and training costs	**0.82 billion yen**		
= Mid-career personnel recruitment agent costs	0.37 billion yen	Required number of engineers (123) × percentage of mid-career engineers (51% which is the percentage of mid-career staff among consolidated recruited staff in FY23/3) × overseas engineer salary level (14,830,000 yen: **double** of company-wide consolidated average engineer salary) × agent fees (~40% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＋ New graduates training costs	0.45 billion yen	Required number of engineers (123) × percentage of new graduate engineers (49% which is the percentage of new graduate staff among consolidated recruited staff in FY23/3) × company-wide consolidated average engineer salary level (14,830,000 yen: **double** of company-wide consolidated average engineer salary) × training costs(~50% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＋ **Sales personnel recruitment costs**	**0.14 billion yen**		
= Mid-career personnel recruitment agent costs	0.14 billion yen	Required number of sales personnel (47) × percentage of mid-career staff (51% which is the percentage of mid-career staff among consolidated recruited staff in FY23/3) ×company-wide consolidated average sales personnel salary level (14,890,000 yen: **double** of company-wide consolidated average sales personnel salary) × agent fees (~40% of annual income as based on interviews with experts)	Company IR; estimation based on interviews with multiple experts
＋ **Overseas office establishment costs**	**0.13 billion yen**		Calculation
= Average opening cost per *tsubo*	0.2 million yen		Company IR; estimation based on interviews with multiple experts
× Number of transferred personnel	170	Aggregate of engineers and sales personnel required for overseas sales (123 engineers and 47 sales personnel)	Calculation
×Required space (*tsubo*) per person	3.7 *tsubo*	Used *tsubo* per NSSOL head office employee as a reference	Calculation
＝Total area of head office	13,211 *tsubo*	Aggregate of head office (Toranomon Hills) (6,300 *tsubo*) and Shinkawa (6,911 *tsubo*）	Reference document research
÷Number of NSSOL's non-consolidated head office employees	3,563	Total number of employees at the head office	Company IR
＝ **Initial costs**	**1.09 billion yen**		

9 Development of Overseas Steel Manufacturer Customers | Approach for examining and implementing measures

Current status of core system renewal ・Understanding **investment plan** and **demand for foreign-owned SI**	Target development project's **priority and account plan**	Consideration and preparation of **internal team system (including local staff)**	**Proposals** for development of new projects
• Conduct interviews in approachable markets (US, EU, South Korea, and India) concerning **core system investment plan** and **demand for foreign-owned SI such as NSSOL** • Based on the above, select global steel manufacturers to preferentially approach from the perspective of **business attractiveness as a SI x NSSOL's winning percentage**	• To interview the candidates selected based on the description on the left regarding specifically anticipated **details of projects, contract value, anticipated profitability, and timeline**. NSSOL's priority will be determined based on the above • Prepare an **account plan** of each customer based on the above (target project's contract value, profitability, etc.)	• Select from NSSOL overseas offices **any sales personnel and engineer candidates who can switch to be in charge of overseas steel manufacturer customers** • In addition, additional recruitment (mainly local staff) is inevitable. **Personnel requirements and the required number and anticipated costs** of local human resources (sales personnel and engineers) for the development of overseas customers will be considered • Commence **recruitment plan and advance preparation**（to contact local agents)	• Start initiatives from management to work front for **multi-layered proposals and relationship building** (including discussions of initiative policies by management)

Section 2：Liquidating Non-Core Financial Assets

Section 2: Liquidating Non-Core Financial Assets

- **NSSOL has excess non-business assets, such as cash deposits with Nippon Steel and "strategic" shares held other than for investment return.**
- **There is also room to rationalize working capital, business asset.**
- **As described below, liquidating the non-core financial assets will yield proceeds worth at least 175.2 billion yen, and rationalization of working capital will free up an additional 3.4 billion yen.**

Optimization of non-core assets: Proceeds of 175.2 billion yen

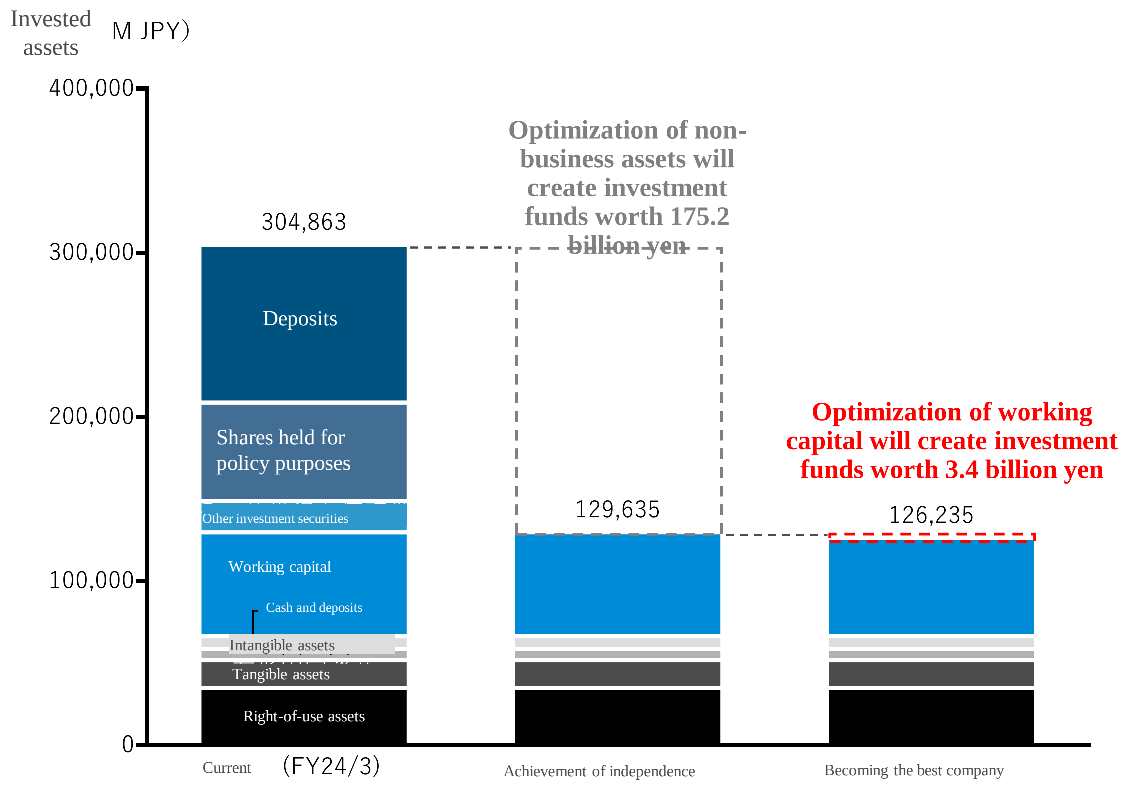
- **Deposits: Proceeds of 96.1 billion yen**
  - Full amount is liquidated by assuming that the deposits may be promptly liquidated based on interviews with NSSOL's IR
- **Shares held for policy purposes: Proceeds of 60 billion yen**
  - All shares are disposed of, since no business impact is expected
- **Other securities: Proceeds of 19.1 billion yen**
  - All investments with investment returns below the hurdle rate are disposed of

Optimization of business assets: 3.4 billion yen in additional funds

- **Working capital: 3.4 billion yen in additional funds**
  - Assuming that CCC will improve to reach the average levels of SCSK, TIS, BIPROGY
  - If it improves to the highest level in the industry, additional investment funds can be created

By liquidating non-core financial assets and rationalizing working capital, NSSOL can create funds available for investment worth approximately 179 billion yen.

Change in invested assets



Assumptions of tentative calculation

- **Liquidation of non-core assets: Proceeds of 175.2 billion yen**
  - **Deposits: Proceeds of 96.1 billion yen** A
    - — Full amount is liquidated assuming that the deposits may be promptly liquidated based on interviews with NSSOL's IR
  - **Shares held for policy purposes[1]: Proceeds of 60 billion yen** B
    - — All share are disposed of, assuming that there is no business impact
  - **Other securities: Proceeds of 19.1 billion yen** C
    - — All are disposed of, assuming that investment returns are below the hurdle rate

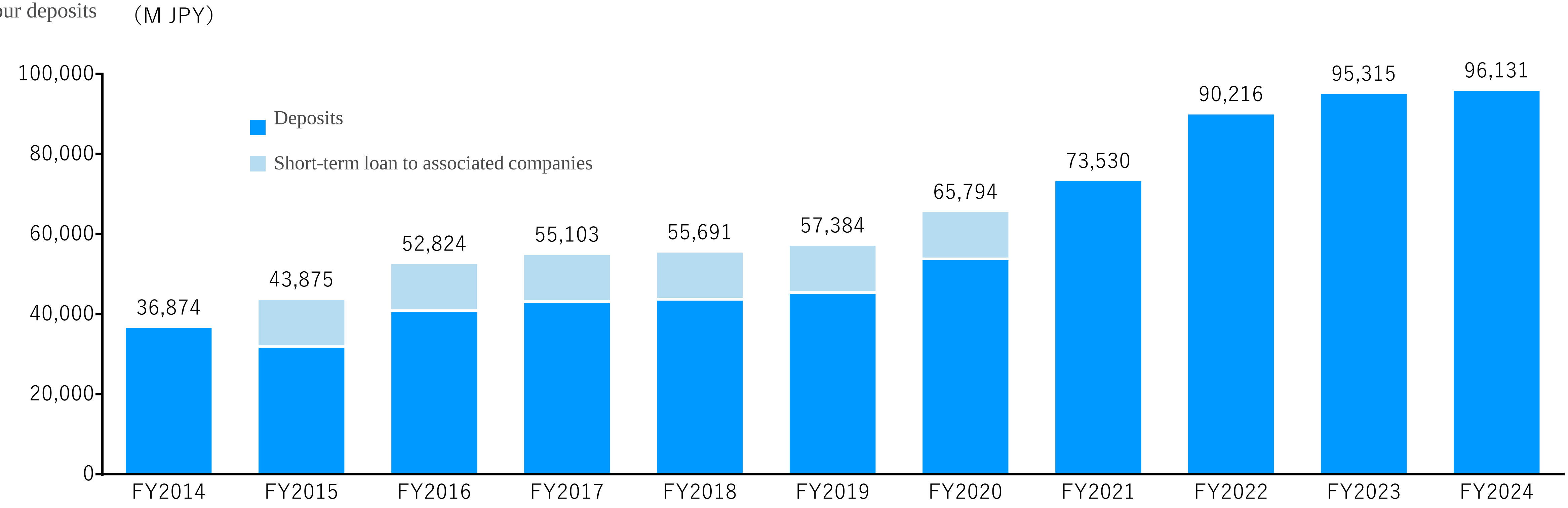
- **Rationalization of working capital: 3.4 billion yen in additional funds for investment**
  - **Working capital[2]: 3.4 billion yen in additional funds for investment** D
    - — Assuming that CCC will improve to reach the average levels of SCSK,TIS, BIPROGY
    - — If it improves to the highest level in the industry, additional investment funds can be created

Note: [1] Those defined as specified investment shares in the annual securities report. [2] inventory assets＋operating receivables＋contract assets－operating payables－contract liability
Source: Annual securities report

A NSSOL deposits 40% of its net assets (approximately 96 billion yen) with Nippon Steel

The deposits made to Nippon Steel have been increasing each year, and currently, 96.1 billion yen (40% of its net assets) are recorded as deposits

Your deposits



Net assets ratio	36.5%	45.0%	50.3%	43.9%	39.7%	39.3%	42.3%	39.5%	44.1%	45.9%	39.3%

Source: Annual securities report

A Interest rate of NSSOL's deposits is 0.2%, which is clearly below the cost of capital and is substantially damaging to corporate value

Annual securities report for FY 2024/3

Consolidated fiscal year (from April 1, 2023 to March 31, 2024)

(in million yen)

Type of company	Company name	Relationship with related parties	Transaction amount	Outstanding balance
Parent company	Nippon Steel Corporation	Sales of products, etc.	62,509	15,274
		Deposit and lending of funds	(Fund deposit) **80,100** (Reversal of funds) **79,500** (Interest income) **215**	96,131
Parent company's subsidiary	Nippon Steel Texeng Co., Ltd.	Intended acquirer of shares	8,143	8,143

Interest income from deposits (FY2024/3)		Average deposit balance during the period (FY2024/3)		Interest rate of deposits
215 million yen	÷	95,723 million yen	=	0.2%

NSSOL should immediately liquidate the deposits to the parent company which are far below the cost of capital

Source: Annual securities report

(For reference) Investing with a return on investment capital ("ROIC") below the cost of capital damages corporate value.

- The capital raised by a company incurs a cost of capital = the rate of return that a funder expects on its investment in the company.
- Based on the DCF formula, corporate value is defined by $\boldsymbol{IC} + \frac{\boldsymbol{IC}*(\boldsymbol{ROIC}-\text{cost of capital})}{\text{cost of capital}}$
- Therefore, **investing in a business that produces only ROIC below its cost of capital is literally damaging corporate value.**

Formula for calculating corporate value using the DCF method[1]

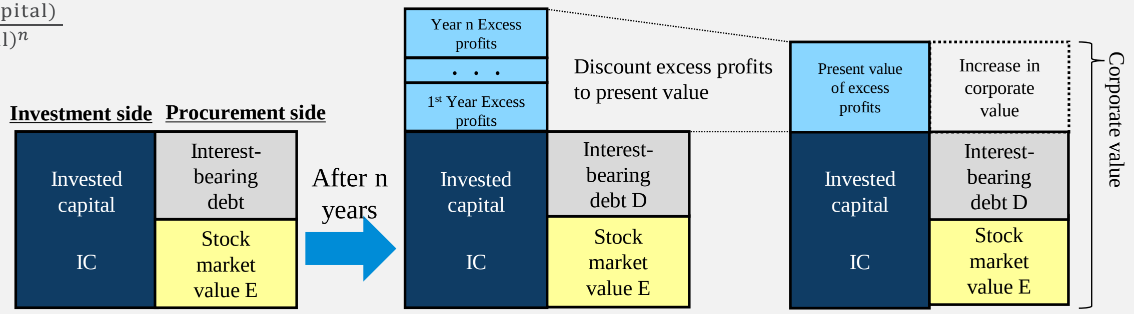
$$\textbf{Corporate Value} = E + D + \frac{IC*(ROIC-\text{cost of capital})}{1+\text{cost of capital}} + \frac{IC*(ROIC-\text{cost of capital})}{(1+\text{cost of capital})^2} + \cdots + \frac{IC*(ROIC-\text{cost of capital})}{(1+\text{cost of capital})^n}$$

$$= IC + \frac{IC*(ROIC-\text{cost of capital})}{1+\text{cost of capital}} * \frac{1}{1-\frac{1}{1+\text{cost of capital}}} = IC + \frac{IC*(ROIC-\text{cost of capital})}{1+\text{cost of capital}} * \frac{1+\text{cost of capital}}{\text{cost of capital}}$$

$$= \boldsymbol{IC} + \frac{\boldsymbol{IC} * (\boldsymbol{ROIC} - \text{cost of capital})}{\text{cost of capital}}$$

ROIC＞Cost of Capital: Corporate Value Creation

ROIC＜Cost of Capital: Corporate Value Damage



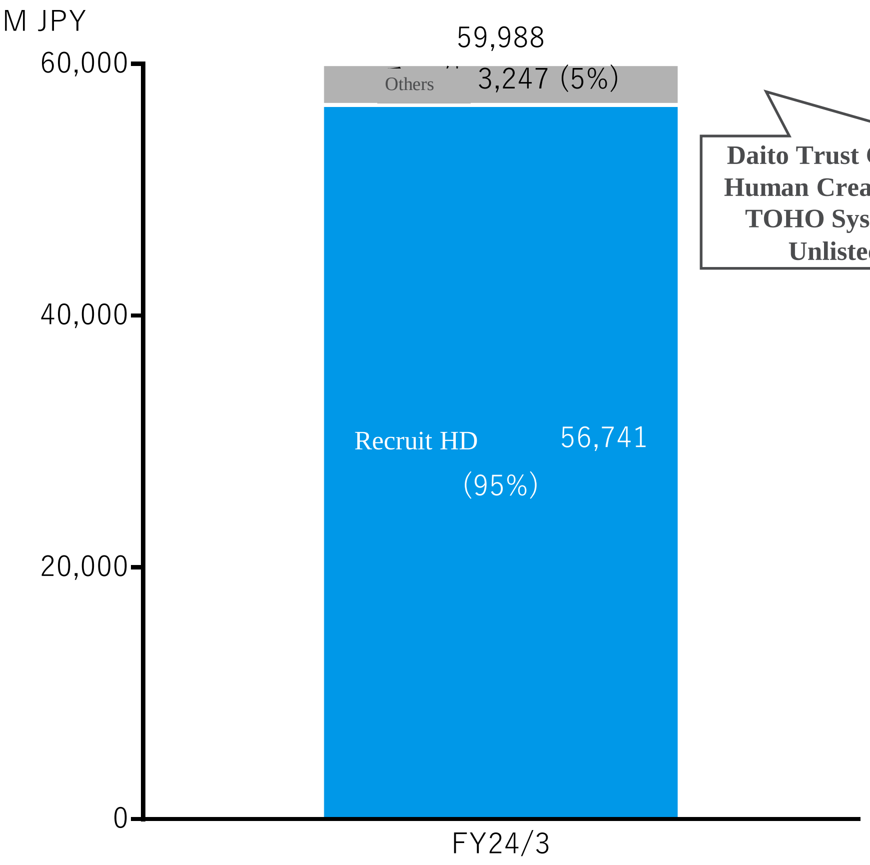
ROIC < cost of capital investments are value-destructive

*"In other words, growth with value-creating (ROIC > WACC) investments will increase corporate value, **while growth with value-destroying (ROIC < WACC) investments will decrease corporate value**."* Opinion of the 3rd Business Restructuring Study Group, sponsored by METI

Note: [1] Calculation formula based on the assumption that the growth rate is 0, excess profits are fully used for dividends, interest expenses, etc., and excess profits are always constant.

B NSSOL holds approximately 60 billion yen in strategic shares held other than for investment return, mainly shares of Recruit Holdings Co., Ltd.

Composition of shares held for policy purposes (specified investment shares)（FY24/3)



Daito Trust Construction: 520 million yen
Human Creation Holdings:190 million yen
TOHO System Science:130 million yen
Unlisted shares: 2.4 billion yen

Ratio to net assets 25%

Purpose of holding shares（FY24/3)

Specified investment shares

Corporate Name	Current fiscal year: Number of shares (in shares) / Amount on the balance sheet (in million yen)	Previous fiscal year: Number of shares (in shares) / Amount on the balance sheet (in million yen)	Purpose of holding, quantitative effect of holding, and reason for increase in number of shares	Whether or not we hold the relevant shares
Recruit Holdings Co., Ltd	8,460,000 56,741	9,910,000 36,171	The said company is a core customer in the platform business, which is our key area of focus, and we hold shares in the said company with the aim of maintaining and/or strengthening our business relationship. It is difficult to state the quantitative effect of holding the shares because it includes our business secrets such as sales revenue. The rationale for holding the shares is comprehensively verified based on business results, such as that the expansion of business through the strengthening of relationships with investee companies is being achieved through the maintenance and/or expansion of annual sales revenue and order volume using indicators such as annual sales revenue for the group of the said company, the economic rationality of transactions comparing the benefits of ownership (dividends received and profits from business transactions) with the cost of capital of our company, and the positioning of investee companies in our medium- to long-term business strategy.	No
Daito Trust Construction Co., Ltd.	30,000 523	30,000 395	We provide the said company with our cloud services, and we hold shares in the company with the aim of maintaining and/or strengthening our business relationship. It is difficult to state the quantitative effect of holding the shares because it includes our business secrets such as sales revenue. The rationale for holding the shares is comprehensively verified based on business results, such as that the expansion of business through the strengthening of relationships with investee companies is being achieved through the maintenance and/or expansion of annual sales revenue and order volume using indicators such as annual sales revenue for the group of the said company, the economic rationality of transactions comparing the benefits of ownership (dividends received and profits from business transactions) with the cost of capital of our company, and the positioning of investee companies in our medium- to long-term business strategy.	No

Corporate Name	Current fiscal year: Number of shares (in shares) / Amount on the balance sheet (in million yen)	Previous fiscal year: Number of shares (in shares) / Amount on the balance sheet (in million yen)	Purpose of holding, quantitative effect of holding, and reason for increase in number of shares	Whether or not we hold the relevant shares
Human Creation Holdings inc.	78,748 188	78,748 162	The said company is an important partner that possesses the DX and system development personnel necessary for the promotion of our business. We have concluded a capital and business alliance agreement and hold shares in the said company with the aim of maintaining and/or strengthening our business relationship. It is difficult to state the quantitative effect of holding the shares because it includes our business secrets such as order volume. The rationale for holding the shares is comprehensively verified based on business results, such as that the expansion of business through the strengthening of relationships with investee companies is being achieved through the maintenance and/or expansion of annual sales and order volume using indicators such as order volume revenue for the group of the said company, the economic rationality of transactions comparing the benefits of ownership (dividends received and profits from business transactions) with the cost of capital of our company, and the positioning of investee companies in our medium- to long-term business strategy.	No
TOHO System Science co., Ltd.	109,000 134	- -	The said company is an important partner that possesses the DX and system development personnel necessary for the promotion of our business. We have concluded a capital and business alliance agreement and hold shares in the said company with the aim of maintaining and/or strengthening our business relationship. It is difficult to state the quantitative effect of holding the shares because it includes our business secrets such as order volume. The rationale for holding the shares is comprehensively verified based on business results, such as that the expansion of business through the strengthening of relationships with investee companies is being achieved through the maintenance and/or expansion of annual sales and order volume using indicators such as order volume revenue for the said company and the positioning of investee companies in our medium- to long-term business strategy.	No

All of these are shares held for strategic purposes for the purpose of maintaining business relationships, and

The quantitative benefit of holding the shares is not explained.

Source: Annual Securities Report

B These strategic shares should be sold unless the rationale for holding them is objectively and transparently established.

Strategic Shares damages capital efficiency, and must be eliminated.

*"(Corporate Management Reform: Promotion of 'Value-Creating Management') In particular, the cash holdings, **shares held for policy purposes**, and high levels of retained earnings **that are pointed out as characteristic of Japanese companies, deteriorate capital efficiency. Therefore, efforts will be made to assess and address these situations.**"*

Ministry of Economy, Trade and Industry

Material 5

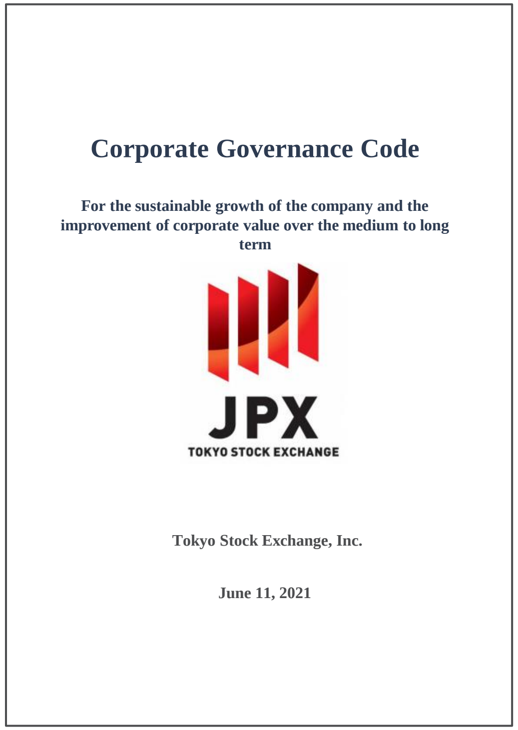
Creating a Group of Companies that Can Win in Global Competition ②

Ministry of Economy, Trade and Industry, Policy Bureau

April 2022

Unless the rationale for holding the shares is objectively and transparently established, listed companies should not hold strategic shares.

*"When a listed company holds listed shares as shares held for policy purposes, [omitted] each year, the board of directors **should specifically and carefully examine whether the purpose of holding each share held for policy purposes is appropriate, whether the benefits and risks associated with holding the shares are commensurate with the cost of capital, and verify the appropriateness of holding the shares, while also disclosing the content of such verification."***



Corporate Governance Code

For the sustainable growth of the company and the improvement of corporate value over the medium to long term

Tokyo Stock Exchange, Inc.

June 11, 2021

Source: Creating a Group of Companies that Can Win in Global Competition ② by Ministry of Economy, Trade and Industry, Policy Bureau; Tokyo Stock Exchange, Corporate Governance Code

NSSOL's strategic shares are not contributing to corporate value.

B

Strategic holdings do not influence Recruit HD's business decisions


RECRUIT

Annual Securities Report

(Report pursuant to Article 24, Paragraph 1 of the Financial Instruments and Exchange Law)

Business Period (63rd): From: April 1 2022 through March 31 2023

Recruit Holdings Co., Ltd

E07801

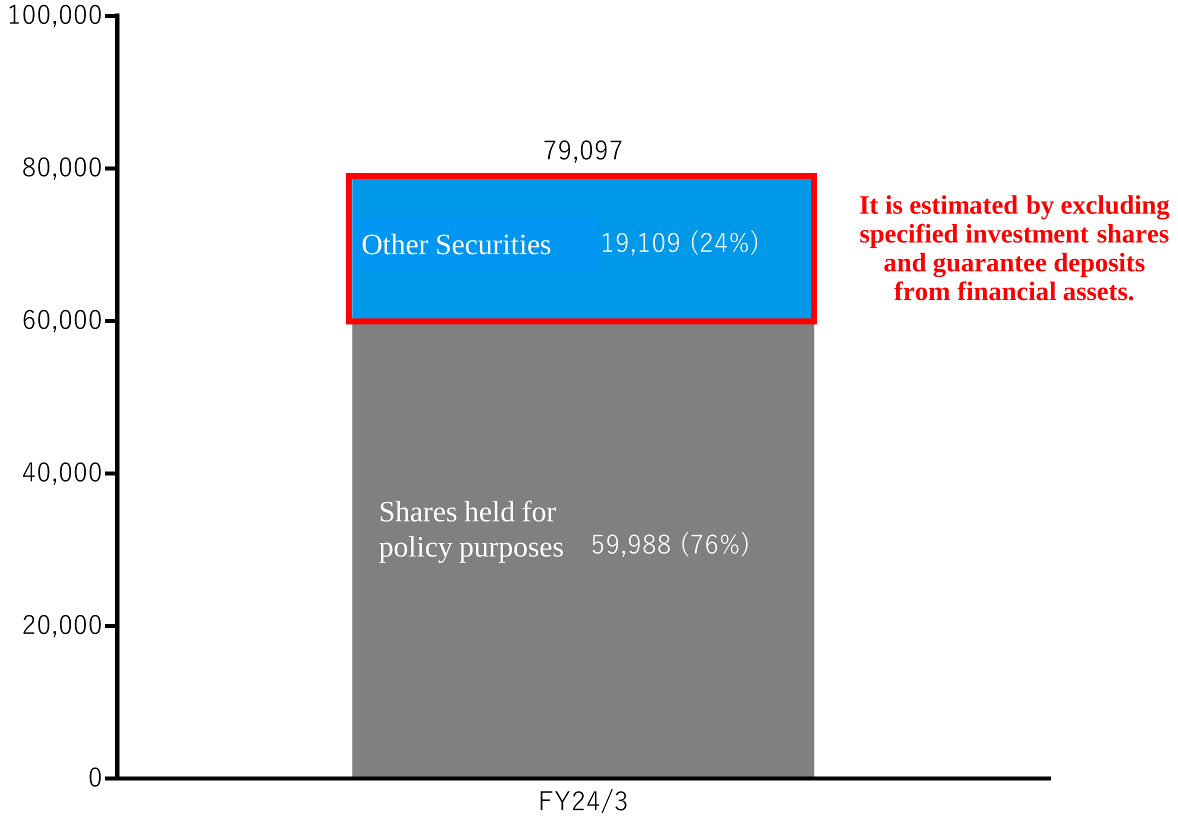
"*When a company that holds our shares as shares held for policy purposes expresses an intention to sell those shares,* we *will not take any action to prevent the sale of shares such as by suggesting a reduction in transactions.*"

"*In addition, we do not engage in transactions that harm the common interests of the company or its shareholders, such as continuing transactions with policy shareholders without fully verifying the economic rationality of the transactions.*"

C Shares held for investment purposes worth 19 billion yen should be liquidated unless returns exceed appropriate hurdle rates.

In addition to the strategic shares, NSSOL holds investment securities worth approximately 19 billion yen.

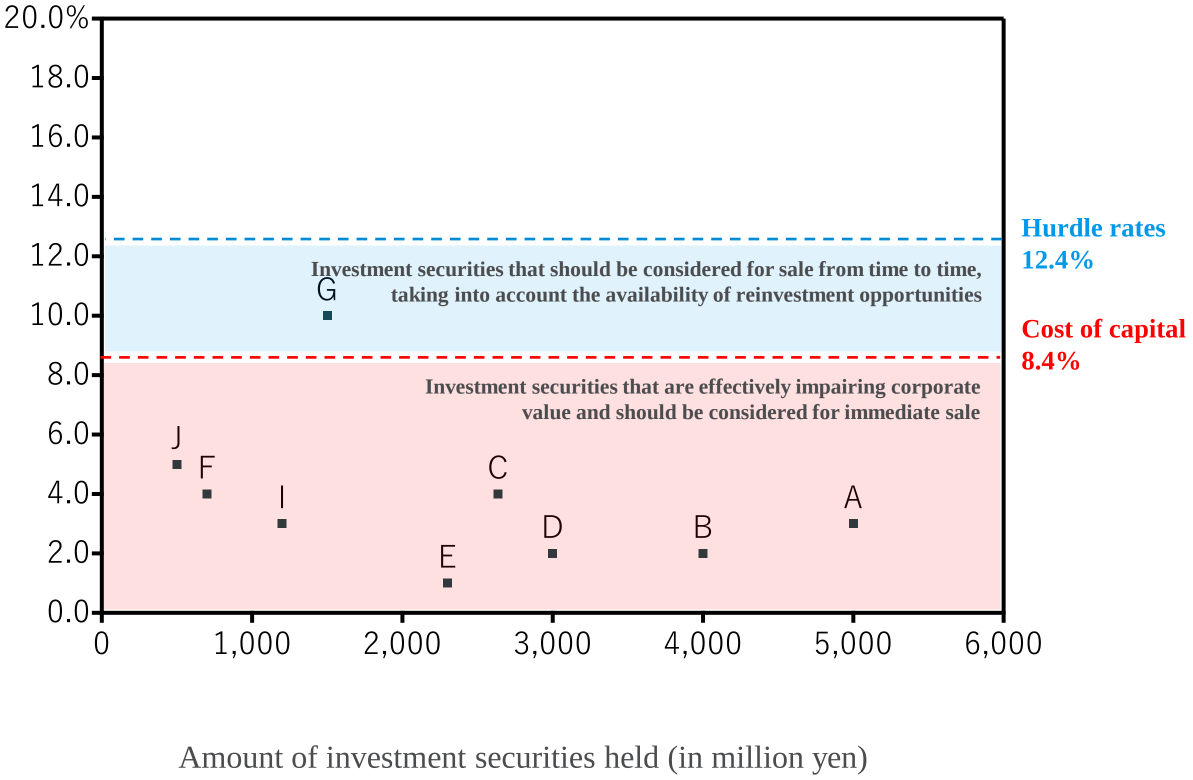
Breakdown of investment securities (in million yen)



These investment securities should be liquidated based on the cost of capital and/or hurdle rates.

Diagram

Investment return[1]



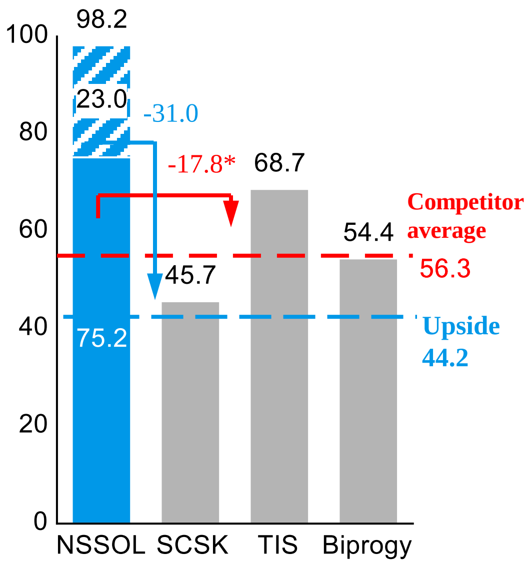
Note: [1] If it is assumed that the shares will be held for the long term, ROIC = after-tax profit / investment book value is used. If it is not assumed that the shares will be held for the long term, IRR, which is calculated based on the timing and price of the sale, is used.
Source: Annual Securities Report

D NSSOL has a larger collection cycle than its industry peers. As a result, there is room for improvement in the cash conversion cycle.

Due to disclosure reasons, the FY23/3 period is used for comparison

CCC

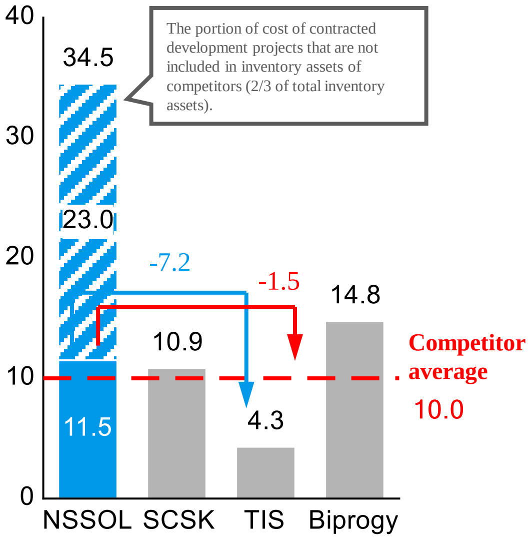
Cash Conversion Cycle (Days, FY23/3)



There is an improvement of 3.4 billion yen in the base case and 6.7 billion yen in the upside case.

Inventory Turnover Days

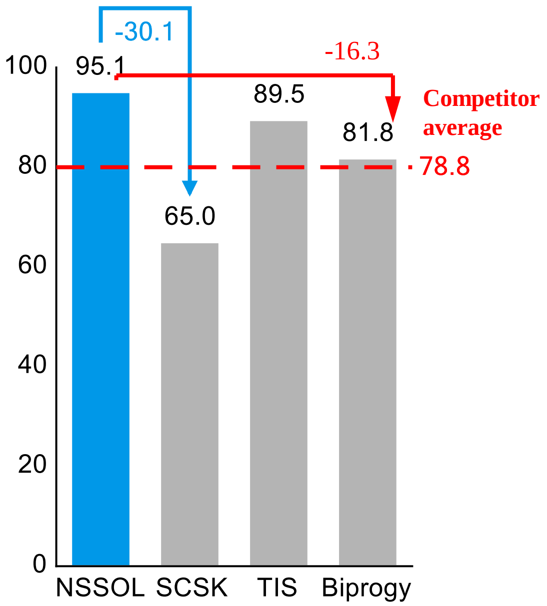
Inventory Turnover Days (Days, FY23/3)



(in billion yen)	NSSOL	SCSK	TIS	Biprogy
Cost price	218	317	360	243
Inventory assets	21	9	4	10
SW/HW ratio (%)	20%	22%	12%	28%

Accounts Receivable Turnover Days

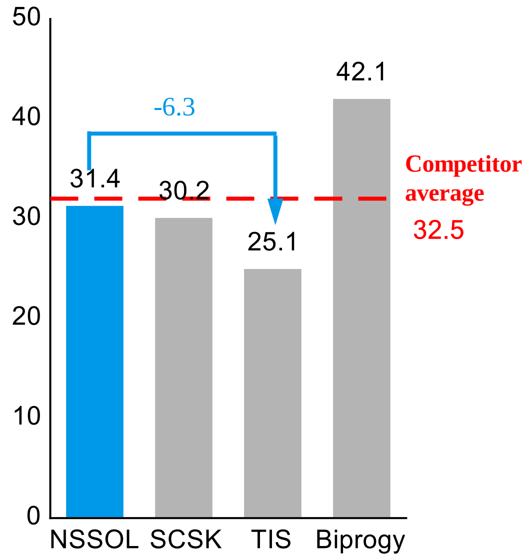
Accounts Receivable Turnover Days (Days, FY23/3)



(in billion yen)	NSSOL	SCSK	TIS	Biprogy
Sales	281	430	495	329
Accounts receivable **	73	77	121	74

Accounts Payable Turnover Days

Accounts Payable Turnover Days (Days, FY23/3)



(in billion yen)	NSSOL	SCSK	TIS	Biprogy
Cost price	218	317	360	243
Accounts payable	19	26	25	28

* The inventory assets of NSSOL includes the cost of contracted development projects, which accounts for 2/3 of the total and has been excluded from the calculation (based on a hearing with t Undisclosed ** Accounts receivable include notes receivable and/or contract assets; accounts payable include notes payable. ***The difference in days compared to the competitor average in CCC is the number obtained by subtracting the number of days of difference in Accounts Payables Turnover Days (1.1 days) from the number of days of difference in CCC (18.9 days); Source: Corporate IR

D Financial Impact and Calculation Methodology

Calculation Methodology		Basis	Source
Base case			
Potential for improvement in inventory assets (compared to the competitor average)	**0.1 billion yen**	-	-
Average inventory assets during the period	20.6 billion yen	The average inventory assets at the beginning and/or end of the period (excluding cost of contracted development projects) is assumed to be the upper limit of the annual improvement range.	Corporate IR
× Potential for reducing the inventory turnover days when assuming the competitor average ÷ 365 days	1.5 days ÷ 365 days	Difference between the inventory turnover period of NSSOL [11.5 days] and the inventory turnover period of competitor average [10 days] ÷ 365 days	Corporate IR
+ Potential for improvement in accounts receivable (compared to the competitor average)	**3.3 billion yen**	-	-
Average accounts receivable during the period	73.2 billion yen	The average accounts receivable at the beginning and/or end of the period is assumed to be the upper limit of the annual improvement range.	Corporate IR
× Potential for reducing the accounts receivable turnover days when assuming the competitor average ÷ 365 days	16.3 days ÷ 365 days	Difference between the accounts receivable turnover period of NSSOL [95.1 days] and the inventory accounts receivable period of competitor average [78.7 days] ÷ 365 days	Corporate IR
+ Potential for improvement in accounts payable (compared to the competitor average)	-	-	
Average accounts payable during the period	-	The average accounts payable at the beginning and/or end of the period is assumed to be the upper limit of the annual improvement range.	Corporate IR
×Potential for reducing the accounts payable turnover days when assuming the competitor average ÷ 365 days	-	There is no Potential for improvement as NSSOL exceeds the competitor average.	
= Effects of measures	**3.4 billion yen**		
Upside case			
Potential for improvement in inventory assets (compared to competitor BDP)	**0.4 billion yen**	-	-
Average inventory assets during the period	20.6 billion yen	The average inventory assets at the beginning and/or end of the period (excluding cost of contracted development projects) is assumed to be the upper limit of the annual improvement range.	Corporate IR
×Potential for reducing the inventory turnover days when assuming the competitor BDP ÷ 365 days	7.2 days ÷ 365 days	Difference between the inventory turnover period of NSSOL [11.5 days] and the inventory turnover period of the competitor BDP [4.3 days] ÷ 365 days	Corporate IR
+ Potential for improvement in accounts receivable (compared to competitor BDP)	**6.0 billion yen**	-	-
Average accounts receivable during the period	73.2 billion yen	The average accounts receivable at the beginning and/or end of the period is assumed to be the upper limit of the annual improvement range.	Corporate IR
×Potential for reducing the accounts receivable turnover days when assuming the competitor BDP ÷ 365 days	30.1 days ÷ 365 days	Difference between the accounts receivable turnover period of NSSOL [95 days] and the accounts receivable period of the competitor BDP [65 days] ÷ 365 days	Corporate IR
+ Potential for improvement in accounts payable (compared to competitor BDP)	**30 million yen**	-	
Average accounts payable during the period	18.7 billion yen	The average accounts payable at the beginning and/or end of the period is assumed to be the upper limit of the annual improvement range.	Corporate IR
×Potential for reducing the accounts payable turnover days when assuming the competitor BDP ÷ 365 days	6.3 days ÷ 365 days	Difference between the accounts payable turnover period of NSSOL [31.4 days] and the inventory turnover period of the competitor BDP [25.1 days] ÷ 365 days	
= Financial Impact	**6.7 billion yen**		

D The reason why NSSOL's collection cycle is longer than that of its industry peers is due to “business practices of steel and/or manufacturing industry customers” and “incomplete collection for each project phase”.

The reason for NSSOL’s **long accounts receivable collection period**

Business practices of steel and/or manufacturing industry customers

- **The collection period for accounts receivable from customers in** the manufacturing industry, particularly **the steel industry (=parent company), is several months longer than in other industries.**
  - In principle, accounts receivable from customers in other industries are collected **within one month of delivery and/or acceptance inspection.**
  - On the other hand, accounts receivable from customers in the manufacturing and/or steel industries are often collected **2 to 6 months after delivery and/or acceptance inspection**, due to business practices.
  - In NSSOL, **the proportion of customers in steel (parent company) and/or manufacturing industry** is large, so the accounts receivable collection period is long.

*“In principle, payment is made at the end of each month, but **accounts receivables from customers in the manufacturing industry is collected 2-3 months later due to their business practice. In particular, in case of customers in the steel industry**, it may take **as long as 6 months.**”*

Undisclosed

• Incomplete collection for each project phase

- Compared to competitors, **accounts receivable collection for each project phase is not being thoroughly enforced.**
  - Competitors divide project phases into smaller segments and manage profitability for each phase. They are also proactive about collecting accounts receivable.
  - On the other hand, NSSOL manages profitability for the entire project. As a result, you are not proactive about collecting accounts receivable for each segment during the period.

*“**Competitors divide the project phases into smaller segments, such as construction and maintenance, and set profit margins for each phase to manage profitability.** NSSOL, on the other hand, does not divide the project phase into smaller segments to ensure flexibility, and instead **examines the profit margin for the entire project. As a result, sales are managed relatively loosely**, which leads to delays in collecting sales.”*

Undisclosed

D Approaches being considered for implementing the measures

Establishing **the policy for collection of accounts receivable** and **the billing process**	**Prioritizing** negotiations and establishing **a negotiation plan** for each customer	**Customer negotiations regarding the collection period** led by the account manager	Establish **internal guidelines** to prevent the extension of the accounts receivable period

- Establish **policies and/or conditions for collection of accounts receivable**, such as payment terms and/or conditions
- Not only clearly communicate the above policies and conditions to customers, but also ensure that all employees are fully aware of them
- Establish **an efficient billing process**
  - Promptly issue invoices immediately after the provision of goods or services
  - Use electronic invoices and add convenient payment methods

- **Identify customers with long debt collection periods** and investigate the causes
- Develop **negotiation plans that match the characteristics of the customers and the causes**
  - For customers who, due to the nature of the industry, inevitably have long debt collection periods, and large customers, gradually implement negotiations in light of the attrition risks

- In particular, implement **reminders and/or negotiations with customers with long debt collection periods**
  - In addition to sending reminder letters, also implement verbal follow-ups
- Send reminders to customers whose payment deadlines are approaching

- **Regularly analyze indicators such as collection periods and collection rates** of accounts receivable **for each customer** to understand trends
  - **For customers or industries that frequently experience delays, review policies and/or conditions**
- Conduct credit checks on new customers and **assess credit risk** before starting transactions

Section 3: Reinvestment in High Yield Returns

Section 3: Reinvestment in High Yield Returns

- **To achieve quantum growth in corporate value, reinvestment with internal rates of return that significantly exceed the cost of capital is essential.**
  - Investments with returns below the cost of capital will damage corporate value, so strict hurdle rates must be established.
  - When setting the hurdle rate, it should be set by adding a margin to the cost of capital. The margin required to achieve significant value creation is 4%.
  - NSSOL's cost of capital is assumed to be approximately 8.4%, and the hurdle rate with the margin added is assumed to be approximately 12.4%.

- **The 3 potential directions for reinvestment are as follows.**
  - Reinvestment in existing product market areas:
    - ✓ Acquiring human resources/ R&D investment such as software development in existing areas/ M&A to accelerate growth and/or acquire capabilities in existing areas
  - Reinvestment in new areas:
    - ✓ Compared to its competitors, NSSOL has potential for diversification in areas other than its "core business", SI.
    - ✓ The potential options for diversification into new areas are areas expected to include IT consulting, in-house software development, outsourcing and international market.
    - ✓ When making decisions about the direction of diversification in new areas, NSSOL should make decisions based on quantitative analysis from the two perspectives of "where to compete" and "how to win".
  - M&A and Share Buybacks:
    - ✓ A combination of M&A and share buybacks using the remaining funds, which can be carried out at the company's discretion, can achieve returns at a higher efficiency than reinvesting in the business at the hurdle rate alone.

- **In implementing reinvestment, we believe that it is necessary to develop a system that ensures expertise, while maintaining strict investment discipline.**

The importance of reinvestment that exceeds the hurdle rate

(For reference) Investing with a return on investment capital ("ROIC") below the cost of capital damages corporate value.

Reposted

- The capital raised by a company incurs a cost of capital = the rate of return that a funder expects on its investment in the company.
- Based on the DCF formula, corporate value is defined by $IC + \frac{IC*(ROIC - \text{cost of capital})}{\text{cost of capital}}$
- Therefore, **investing in a business that produces only ROIC below its cost of capital directly damages corporate value**.

Formula for calculating corporate value using the DCF method [1]

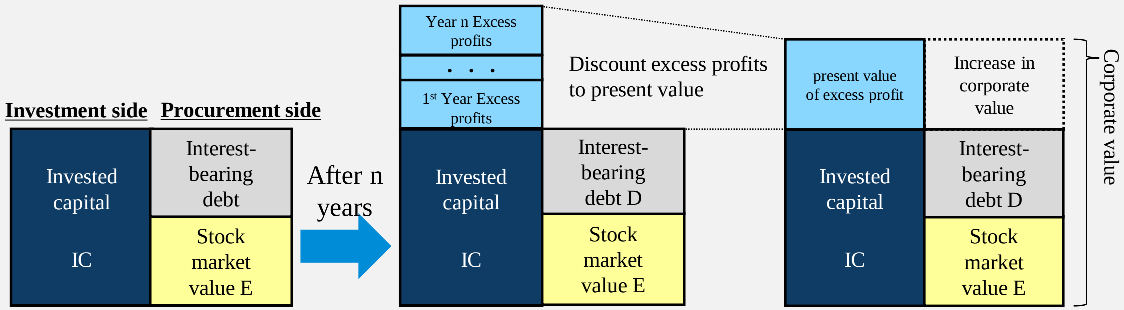
$$\text{Corporate Value} = E + D + \frac{IC*(ROIC - cost\ of\ capital)}{1 + cost\ of\ capital} + \frac{IC*(ROIC - cost\ of\ capital)}{(1 + Cost\ of\ capital)^2} + \cdots + \frac{IC*(ROIC - cost\ of\ capital)}{(1 + cost\ of\ capital)^n}$$

$$= IC + \frac{IC*(ROIC - cost\ of\ capital)}{1 + cost\ of\ capital} * \frac{1}{1 - \frac{1}{1 + cost\ of\ capital}} = IC + \frac{IC*(ROIC - cost\ of\ capital)}{1 + cost\ of\ capital} * \frac{1 + cost\ of\ capital}{cost\ of\ capital}$$

$$= IC + \frac{IC * (ROIC - cost\ of\ capital)}{cost\ of\ capital}$$

ROIC＞Cost of Capital: Corporate Value Creation

ROIC＜Cost of Capital: Corporate Value Damage



ROIC < cost of capital investments are value-destructive

*In other words, growth with value-creating (ROIC > WACC) investments will increase corporate value, **while growth with value-destroying (ROIC < WACC) investments will decrease corporate value**."*

Opinion of the 3rd Business Restructuring Study Group, sponsored by METI

To avoid damaging corporate value, it is necessary to strictly adhere to a strict hurdle rate (≒ the minimum required investment efficiency) upon reinvestment.

Note: [1] Calculation formula based on the assumption that the growth rate is 0, excess profits are fully used for dividends, interest expenses, etc., and excess profits are always constant.

The hurdle rate required not only to avoid damaging corporate value but to achieve sustainable and compound corporate value growth is the cost of capital + 4%.

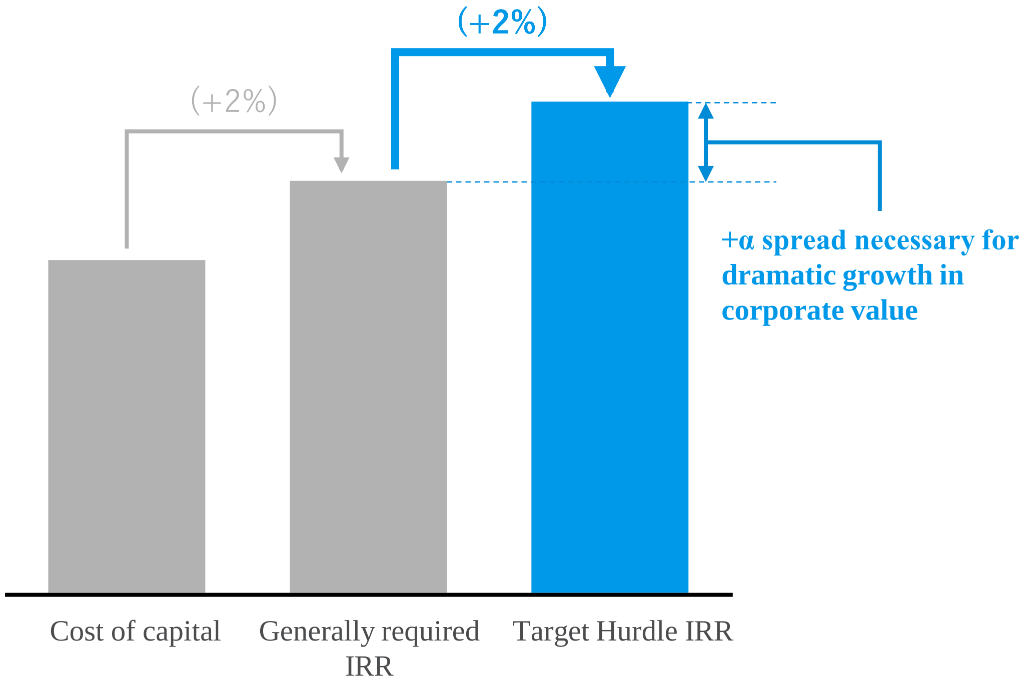
In general, the return required to create value is the cost of capital ＋ 2%.

- Mr. Ryohei Yanagi (visiting professor at Waseda University) **interviewed a large number of global investors and found that the required level of the equity spread in value creation is "generally around 2%".**

- Therefore, Mr. Yanagi stated that the investment selection criteria is "cost of capital + 2%", in other words, an IRR spread of 2%.

- In addition, the investment criteria of Eisai Co., Ltd.'s **have always been applied in practice an IRR +2%** over the course of Mr. Yanagi's tenure of approximately 10 years as the CFO, **and Eisai Co., Ltd has gained the support of investors around the world through dialogues with them.**

In general, we believe that an IRR of cost of capital + 4% or more is a reasonable hurdle rate for achieving dramatic growth in corporate value.



NSSOL's cost of capital is approximately 8.4%.

- There are several calculation methods for a company's cost of capital. It is common to **calculate the weighted average of the cost of equity and the cost of debt based on the capital structure.**

$$\textit{WACC} = \textbf{Cost of equity} \times \underbrace{[\text{Market capitalization}/(\text{Market capitalization} + \text{Net debt})]}_{\substack{\textbf{Capital structure} \\ \text{(Numerator: Market capitalization)}}} + \textbf{Cost of debt} \times \underbrace{[\text{Net debt}/(\text{Market capitalization} + \text{Net debt})]}_{\substack{\textbf{Capital structure} \\ \text{(Numerator: Net debt)}}} \times \textbf{(1- Effective tax rate)}$$

- However, NSSOL is in a net cash position, and NSSOL is effectively raising capital solely from shareholders. Therefore, **the cost of capital for NSSOL is equivalent to the cost of equity.**

- Based on the average of the 3 calculation methods, **NSSOL's cost of equity is calculated to be 8.4%.** Based on this, **the cost of capital is also assumed to be 8.4%.**

  — Share price basis: 9.9% (Appx Pg186)

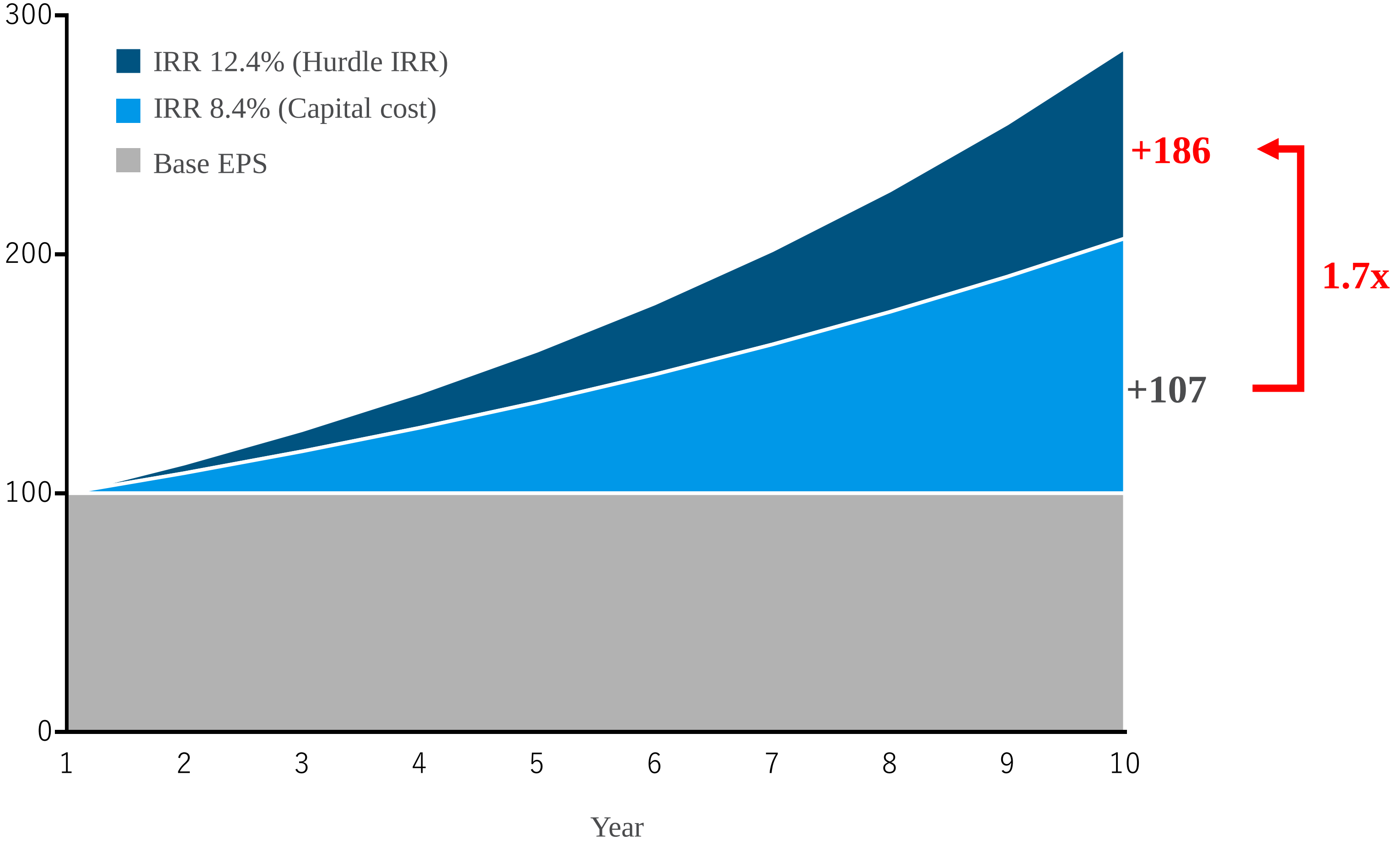
  — Questionnaire basis: 8.0% (Appx Pg187)

  — CAPM basis: 7.4% (Appx Pg188)

We assume that NSSOL should set the hurdle rate at 12.4% and proceed with reinvestment.

Continued reinvestment above the hurdle rates will result in sustained and compound growth in corporate value

EPS growth per share per IRR (EPS for initial year=100)



- **Reinvestment with hurdle IRR[1] will create nearly twice the value in 10 years** compared to reinvestment at the capital cost level.
- **Thus, investment at an IRR level significantly above the capital cost is critical** to achieving rapid growth in corporate value.

Note: [1] Hurdle IRR = IRR equal to or greater than capital cost +4%

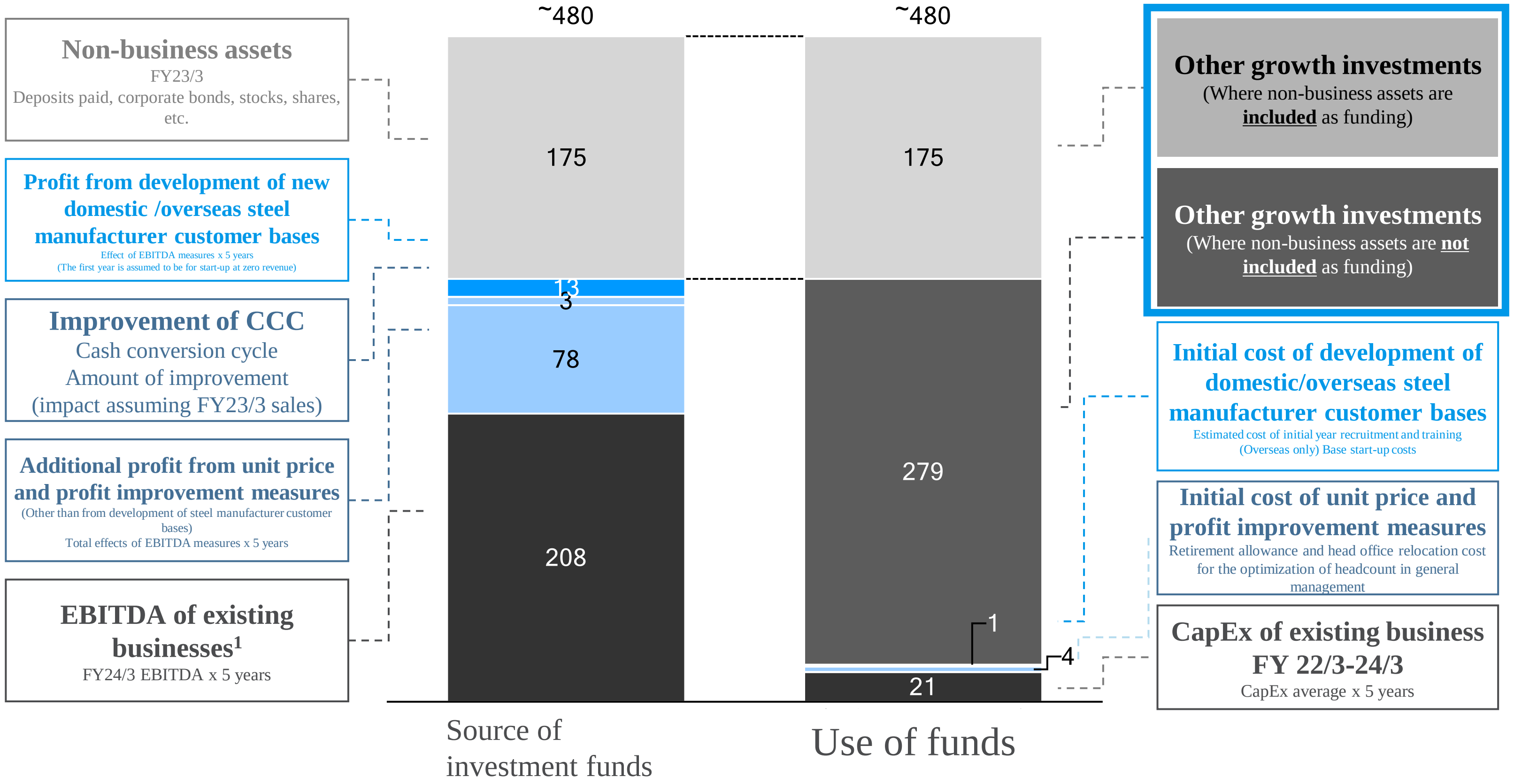
Reinvestment Policy ①: Reinvestment in existing areas

One option is to reinvest the funds to acquire human resources, R&D investment, and M&A in existing areas on the premise that the IRR exceeds the hurdle rate

Raise funds for growth investments by improving profits and cash flows through implementation of measures

The profit impact is equivalent to five years of the base case. The synergies between each measure are not included in the tentative calculation.

Source of investment funds and use of funds (1 billion yen)



... The funds raised will be effectively allocated to growth investments on the premise of high IRR.

Potential reinvestment targets in existing areas

- **Acquisition of human resources** to achieve further sales Expansion
- **R&D investment** in software development in existing fields
- **M&A** to accelerate growth and acquire capabilities in existing fields etc.

Potential reinvestment targets in new areas

- IT consulting
- Shareware developed in-house
- Outsourcing
- Overseas

Source: Company IR, literature research, interviews with market participants

Note: [1] Operating profit for the fiscal year ending March 2024 is calculated by adding the depreciation and amortization of 6.61 billion yen for the fiscal year ending March 2021 before the application of IFRS.

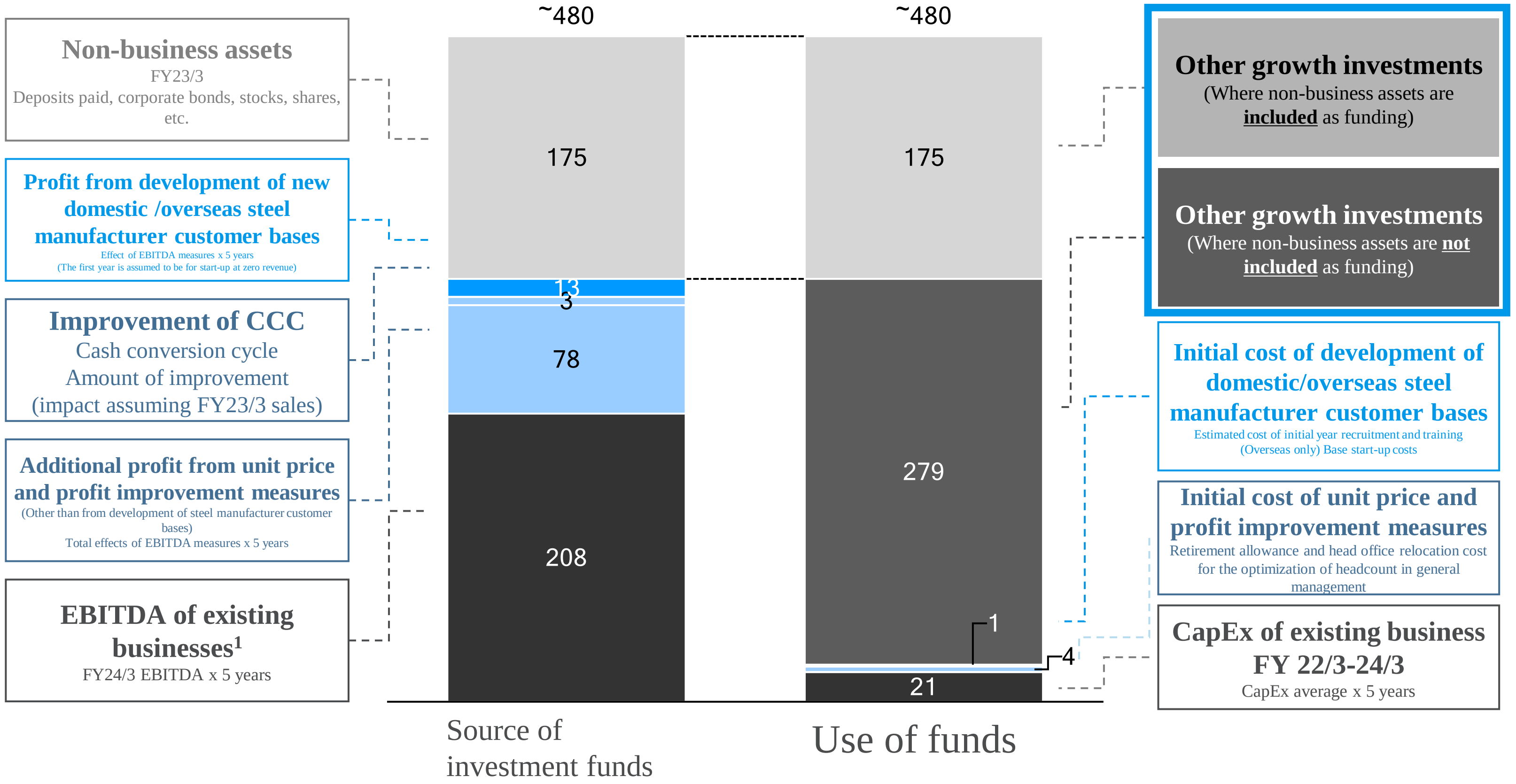
Reinvestment Policy ② : Reinvestment in new product market areas

Another alternative is to reinvest the funds obtained through these measures in order to advance and expand into new product market areas on the premise that the IRR exceeds the hurdle rate

Raise funds for growth investments by improving profits and cash flows through implementation of measures

The profit impact is equivalent to five years of the base case. The synergies between each measure are not included in the tentative calculation.

Source of investment funds and use of funds (1 billion yen)



... The funds raised will be effectively allocated to growth investments on the premise of high IRR.

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- IT consulting
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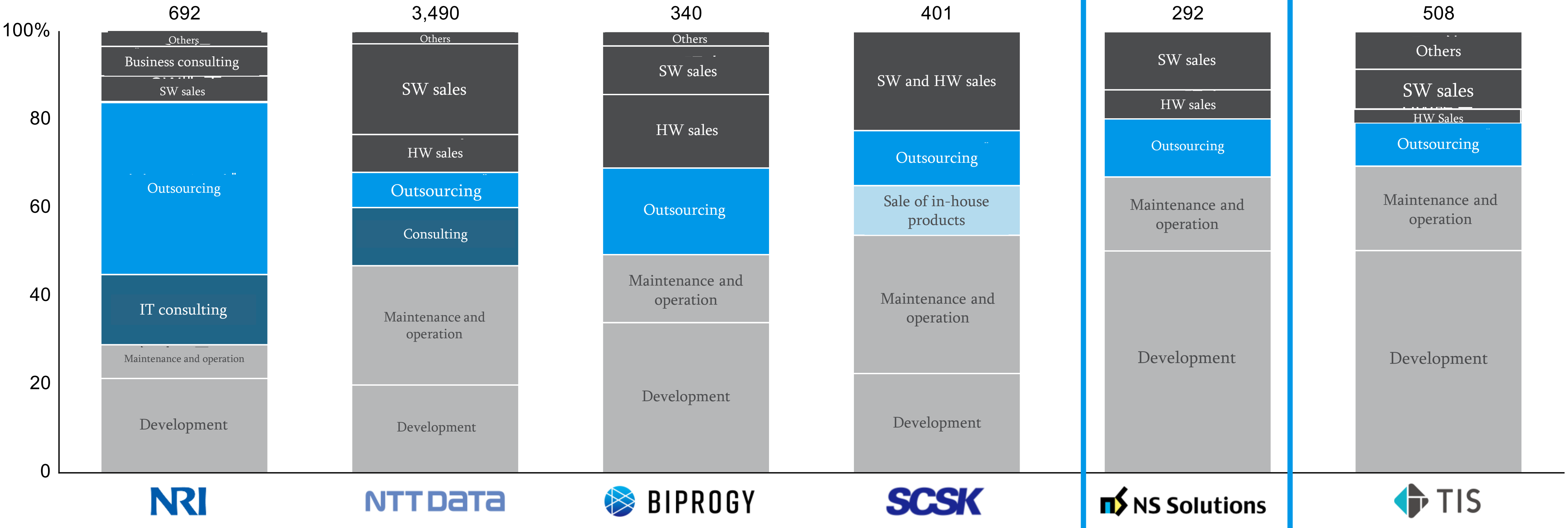
Source: Company IR, literature research, interviews with market participants

Note: [1] Operating profit for the fiscal year ending March 2024 is calculated by adding the depreciation and amortization of 6.61 billion yen for the fiscal year ending March 2021 before the application of IFRS.

NSSOL has potential to diversify in areas other than SI (its core business) compared to its competitors.

Net Sales by Segment
(FY 22/3 : in billion yen)



	NRI	NTT DATA	BIPROGY	SCSK	NS Solutions	TIS
Non-development and Maintenance ratio	71%	53%	51%	46%	33%	30%
Overseas ratio	18%	29%	N/A	N/A	Less than 3%	N/A

Source: Company IR, interviews with market participants

There are several possible options for NSSOL to diversify into new areas.

Expansion of business areas: IT consulting, In-house developed software, Outsourcing
Expansion of market: Overseas expansion

Main options in new areas:		IT consulting	In-house developed software	Outsourcing	Overseas expansion
Market attractiveness	Market size (2022)	0.4 trillion yen	3.0 trillion yen	2.8 trillion yen	-
	Market growth rate ('22-'27)	6%	9%	3%	-
	General gross profit margin	~30-40%	~20-40%	~20-30%	-
NSSOL's		**High** *"NSSOL has knowledge of both the **industry and infrastructure stream** necessary for IT consulting, so it should be easy to **make use of NSSOL's current strengths.**"* Undisclosed	**Mid** *"**We have knowledge of software development**, but our strength is in customization, and **we have less knowledge than other companies in developing general-purpose software** that can be sold as packaged software."* Undisclosed	**Mid** *"While we are currently providing **outsourcing services that emphasize customization**, but recently, **there has been an increase in competitors that emphasize cloud technology**, and we are struggling to grow."* Undisclosed	**Low / Mid** *"In Japan, the ability to flexibly respond to customer requests and provide **"customization" is valued**, but overseas, **best-in-class products are preferred**, and it seems that **NSSOL's strengths are not as well-received.** In addition, **there is a shortage of personnel who are proficient in languages**"* Undisclosed

Source: Company IR, IDC, interviews with market participants
Note: For In-house developed software, the software market size is displayed excluding the stem infrastructure.

Decision-making Process for Business Expansion in New Areas — Two perspectives are necessary: "Where to play" and "How to win"

Where to play

How to win

Market attractiveness analysis by sub-segment for each option in the area of business expansion

Evaluation of NSSOL's competitive advantage and **"chances of success"** in the selected market

Strategy and roadmap development to grow business in target markets

Creation of action plan for roadmap implementation

- Analyze **market size, growth rate, and profitability** (gross profit margin, ROA, etc.) by sub-segment

–IT consulting: IT strategy, IT management, IT infrastructure, IT solutions, etc.

–In-house developed software: Sub-segments exist along industry-specific x technology-specific axes–Outsourcing: Hosting, housing, full outsourcing, etc.

–Overseas expansion: USA, South Korea, India, etc.

- Analysis and identification of **KSF (Key Success Factors)** in highly attractive markets
- Evaluation of the company's **unique assets** that can be used as a foothold for entry and **competitive advantages** in light of the above evaluation criteria

–e.g. specialized knowledge, customer relations, human resources that can be re-skilled, etc.

- Determining **full potential business goals and a time frame for achieving them** in new business areas
- Considering approaches to acquiring target customers and businesses
- Formulating policies for the **capabilities** (e.g. technology, human resources) that are additionally needed to achieve the above and the **methods for acquiring them** (e.g. in-house development, M&A)

- Formulation of a **concrete action plan** to realize the formulated strategy and roadmap

– Formation of a project team necessary for expansion into new areas

– Formulation of a detailed action plan for the time being

“Where to play”, “How to win ” in New Product Market Areas

Expansion of Business Areas: IT consulting | SW developed in-house | Outsourcing

Market Expansion: Overseas expansion of business

Where to play

IT consulting

- **Which sub-segments and industries are attractive to deal with** in terms of scale of investment by customers, growth rate, and effects of business on downstream processes?
- In which areas does NSSOL **have deep expertise and utilize its competitive advantage to the fullest** in light of its advantages and existing business capabilities?

SW developed in-house

- Among existing commissioned development projects of NSSOL, which **products can be packaged**?
- Which products among these **could have demands form existing customers**?
- Among these, what are the areas in which NSSOL has an advantage in terms of performance and technology over its competitors, and **could win a position of a segment leader?**

Outsourcing

- Is it possible for existing customers to further expand outsourcing business of **existing business** (such as data center)? Are there any room left?
- Are there **any sub-segments** in the outsourcing business **that should be newly developed** in terms of market attractiveness and NSSOL’s competitiveness?

Overseas expansion of business

- Which **overseas markets are more attractive** in terms of market size, growth potential and profitability?
- Within these markets, which regions should be used as a stepping stone to overseas expansion, including where **NSSOL is currently based**, or if there are **customers who are worth approaching** (Example: global steel manufacturer)?

How to win

IT consulting

- How to acquire and complement **business capabilities necessary** to win in the above-mentioned markets
  - Acquisition of IT consulting firms
  - Recruitment of person(s) with consulting experience
- In light of NSSOL’s appeal, what kind of customers are targeted, and what **“sales hooks”** are used to win deals?

SW developed in-house

- How to develop **an organizational structure which enables voluntary in-house SW development**.
  - Develop an incentive structure for employees who propose [a new] organizational structure or in-house development of products.
- What kind of **organizational structure and internal system** should be developed to accelerate the sales of its products?
  - Example: Establish [a team] specialize in sales

Outsourcing

- What are **the bottlenecks to accelerating sales** of the existing outsourcing business? (Example: number of staff and growth investment)
- What are the **“winning strategies”** in a new area of outsourcing business, and what business capabilities are needed to implement them?

Overseas expansion of business

- How to acquire **the business capabilities necessary to win in** overseas **local markets** (recruitment of local SIs and sales personnel, and acquisition of local SI firm)
- Who are **the customers to approach**, where successful cases of overseas expansion of business (i.e. “quick wins”) are expected?

Illustrative Case Study: NTT Data enters IT consulting and expands overseas via M&A.

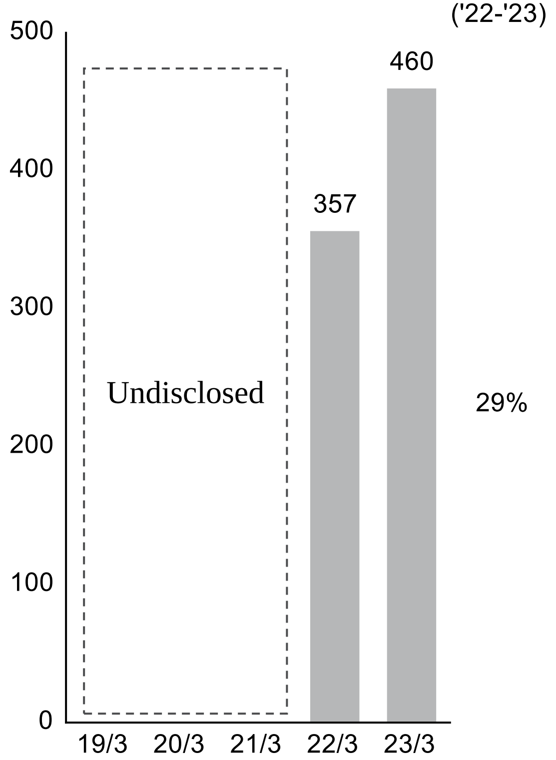
IT consultation | SW developed in-house | Outsourcing | Overseas development of business

NTT DATA

NTT Data has been actively acquiring mainly overseas consulting firms over the past five years, expanding its business capabilities in the consulting field and overseas market.

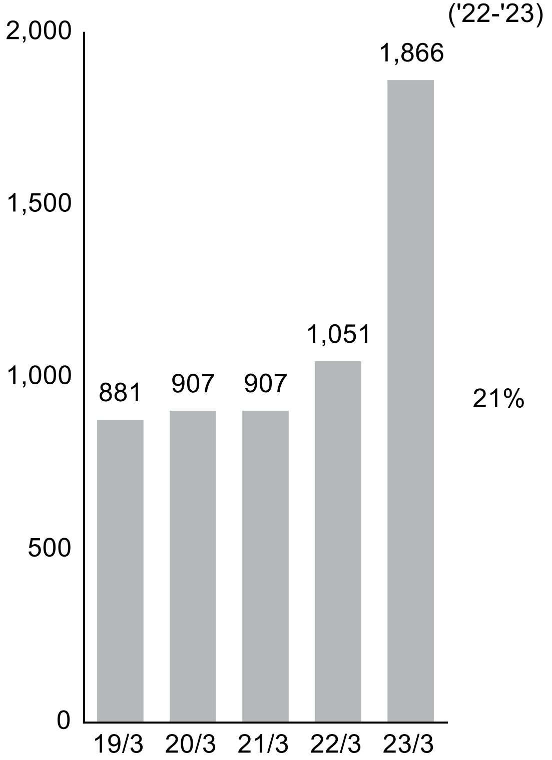
Consulting sales transition

NTT Data Consulting Segment Sales Transition (billion yen)



Overseas sales transition

NTT Data Overseas Sales Transition (billion yen)



Related to consulting | Related to overseas expansion of business | Other

Major acquisition cases

2019
- Acquired Locus Telecommunication Inc., Ltd. (Thailand) (Digital consultation and DX business)
- Acquired Fachin e Hauagge Incorporações e Participações S.A. (Brazil) (Consulting business for SAP)

2020
- Acquired Flux7 Labs Inc. (US) (App implementation support and cloud-related consulting business)
- Acquired Acorio LLC (US) (Consulting business specialized in internal business systems)

2021
- Acquired Nexient, LLC (US) (Development business of apps for cloud environments)
- Acquired Chainalytics, Inc. (US) (Supply chain consulting and analytics)

2022
- Acquired Business Services and Technologies OOD (Bulgaria) (Consulting business for SAP and SI business)

2023
- Acquired Natuvion GmbH (Germany)(Consulting business for SAP cloud and digital business)

. . .

NTT Data plans to invest 100 billion yen in M&A projects in Japan by 2025, aiming to **solve labor shortage problems early and enhance its consulting skills**

Source: CapIQ; Corporate website; reference document research; corporate IR; interviews with market participants

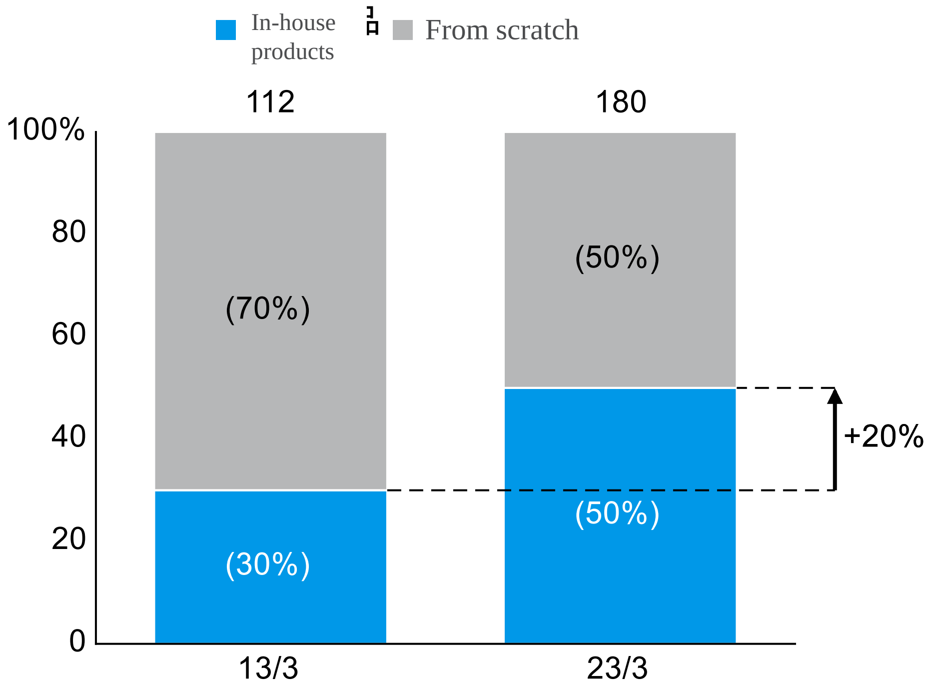
Illustrative Case Study: 20-30% of SCSK's sales personnel specialize in sales of in-house packaged products. In addition, its corporate structure encourages the packaging of development projects, such as by allowing employees to form development teams flexibly.

IT consultation | SW developed in-house | Outsourcing | Overseas development of business

SCSK

20% increase in ratio of in-house products to SCSK development projects

Sales transition of SCSK development projects (billion yen)



*"With the development of cloud technology and the trend toward further standardization, and in response to a company's management policies, **there has been a significant increase in packaged products and in-house products** over the past 10 years. Over the past 10 years, the ratio of [in-house products] to development projects has increased from approximately **30% to 50%**"*

Undisclosed

SCSK has launched a program to expand its service offerings based on its in-house products

Company Policy

- In the mid-term business plan (FY15-21), the transition from the conventional 'commissioned from scratch' type of projects to **"service-based business" based on its intellectual properties and IT assets**.

*"About 10 years ago, the company decided **a policy to increase the "intellectual properties"**, and there has been a shift to a style of **developing [products] with the possibility of packaging in mind** even for commissioned development projects"*

Undisclosed

Development

- Develop an **incentive structure** where if an employee proposes in-house development of products by packaging it from commissioned development project deliverables, **he/she is highly evaluated within the company**
- A structure where any development of the company products are categorized as a project, and **a team including the proposer is formed flexibly**

*"Many of our in-house products are packaged version of commissioned development projects [deliverables], and **if [an employee] proposes in-house development of products and conducts so, he/she is evaluated as having achieved a lot** , so many [employees] are working with the possibility of packaging in mind. Furthermore, even after the proposal, we have a structure **where a team** including the proposer **is formed flexibly** as a development project"*

Undisclosed

Sales

- Of the sales personnel, **20-30%** of them belongs to **a team specialize in the sales of in-house products**

*"**20-30%** of the sales personnel for each industry **specialize in the sales of in-house products**"*

Undisclosed

Source: Interviews with market participants

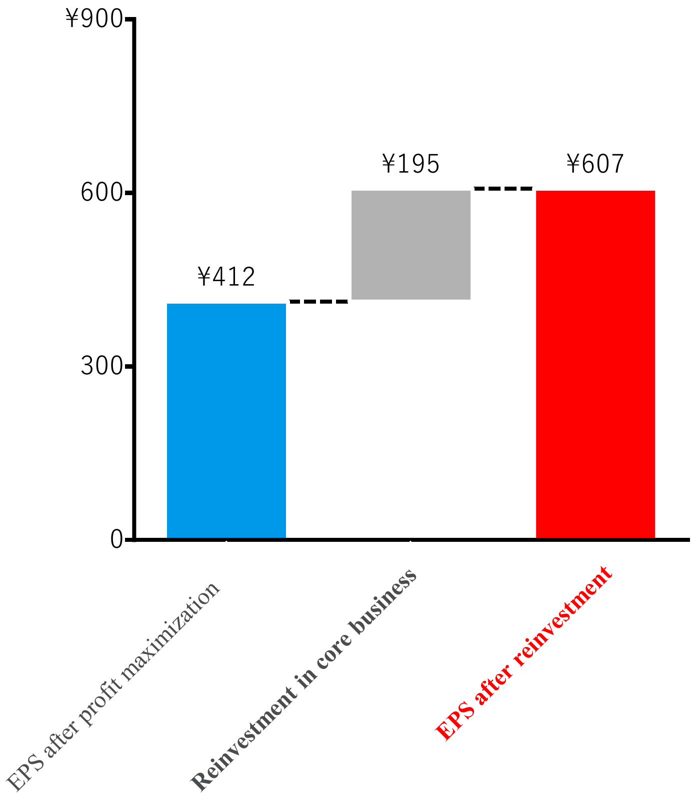
Reinvestment Policy ③ : Share Buybacks

By combining business investment with discretionary share buybacks, NSSOL can maximize earnings more effectively than with business investment alone.

Earnings can be maximized by combining investment in the business with share buybacks

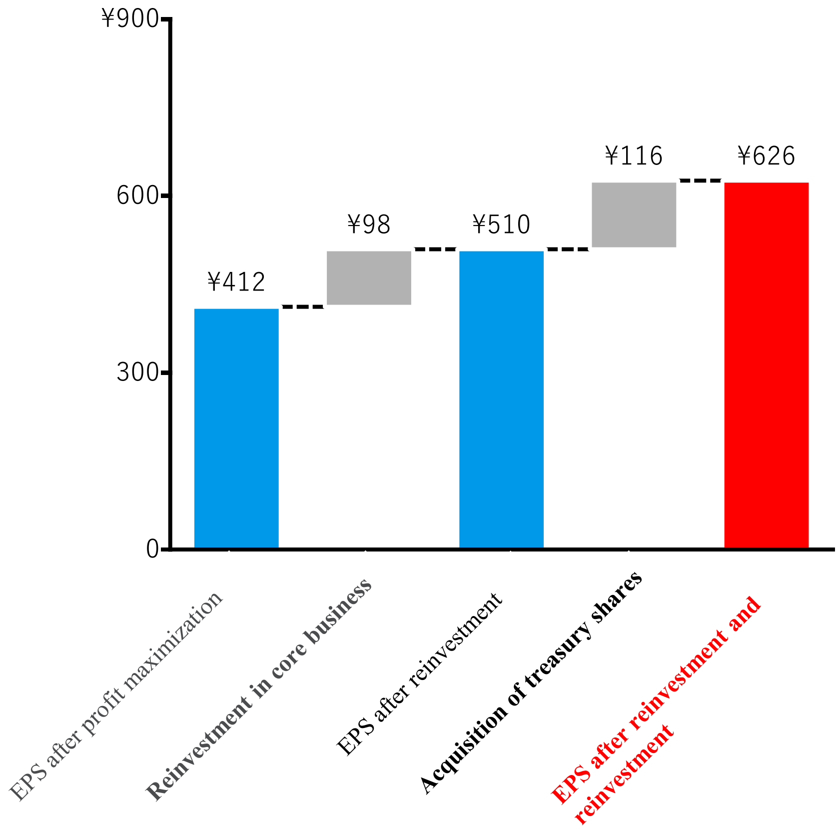
Investment in core business alone

Impact of each measure on EPS improvement (yen)



Combination with share buybacks

Impact of each measure on EPS improvement (yen)



Assumptions for estimate

- Assumption that **178.6 billion yen liquidation proceeds will be reinvested**
- **Investment in core business only:**
  Allocating 178.6 billion yen to M&A of a company with ROIC of 19% and net profit growth rate of 5% on the EV/NOPAT 10x basis
  (Equivalent to IRR of 12.4%, net profit increase of 17.9 billion yen)
- **In combination with share buybacks**
  Treasury share acquisition of 89.3 billion yen + allocated to M&A on the EV/NOPAT 10x basis of 89.3 billion yen
  - Total number of shares outstanding is to decrease from 91.5 million to 74.48 million (on the assumption that acquisition is conducted at 5,250 yen)

(Reference) If the market value is lower than intrinsic value, share buybacks increase the intrinsic value per share

Share Value per Share

Treasury Share Acquisition

- **If the market value is lower than the intrinsic value,** acquiring treasury share under such circumstance **increases the intrinsic value per share**

Intrinsic Value 100 billion yen = [Variance between Intrinsic Value and Market Value 50 billion yen + Market Capitalization 50 billion yen] ÷ Total Number of Shares Outstanding 100 million shares = Intrinsic Value per Share **1,000 yen** (Share Price of 500 yen)

⬇ **treasury share acquisition of 10 billion yen (500 yen, 20 million shares)**

Intrinsic Value 90 billion yen = [Variance between Intrinsic Value and Market Value 50 billion yen + Market Capitalization 40 billion yen] ÷ Total Number of Shares Outstanding 80 million shares = Intrinsic Value per Share **1,125 yen** (Share Price of 500 yen)

Dividends

- The intrinsic value per share does not change before and after the dividends.

Intrinsic Value 100 billion yen = [Variance between Intrinsic Value and Market Value 50 billion yen + Market Capitalization 50 billion yen] ÷ Total Number of Shares Outstanding 100 million shares = Intrinsic Value per Share **1,000 yen** (Share Price of 500 yen)

⬇ **Dividends of 10 billion yen**

Intrinsic Value 90 billion yen = [Variance between Intrinsic Value and Market Value 50 billion yen + Market Capitalization 40 billion yen] ÷ Total Number of Shares Outstanding 100 million shares = Intrinsic Value per Share **1,000 yen** (900 yen + Dividends 100 yen) (Share Price 400 yen + Dividends 100 yen)

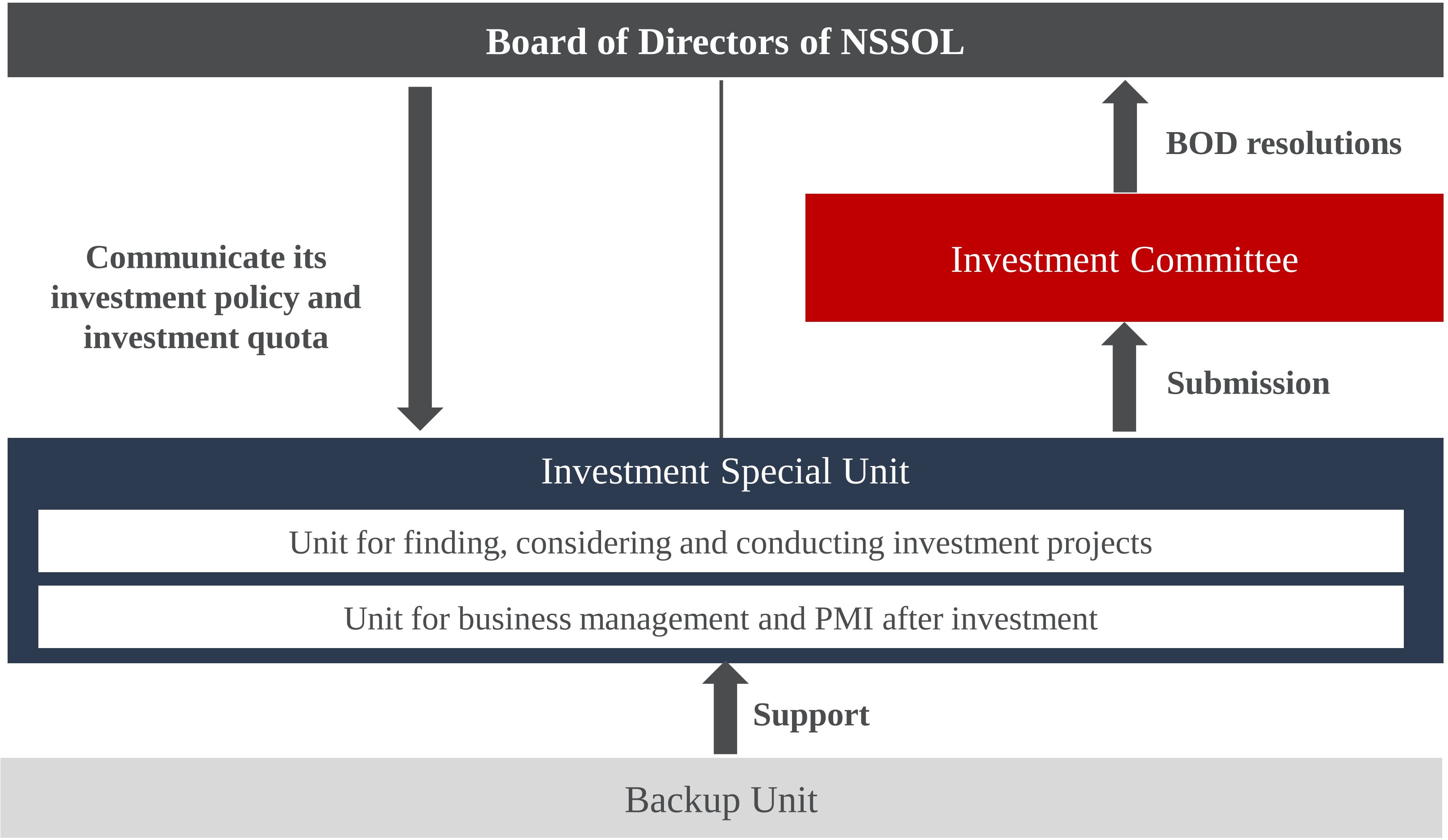
Taxation System

- As for treasury share acquisition, only the portion falling under the deemed dividend is subject to taxation.
- As for the dividends, the entire amount thereof is subject to taxation.

Establishment of system to achieve quantum growth of corporate value through reinvestment

It is essential to establish the necessary governance to ensure strict investment discipline in reinvestment.

Visualization of Investment Organization



- **Determine an investment policy and investment quota** based on the premise of maximizing corporate value in a cumulative manner
- **Examine** investment projects **thoroughly** whether the IRR exceeds the hurdle rate, and from a viewpoint of other quantitative and qualitative risk, return and synergy
- **Conduct sourcing and due diligence of investment projects**[1] based on the investment policy and investment quota
- Execute **synergy creation, value enhancement, and monitoring** with investment partners
- **Responsible for back-office operations such as accounting and legal operations**

Conclusion

Conclusion

- **Due to poor of governance, NSSOL is not managed with the maximization of shareholder value and corporate value as primary objectives. There is significant room for improvement in the P/L, B/S and capital allocation**

Poor governance

— **It is crucial to develop a governance structure to establish the management with the maximization of shareholder value and corporate value as primary objectives**

— **However, NSSOL's governance is inadequate, and NSSOL does not have a structure in place to manage the company with the maximization of shareholder value and corporate value as primary objectives**

✓ Governance issues include lack of independence of the board of directors and improper accounting of round-trip transactions

✓ General shareholders are concerned about NSSOL's governance

Failure to conduct management with shareholder value and corporate value as the KPIs

Better Profitability

— For the maximization of profits, there appears to be room for improvement in areas such as ① Review of Pricing for Nippon Steel, ② Review of Pricing for Other Customers, ③ Reallocation of Resources Away From Low Return Projects, ④ Reducing Outsourcing Costs for Subcontractors, ⑤ Increase Offshore Share of Outsourcing, ⑥ Reduce Headcount and Personnel Expenses in General Management, ⑦ Reduction of Other Costs, ⑧ Development of Domestic Steel Manufacturer Customers, ⑨ Development of Overseas Steel Manufacturer Customers.

— These seven improvement measures are expected to result in a profit of approximately 19 billion yen.

Liquidation of Non-Core Financial Assets

— For the maximization of investment funds, there appears to be room for improvement in areas such as ① resolution of deposits with the parent company that fall below the cost of capital, ② sales of cross-shareholdings, ③ sales of other securities that fall below the cost of capital, and ④ improvement of the CCC, which is centered around a receivable turnover period

— These four improvement measures are expected to result in the creation of investment funds of approximately 179 billion yen

Reinvestment in High Yield Returns

— By reinvesting the investment funds gained from improving B/S at a level that adequately exceeds the cost of capital, it is possible to achieve value improvement in a cumulative manner

— Possible reinvestment policy includes "recruiting in existing areas, R&D and reinvestment in M&A", "reinvestment for venturing and expansion into new areas", and "reinvestment in treasury shares"

— It is suggested that reinvestment that combines treasury share acquisition which can be conducted at the company's discretion, and reinvestment in business should be carried out. We believe this is the most effective way to enhance value per share

- **The root cause of NSSOL's poor governance is the fact that NSSOL has not achieved independence from Nippon Steel**

— If there is a structural risk of conflict of interest between Nippon Steel and minority shareholders, and the company is not independent from Nippon Steel, it is difficult to develop the governance structure to maximize shareholder value and corporate value

— Based on the structure of your board of directors, and the status of transactions and deposits with Nippon Steel, NSSOL has not achieved independence from Nippon Steel

Therefore, NSSOL should ensure complete independence from Nippon Steel, and maximize shareholder value and corporate value by developing the governance structure

Appendix

3D INVESTMENT PARTNERS

Cost of Capital of NSSOL

Estimated cost of capital shareholders except from NSSOL: Share Price Standard
The cost of equity of NSSOL calculated based on the share price is 9.9%

- Assuming that NSSOL's share price is the present value of future EPS, it is possible to express it using the formula below, and we can estimate NSSOL's cost of equity based on NSSOL's PER and growth rate.

- As of the end of May 2024, NSSOL's PER is 19.0x. Assuming that the growth rate is 4.7%[1], NSSOL's cost of equity recognized by the capital market is 9.9%.

Formula

$$\text{Share price} = \frac{EPS}{r-g} \quad \rightarrow \quad PER = \frac{1}{r-g}$$

$$r = \frac{1}{PER} + g$$

$$g = r - \frac{1}{PER}$$

PER: Calculated based on the ratio of the market consensus EPS as of the end of March 2024 to the share price as of the end of July 2024.

r: The cost of equity for individual companies

g: Growth rate calculated by reference to the market growth rate

*Assuming a clean surplus relation and a steady state

Note: [1] See the sales CAGR of FY15/3-FY24/3 for the growth rate

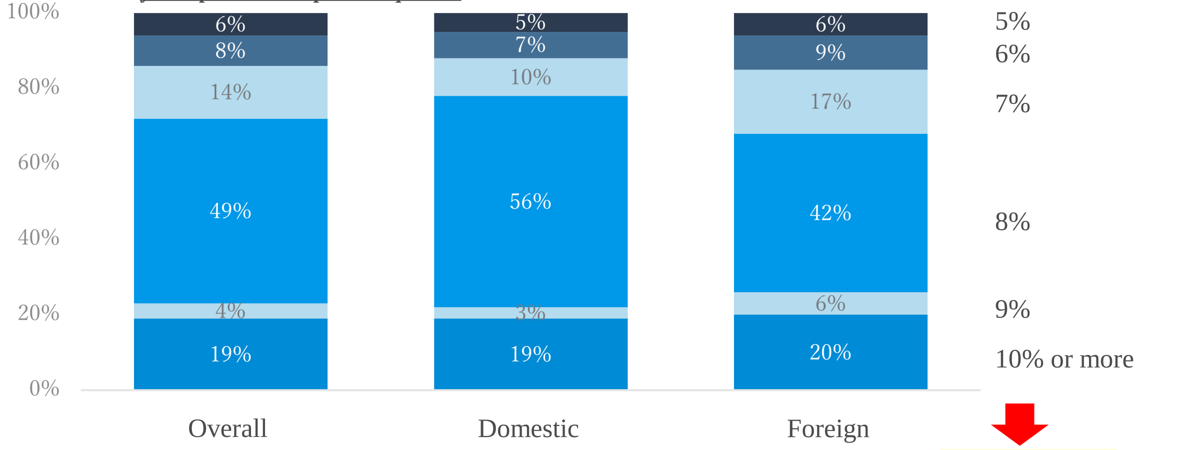
Cost of Capital Based on Investor Expectation

- According to a questionnaire conducted in 2020 for 144 investors, the average cost of capital that investors expect from Japanese equities is 8%.
- Considering that NSSOL's β is 0.95 (Appx Pg190), and the Bloom Principle that the overall market β converges to 1.0, the cost of capital shareholders expect from NSSOL should be around 8.0%, the same cost of capital shareholders expect from Japanese equities.
- In addition, the minimum level of ROE recognized by global investors is 8%. NSSOL, which has decided to list on the Prime Market [2] with a focus on constructive dialogue with global investors, should assume that the cost of capital shareholders expect is at least 8.0%.
  — *"Although the level of the cost of capital for each company differs, as a first step to be recognized by global investors, each company should commit to achieving ROE which exceeds at least 8%. Of course, this is just a "bare minimum", so once a company achieves a ROE of 8% or more, or if a company has already achieved this, they should aim for an even higher level."* [3]

Cost of capital investors typically expect from Japanese equities[1]

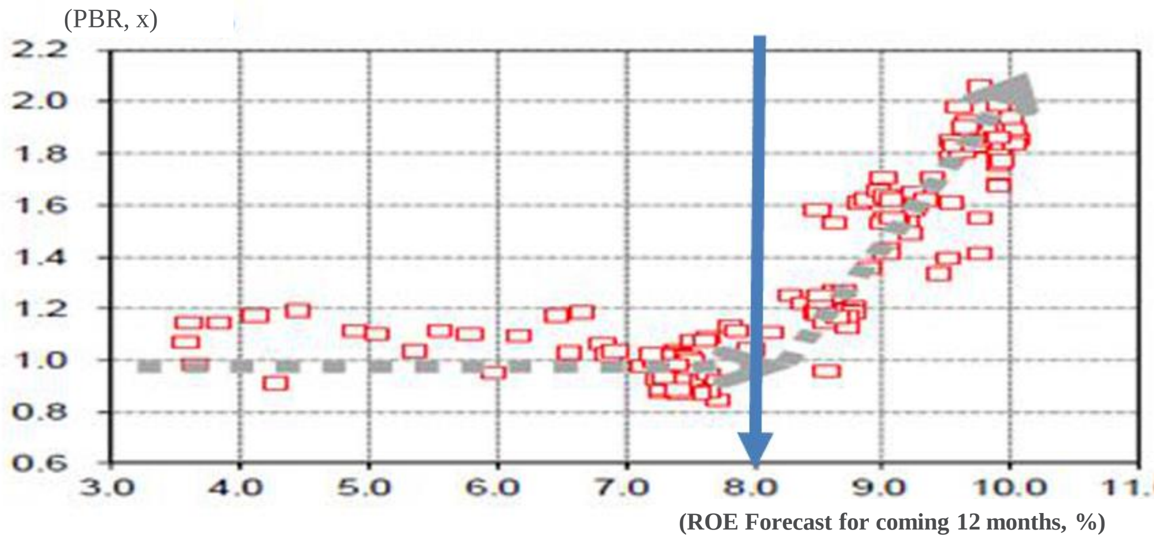
Q:Generally speaking, what level of cost of equity (which differs from company to company, but on the assumption of beta 1, as the average for Japanese equities) do you expect from Japanese equities?

Cost of capital shareholders expect



Average: 8%

In fact, since companies tend to be evaluated positively by investors for their cost of equity when their ROE exceeds 8%, 8% represents one benchmark for the cost of capital



[Source] Theory and Practice of Cost of Capital [Note] The 2004 forecast for TOPIX is the 12-month forecast consensus from I/B/Y year onwards (201415 ROE year and PBR are plotted)

Note: [1] "Perspective on Capital Market on Value Creation of Japanese Companies 2021" Ryohei Yanagi July 2021 [2] "Outline of Market Restructuring" Japan Exchange Group [3] Ito Report

Estimated Cost of Capital Based on Investor Expectation: CAPM Standard
The cost of equity of NSSOL based on the CAPM Standard is 7.4%

$$Cost\ of\ equity = \mathrm{rf}+\beta(\mathrm{rm}-\mathrm{rf})$$

Variable	3D
rf Risk Free Rate	Average yield over the past 10 years of 10-year Japanese government bond *As of the end of May 2024 ▪ 0.187%
β Beta	NSSOL's β against TOPIX over the past 5 years *As of the end of May 2024 ▪ 0.95
rm – rf Market Risk Premium	Estimated by comprehensively considering the market risk premium calculated using the historical method, implied method and survey method. ▪ rm – rf = 7.7%
re **Cost of Equity**	**7.4%**

Estimated Cost of Capital Based on Investor Expectation: CAPM Standard Presumption of risk free rate (rf)

- The risk free rate refers to the "non-uncertain yield" determined by market interest rates, where the final yield on government bonds is generally used.
- When evaluating corporate value, such as shareholder value, companies subject to evaluation are based on the assumption of going concern, so it is common to use the yield on long-term government bonds with longer redemption periods, and in Japan, 10-year government bonds are generally used to calculate the risk free rate.
- The following are primary methods for calculation of the risk free rate using 10-year government bonds:

Calculation Method	Numbers Used	Basis
Method that uses market yield as of the evaluation	▪ 1.08% As of the end of May 2024	The risk free return that is expected at the time of evaluation that determines investment should be used. ▪ *"The risk free rate is a future estimate at the time of evaluation, so the final yield at the time of evaluation should be used instead of the past average yield prior to the time of evaluation"*[1]
Average yield for 10-year government bonds over the past 10 years, starting from the date of evaluation	▪ 0.187% Starting from the end of May 2024	Based on the premise of long-term investment, the average value should be used, not at the time of evaluation, but from the time of evaluation, in a way that mitigates the impact of temporary policies ▪ *"It is highly likely that the yield trend of 10-year bonds has been affected by significant changes in monetary policies, such as the surge in money supply implemented in Japan in the last five years. [Omitted] Based on this idea, it may be possible to select the average value for the past 10 years, which is the maturity period of 10-year government bonds."*[2]

- In light of the following comments and results of the questionnaire shown in the following section, when evaluating NSSOL as a listed company (i.e. a going concern) from a mid- and long-term perspective, "average 10-year government bond yield over the past 10 years, starting from the time of evaluation" should be used as the risk free rate, in order to reflect the long-term risk free rate free from effects of temporary policies.
  - — *"If the cost of capital is calculated for the purpose of management control in a going concern, risk free interest rate should be estimated after removing the effects of temporally policies"*[2]
  - — *"In the case of M&A, objectivity should be ensured by selecting a value at the time of evaluation"*[3]

Note: [1] "Cost of Capital Management for Enhancing Corporate Value" The securities Analysis Association of Japan [2] "Corporate Value Management" Kunio Ito [3] "Enhancement of Corporate Value and Cost of Capital" Seminar on Enhancement of Corporate Value (held by Tokyo Stock Exchange) Tetsuyuki Kagaya (Hitotsubashi University)

Estimated Cost of Capital Based on Investor Expectation: CAPM Standard Presumption of β (beta)

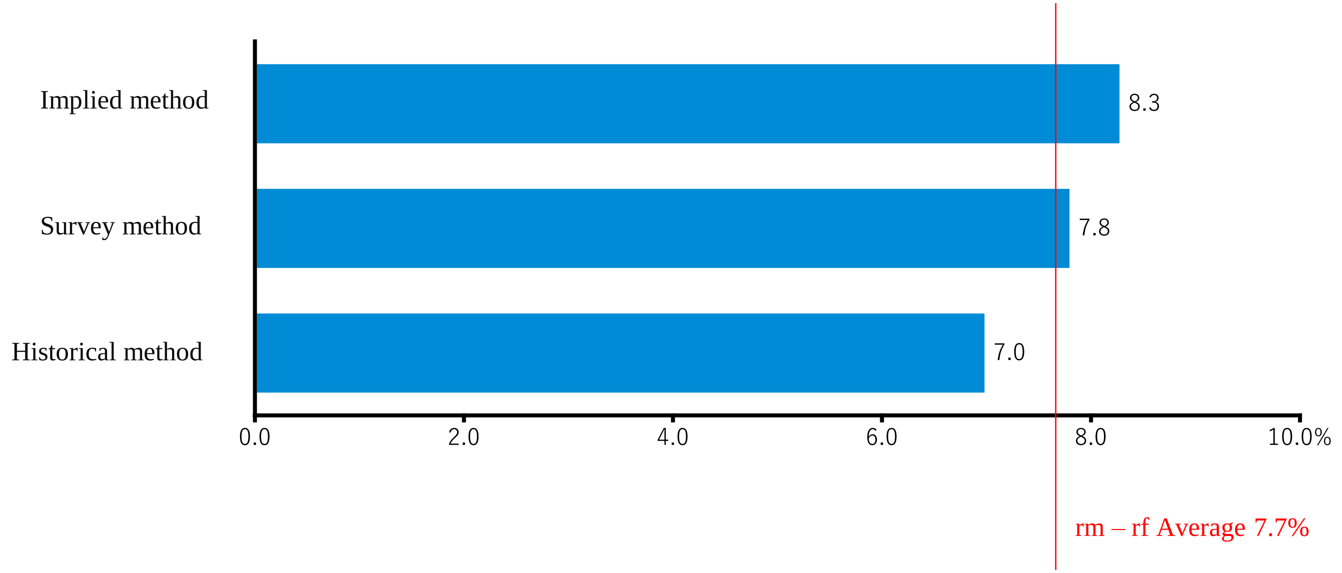
- β is a measure of sensitivity of a company's and industry's return on investment to the overall stock market's return of investment
- TOPIX is used as the relevant index for the calculation of β (2019/5/31-2024/5/31)

Source: Bloomberg

Estimated Cost of Capital Based on Investor Expectation: CAPM Standard
Presumption of market risk premium (rm-rf)

- The market risk premium indicates how much additional return investors expect when investing their funds in stocks compared to risk-free assets.
- In principle, the following methods [1] are used for the market risk premium and we estimate the market risk premium for Japanese stocks comprehensively based on each of those methods.
  - — Historical method: Estimated from the past stock market returns
  - — Implied method: Calculated backward from the market price
  - — Survey method: Based on a survey of institutional investors who are actually in charge of investing
- The market risk premiums for Japanese stocks calculated based on each method are as follows, and we use 7.7% as the market risk premium.

Market risk premiums for Japanese stocks calculated by each method



Note: [1] "Corporate Value Management" Kunio Ito

Estimated Cost of Capital Based on Investor Expectation: CAPM Standard
Presumption of market risk premium (rm-rf) (cont.)

Historical method

- The market risk premium is calculated by subtracting the simple average of the annual income return of the risk free assets (10-year Japanese government bonds) for each year in a specific period from the simple average of the annual return of the stock market (TOPIX) for each year in the same period. Regarding the period, it is recommended that the data be calculated over as long a period as possible to mitigate the effects of phenomena specific to a particular period.

  — *"The longer the measurement period, the more number of samples, thereby improving the reliability of the estimates. Historical ERPs for a period of 30 years or more or, preferably, 50 years or more (encompassing multiple economic, business, and market cycles) are required."*[1]

- According to the market risk premium data calculated using the historical method provided by Ibbotson Associates, the market risk premium for Japan estimated from the longest period is 7.0% (which is the average market risk premium calculated by setting the start of measurement as each year from 1952 to 1961).

  — *"Many investors, corporate valuers, certified public accountants, and tax accountants in Japan who use this report (Ibbotson Associates) use historical ERPs near the longest period for their corporate valuation."* [1]

Implied method

- Based on the presumption that the stock price is the present value of future EPS, the following formula holds true, and presuming a PER of 15.4x[2] and a growth rate of 2.0%[3] as of the end of May 2024, the cost of capital that the market expects for Japanese stocks as of the end of May 2024 is 8.48%, and the market risk premium after deducting the risk free rate of 0.187% as of the end of July 2023 is 8.29%

  - $Stock\ price = \frac{EPS}{r-g} \rightarrow PER = \frac{1}{r-g} \rightarrow r = \frac{1}{PER} + g$

PER: Regarding TOPIX, calculated based on the market consensus EPS (Y+1) as of the end of May 2024 (=PER15.4x)
r: TOPIX's cost of equity
g: Growth rate calculated with reference to the actual growth rate, etc.
※Assuming a clean surplus relationship and a steady state

Survey method

- According to a survey of investors and business companies conducted by the Securities Analysts Association of Japan[4] and the Japan Investor Relations Association[5], respectively, the average market risk premium is recognized as 6.32% and 6.11%, respectively.

- In addition, it is pointed out in the Ito Report[6] that in a global investor survey, the average response to the question "What is the cost of equity you would generally expect for Japanese stocks?" was 8.0%. From the perspective that this 8.0% level represents the rate of return investors expect from Japanese stocks over the medium to long term, by deducting the average yield of 10-year government bonds for the past 10 years based on the end of July 2023 of 0.187% as the risk free rate, the market risk premium is calculated as 7.81%.

Note: [1] "Management of Cost of Capital to Enhance Corporate Value," Securities Analysts Association of Japan [2] Bloomberg [3] The growth rate of 2.0% is considered to be a reasonable level compared to the TOPIX actual EPS annual average growth rates of 10.7%, 8.2%, and 7.7% since 2000, 2010, and 2015, and the target inflation rate of 2.0%, based on the end of December 2021, excluding the impact of COVID. [4] "Survey of IR Activities," Japan Investor Relations Association [5] "Survey on Cost of Capital and Corporate Value Enhancement," Securities Analysts Association of Japan [6] "Theory and Practice of Cost of Capital ~ Sustainable Enhance of Corporate Value," Dr. Ryohei Yanagi

Reinvestment at an IRR above the hurdle rate

Investment at an IRR above the hurdle rate is feasible

Even when limited to listed companies, there are plenty of M&A targets with the potential to achieve an IRR above the hurdle rate

Domestic companies

Approximately 3,900 listed companies

↓

411 companies belonging to the system development/software industries[1]

↓

415 companies with a market capitalization of 500 billion yen or less

↓

110 companies with a positive NOPAT and EV/NOPAT of 10x or less
(Total market capitalization: 1.5 trillion yen)

Note: [1] System development/software in the SPEEDA classification are the relevant industries
Source: SPEEDA (June 20, 2024)

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