Part II: Conclusion and Recommendations

1 Conclusion

This chapter presents the overall conclusion of the study. Appendix 1 of the Part II outlines the process that led to the conclusion, while "Discussions" present details of discussion and analysis of each of the major items.

Part II-1, 1.1 discusses the need for design promotion in Indonesia on the basis of the results of analysis of the current state of industrial development in the country, together with its goals and major issues, and benefits expected from introduction of the design concept and process. Then, 1.2 analyzes the current state of design promotion and identifies its potential and constraints. 1.3 proposes basic strategy for design promotion on the basis of the above results, and 1.4 discusses the roles of the private and public sectors in implementing the promotion strategy. 1.5 discusses desirable design promotion projects and programs led by the public sector, as recommended from the viewpoint of fulfilling the role expected of the sector. 1.6 and 1.7 map out the division of responsibilities among related organizations in implementing the necessary programs and projects, focusing on the desirable role of the design center that is expected to serve as the core of design promotion activities.

II-2 makes recommendations on design promotion, mainly about the master plan, on the basis of the results of the above study and analysis.

1.1 Need for Design Promotion

As discussed below, such policy measures as export promotion, SME development, formulation of industrial linkages, regional industrial development and job creation are expected to play a vital role in solving the problems of industrial development in this country, both short-term and long-term. Introduction of the design process is believed to provide a highly effective tool for achievement of these policy measures, enhancing the capability of product development based on market needs and advantages of producing areas, contributing to establishment of Indonesian identity, and resulting in improvement of price and non-price competitiveness. Further, since enhancement of product development capability will be the key for the export industry to attain sustainable growth, the approach with design will be more effective than others that are applicable to the situation. In this recognition, it is very important and urgent for the country to create the environment that ensures the smooth design introduction process by providing proper measures to encourage and support such process.

Target and urgent Issues for industrial development

Target and urgent as well as mid/long term issues for the industrial development in Indonesia, may be summarized as follows (for detail, see I-3):

1) The recent economic crisis in Southeast Asia has caused the Indonesian market to contract sharply and has increased unemployment in urban areas, resulting in outflow of labor from urban to rural areas where a large number of jobless persons take shelter. This has deteriorated standards of living significantly throughout the country and creation of employment opportunities is undoubtedly the highest priority for the country's economic policy.
2) In terms of the medium to long term point of view, the government policy is firmly pointed in the direction of an open market economy, since it is very difficult, if not impossible, for the government to maintain the previous policies to protect domestic industries, which has in fact retarded their healthy growth. With such change in economic policy, it is essential at the same time for the government to foster various industries that can survive and grow under conditions of the economic shift. Further, because of removal of the embargo on export of raw or simply processed materials, the country's advantage for industries which use these materials, has been diminishing with emergence of new competitors importing these materials.

The Indonesian economy, which was thought to be in a relatively good shape, began to flounder in the acute currency crisis that started in late 1997. A major factor was rapidly expanded imports of capital goods in response to high economic growth, which created a continued deficit in the country's current account, while government finance remained in the black. As a result, the rupiah was persistently overvalued despite the constant devaluation year after year. Then, the devaluation of the baht by the Thai government hit the rupiah, directly to create the grave currency crisis.

The devaluation of the rupiah caused capital flight into dollars, creating a negative spiral of devaluation. This inflated rupiah-denominated external debts and domestic, non-performing debts, which accelerated the pace of devaluation. Investment, both domestic and foreign, plummeted, and construction projects, a major force driving the booming economy, were halted, postponed or scaled down. Manufacturers using imported materials lost competitiveness. Then, political instability, the decline in food production, and the rise in import prices due to the depreciation of the rupiah unleashed an inflationary force. Outcomes were the sluggish domestic market, increased unemployment and the decline in the standard of living of a massive segment of the population. These still plague the country. Industrial production in FY1998, except for export production using domestic resources, dropped to around 30% of the pre-crisis level. 70-80% of

manufacturing enterprises have reportedly been forced to close down[1].

In fact, many problems related to industrial development, which contributed to the economic crisis, have been identified earlier, and many pointed out the need to solve them from medium- and long-term perspectives. The most important challenge, as urged by various sectors, was the fostering of the ability of the industrial sector to maintain sustainable growth under the increasingly liberalized economy and the open market system. That is, to promote an industrial sector that could remain competitive under the freely competitive environment without government intervention. The new set of goals for the industrial development process, given these circumstances, including the urgent need to create employment opportunities, are summarized as follows:

1) In light of the fact that rapid growth of the industrial sector that relied on imported equipment and materials led to the uncontrolled surge of imports of capital goods, far outpacing exports, and exacerbated the economic crisis, exports should be promoted with the view of ensuring that industrial development contributes to a better balance of exports and imports.
   a) Fostering of competent export-oriented industries that utilize domestic resources such as lumber, farming and fishery products
   b) Revitalization of labor-intensive export industries, such as clothing and shoes, which were once major export items but have declined since then
2) To form intra- and inter-industrial linkages by promoting local procurement of raw materials and parts in order to help balance exports and imports and to achieve stable economic growth through deepening of the industrial structure.
3) Inefficient management of national enterprises and monopolies, mainly manufacturers of basic materials and heavy and chemical industries, created bad loans by diverting expanded money supply to speculative investment in real estate, resulting in the economic bubble and accelerated growth of imports of capital goods. Based on the lessons learned, comprehensive measures should be taken to discontinue competition restrictive government intervention, modify the high-cost structure, and strengthen competitiveness, including privatization of state enterprises that serve the domestic market, such as metalworking, chemical and electrical/electronics products.
4) To encourage foreign investment and free entry of private investors, in industries that require efforts to strengthen competitiveness, government regulations and procedures should be simplified with increased transparency.
5) To create employment opportunities in rural areas by promoting local industries,

[1] Information from the company interview survey.

thereby to correct economic disparities between regions and reduce unemployment and underemployment in rural areas.

Development issues by industrial category, and possible direction to solve the issues making most of the potential capacity of design

Following points out the issues by industrial category and indicates the possible directions to solve the issues with making most of the potential capacity of design.

(1) Industries processing primary products

These industries are founded upon agricultural, fishery and forestry resources that are abundantly available within the country and are considered to be the most promising sector to achieve sustainable growth under the open market economy. Major products include rubber, palm oil, lumber, coffee, tea and shrimp, which were originally exported without local processing and are now processed to varying degrees. Many of them, however, are simply packed into small packages or processed to products as directed by buyers, which does not add much value. Few original products have been developed.

As industrial development based on agricultural and other resources is a primary target of by many developing countries, it is important for Indonesia to develop high value added products by raising the levels of processing and improving quality, and to find their markets. Otherwise, Indonesia may lose its current markets with intensive competition with other countries. Some countries are emerging to new competitors with importing raw materials from Indonesia with removal of embargo on such products as lumber and rattan.

Here, design is expected to play a major role in supporting such efforts by proposing new products on the basis of new lifestyles and by providing processing and packaging methods that can convey product image effectively to the market.

Also, the higher level of local processing will enable the sustainable use of agricultural and other resources through environmental preservation and planned regeneration of resources, because manufacturers do not have to pursue thoughtless volume growth because of the higher value added.

(2) Industries manufacturing import-substituting consumer goods

Manufacturers of these goods have benefited considerably from the government's protectionist policy (control of import tariff and foreign exchange rates, etc.) that was based on the broader policy of building up the country's production system covering a wide range of industries. They can no longer expect such benefits because of the unavoidable change to the open market policy. Major products include textiles, fibers

and other light industry goods, as well as electrical equipment and the like, which primarily serve domestic demand[2]. Among them, textile and garment industries already are satisfactorily meeting domestic demand and are boosting exports by using surplus capacity. Nevertheless, these products are primarily intended for domestic consumption, and unlike foreign manufacturers who are operating in the country to establish production bases for the sole purpose of exporting (textiles, clothing or electrical products), local manufacturers are basically vying for export markets by relying on price competitiveness. As local consumer goods will face increasingly intensive competition with foreign imports under conditions of the open market economy, manufacturers are expected to offer product lines that are planned on the basis of accurate market analysis including export markets. And design is considered to be a key driver for this imminent strategic shift.

(3) Labor-intensive/export-oriented industries

Labor-intensive industries that primarily manufacture goods for export consist mainly of foreign companies who are operating in the country to take advantage of low-cost labor. Originally, garments, sports shoes and stuffed toys were the major goods produced. Then in the 1990s, electrical and electronics production increased. These products are designed and developed at headquarters (parent companies) of foreign manufacturers. Their products have sufficient levels of quality and performance that are acceptable in the international marketplace and are usually exported through existing channels of parent companies. These manufacturers import most of raw materials and utilize almost labor force only in the country.

Now, they are shifting their attention to Vietnam and China that offer lower labor costs, while Indonesia is becoming less attractive. Major efforts are necessary for Indonesia to continue to attract and retain these industries by adding other advantages to the current ones. Higher level of quality management, exact delivery, preferential treatment for movement of people and cargo in and out of the country, could be advantages of Indonesia, if it can provide such conditions. Further, if Indonesia can use local materials which are comparable in price and quality compared to those available in competing countries, it could be an advantage of Indonesia also.

In view of design, there is a possibility to improve material consumption and production method adding the characteristics of Indonesia, modify the products reflecting the needs of market, or plan to expand the target markets/consumers. It is an urgent task

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[2] There are different types of textile and garment industries, and electrical equipment industries in Indonesia, which have been shifted from abroad for export production. These industries are not included in this category, rather they are categorized in the next category (labor-intensive / export-oriented industries).

for Indonesia to differentiate its products from those of other competitors through such efforts.

(4) Industries manufacturing basic materials, capital goods and consumer durables

These industries have grown in line with the government's broad-based industrialization policy and with the aid of strong protection. Their products chiefly serve the domestic markets and include iron and steel, cement, automobiles and electrical machinery and equipment. In fact, they will be hit hardest under the open market economy because of high production costs and the lack of efficiency, which must be corrected if they are to survive.

Although many of them introduce have acquired technology and management know-how from foreign partners, they import most of their parts and components (this most evident among manufacturers of consumer durables). As a result, technology transfer has not progressed as intended, while the current economic crisis makes it difficult for them to import necessary parts. Product development is basically carried out by parent companies of foreign partners and the extent of localization remains very limited. Under the open market economy, these manufacturers will face difficulty unless they attain cost competitiveness by expanding production through successful export promotion.

Meanwhile, for the automobile and electrical equipment industries, that have large impacts on the national economy, it is important to promote development of original products or parts, which will encourage growth of local suppliers through increased procurement. Thus, this is an area that can be one focal point of design promotion efforts and a starting point for localization of parts production[3].

Finally, issues and possible directions to solve them may be summarized as follows.

Indonesia still has an abundant labor supply and its labor costs have not risen as sharply as neighboring NIEs, namely Malaysia and Thailand. The country also has fundamental advantages that can attract foreign investment: (1) moderate increase in labor cost with sufficient supply ability of labor force; (2) a sufficient level of production skills of local industries learned over long years of experience, represented by skilled workers; and (3) the vast domestic market with enormous growth potential. On the basis of these advantages, it is essential for the country to nurture industry which can cope with the above weakness and enhance the following capability:

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[3] Component suppliers in Japan are frequently propose improved component designs to their customers, taking into consideration improved usability, cost saving, environmental protection, etc.

1) To create products that meet the market needs;
2) To develop original products that incorporate local resources and other advantages; and
3) To develop products that are based on raw materials and parts available in the country.

These strategies should be combined with efforts to nurture small- and medium-sized enterprises that have potential to create a large number of employment opportunities. This way, the industrial sector, contributing to continuous expansion of exports by effectively utilizing local resources, can be helped to grow in a relatively short period of time, instead of relying on short-lived export drives.

Potentiality of design use

At present, the word "design" is generally understood to plan and design a product in accordance with an intended purpose, and at the same time, in the most aesthetic form and shape. In practice, however, design is increasingly used in a wider range of areas, beyond the traditional areas concerned with "articles", to an effective way of expressing "ideals" including ideas, thoughts and views[4].

In designing, a certain process which is called the design process, is used. The process is to carry out the design according to a concept which is developed on the basis of research and analysis of the scene where the design is used. The use of design process brings indirect benefits, in addition to direct and obvious benefits of realizing a more comfortable or desirable color, shape and/or space; it helps people to attain the ability to apply design techniques to various planning practices including public administration and private business in a more rationalized way once the design process is understood by the people.

Thus, nowadays, design is not limited to proposing a new product in a visual form and in the context of new aspects of its use or life style of its potential users, which are also planned and proposed. Rather, it has expanded its applications into diverse areas as

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[4] Initially, design work was an activity to create quality and standardized industrial products with reasonably planned production method incorporating aesthetics and amenity in the outcome, with an implicit criticism of the deterioration of quality when products made by masterful-hands were replaced by those churned out from machines, while simultaneously (paradoxically) advocating modern, mechanized production to supply products in large quantities. In the process, design activities were found to have positive effects on much broader aspects of human activities and their total area of application has expanded accordingly. Today, design is viewed as an effective communication tool in addition to the ability to add value in terms of aesthetics and amenity to products, and further, appreciated because of the design process, which is found effective for various planning processes. Also, design increasingly treats "intangible matters" of presentation of ideas, concepts and propositions, in addition to "tangible matters" of traditional articles.

shown in Table II-1.1-1.

Export promotion with design use

Use of design is expected to contribute significantly to overcome the prevailing weakness of export sector, which are seen in the following points, fostering the export sector which has potentiality of sustainable growth, in a short period of time.

1) Most industries fail to differentiate their products from those made in neighboring countries. As a result:
   a) Labor-intensive industries are emerging in countries offering lower labor costs, such as China and Vietnam, which attract increasing attention of buyers and customers.
   b) Industries processing agricultural, forestry and fishery products tend to have strong competitors in other countries where similar raw materials are available or Indonesian products can easily be imported.
   c) Development of new products by Indonesian industries serving the domestic market is being carried out almost exclusively by foreign partners or parents in the case of large enterprises or foreign-affiliated ones, while smaller enterprises copy or modify products on market. As these products are not distinguishable from competing products that are widely available in neighboring countries, in terms of design and performance, they must compete in export markets on the basis of price alone.
2) As smaller enterprises do not directly deal with retailers and end users, they do not have knowledge or experience in developing and marketing products that meet the market needs. In particular:
   a) They manufacture products according to the buyer's instruction, which are usually purchased at low price and to which they do not add much value except for labor.
   b) They do not understand what they need to do in serving the market effectively, e.g., satisfying requirements such as quality and delivery schedule.
3) Large enterprises and foreign-affiliated ones manufacture products that are planned and/or designed by foreign partners or parent companies, where local ideas and needs are not reflected:
   a) Local procurement of raw materials and parts is made on the basis of production economies alone, in the absence of considerations to the effective use of local resources and suppliers for product development.
   b) Local needs including those of the domestic and neighboring markets are rarely taken into account.

4) State enterprises and monopolies that have been operating in the less competitive marketplaces fail to explore opportunities for product development by focusing on local needs and availability of local resources.

SME development, local industry promotion, and formulation of industrial linkages with design use

Increasing use of design is not only effective for export promotion, but also useful for SME development, formulation of industrial linkages, and promotion of local industry as well, which are the essential for industrial development in Indonesia, together with the export promotion.

Namely, enhancement of product development ability of SMEs, which is based on the appropriate understanding on the market needs, will be an effective tool for their development, since the improved product development ability will enable them to enhance their business ability continuously, with nurturing their accessibility to the market.

Further, use of design makes local industries which are piled up in specific localities, sustainable and developable with market development ability, switching their business mind from the current "product-out" to "market-in".

So far, most of leading enterprises in Indonesia are not willing to procure necessary components and materials locally, due to the difficulty of local supplier industry in fulfilling the quality and delivery requirement. However, if the local supplier industry can understand the needs of customers, while the customers procure with paying appropriate attention to the suppliers' limitation, then, the local procurement may be increased fulfilling the needs of both side. It will result in formulation of industrial linkages. The dissemination of design process will be an effective tool for promoting mutual understanding of the local suppliers and their potential customers.

Advantage of design promotion

The design approach is not only effective in achieving the goals and solving the problems related to industrial development, namely, export promotion, SME development, promotion of industrial linkages, regional industry development, and job creation, etc., but also is superior to other approaches that have been conventionally applied, as discussed below:

1) The ability to use design allows an industry or an individual manufacturer to understand market demand accurately and to develop the product and the market by taking into account market trends and local characteristics. The end results are marketing skills, non-price competitiveness, higher value added, and sustainable growth.

2) The effective use of design helps shift the role of procurement for the manufacturer from merely satisfying current production needs to supplying useful information on raw materials and parts for product development, i.e., the bottom-up approach to product development based on the optimum combination of local resources.

3) The previous export promotion strategy focused on the establishment of a linkage between producers and buyers, centered on transfer of business know-how including export procedures and business practice as well as technology transfer to meet quality and performance requirements of buyers. As seen in many export industries in the country, however, the strategy, if successfully implemented, leaves production leadership to the buyer, while local producers are unable to obtain market recognition or the ability to develop and present their original products. If the local manufacturer has the design capability, it will become evident in the market and will be able to propose a new product to the buyer in recognition of market needs. This way, the manufacturer can establish leadership in dealing with the buyer. As such practice spreads to other manufacturers and an entire industry, the industrial sector can transform itself to a unique presence in the export market, one characterized by strong non-price competitiveness.

4) At present, major export industries in the country are either of the labor-intensive type that primarily enjoys cost advantage from abundant labor force, or of the resource-oriented type that relies on a variety of natural resources available in the country. They are merely supplying products on a contract basis by following instructions from the buyer. They are little more than suppliers of a low-cost labor force and do not add much value to products. This vulnerable competitive advantage can easily be taken over by other emerging countries. To modernize the export industry into a truly competitive sector, they have to provide original products that address the market needs and incorporate local resources. Design constitutes an essential and core element of such product development process.

Table II-1.1-1 Examples of Design Application

Field	Example
1) Planning, management and communication aspects of public administration	• Nurturing of government officers with design techniques to serve as design producers in regional development planning • Regional planning with visions and conceptions *For improvement of quality of public service, and development of barrier-free system and facilities* • Restructuring of the entire public service system • Standardization of application forms that emphasize ease of use, i.e., easy to understand and fill out by citizens *For information disclosure, and information exchange with citizens in an interactive manner* • Development of public relation and communication systems accessible to all parts of society, and/or increased participation of citizens in the policy making process • Development and installation of a mechanism to enable interactive communication other than traditional printed media, and introduction of multimedia systems
2) Architecture and civil engineering	• Design and planning of public facilities and amenities • Design and planning of public space and auxiliary facilities for streets, ports and harbors, parks and public housing • Research and development of pedestrian walks and bridges that maximize user-friendliness and safety for all users including elderly and handicapped
3) Agriculture, forestry and fishery	• Promotion of advanced processing of primary products and convergence of production, processing and distribution systems • Development of new products and businesses by incorporating or leveraging technology in other industries • Product development by combining dissimilar materials • Development of equipment, apparatuses, tools, working cloth and the like • Preservation and nurturing of productive resources
4) Industry and economy	• Regional development integrating modernization of local industries, tourism promotion, and development of the better living environment • Development of new products and businesses that incorporate potential technological resources of the regions or local communities
5) Daily life and social welfare	• Development of life support equipment and devices, and information systems to support autonomous life of the elderly and handicapped • Development of equipment, tools and information systems suitable for home care and medical treatment • Development of mobile service systems
6) Environment (ecology and energy saving)	• Development of waste treatment systems including sewage reuse works to supplement existing waterworks and sewerage • Comprehensive waste control measures including composting and recycling of waste
7) Disaster control (emergency rescue, treatment and life support services)	• Research and development of emergency service and rescue systems according to local characteristics, such as isolated islands, mountain villages and congested urban areas • Research and development of high-grade, temporary housing and life support systems for refugees and victims of disasters
8) Public transportation	• Research and development of new public transportation systems that provide universal access for elderly and handicapped • Development of clean energy sources for public transportation systems • Research and development of local transportation systems that serve the needs of a specific region or area (e.g., snow-covered, island, mountain villages, etc.)
9) Education and culture	• Establishment of a foothold for design development that involve local residents • Research and development of educational facilities and equipment to allow integrated education including handicapped children • Establishment of a design museum

1.2 Potential and Constraints on Design Promotion

Design promotion is considered to be an imperative and effective tool for industrial development in Indonesia, producing far more benefits than other approaches. While design promotion is feasible in the country, there is an apparent lack of resources and the proper environment to develop and implement design promotion initiatives.

(1) Design promotion potential

While design promotion activities have still to be full-fledged in Indonesia, great potential is seen, including abundant design resources that can appeal to the world[1], opportunity to produce an excellent effect of design, and a growing community of highly skilled people who can integrate the resources and opportunities to bring results.

1) Indonesia is endowed with a wealth of design resources. The country consists of 300 or more ethnic groups that have settled over a long period. Each has its own tradition and culture, which taken together form a very diverse mix of design resources, some of which are not fully exploited[2]. Furthermore, as these traditions and cultures have developed in close relations with nature, the unique interface between the design resources and the natural environment has potential to attract world attention. If the design resources are effectively incorporated into product design, Indonesian industry will have an important asset to present to the world (and to the nation's people) in terms of a clear identity (or identities) of the country or region.
2) One of the issues facing Indonesian industry in promoting further development is its limited ability in product supply. As seen in many developing economies, most of Indonesian industries make products of undistinguishable design (including undistinctive appearance). As a result, they must seek comparative advantage in low-cost labor and natural resources. They inevitably compete on price by supplying low value added products without differentiation from competitors who are abundant in developing countries. They do not realize that there are a vast number of opportunities to develop and provide original products provided that design capability is acquired, including in that capability the ability to address market needs. The effective use of design would allow them to offer to the buyer new products that incorporate Indonesian resources and ideas. This also will enable them to grow out of being mere subcontractors. In particular, for small- and medium-sized enterprises that

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[1] Design resources herein used embrace diverse meanings that may expressed in a variety of words representing design elements and outcome, such as *figure, design, device, motif and pattern.*

[2] See III-5.2.

make products in which value depends on design, there must be a powerful medium to bring the product and the market together, or the producer and the consumer. Design and design process can serve as the medium. As Indonesia has many industries that belong to the category, design promotion is expected to produce significant results.

3) Indonesia has already produced a number of talented designers in various fields, including interior design, and some of them are working on the global stage in competition with foreign designers. Their activity and reputation, however, are known by only a limited number of people. Making these designers and their works known to the world will be highly effective in establishing Indonesia's identity in the field. Also, designers and design students in the country are expected to show high levels of creativity and artistic skills. Indonesian industry should realize that there is a rich stock of human resources that can be mobilized to utilize existing design resources and turn them into new industrial assets.

(2) Constraints on design promotion

At the same time, there are a number of constraints on promotion of design in the country. They are seen among design users, designers and design promotion organizations, each of which is discussed below.

1) Constraints on design use

As already discussed, there are a number of opportunities to produce significant benefits for industrial development and export promotion by using design and the design process. In fact, it is very timely and feasible to initiate formal design promotion activities.

One major obstacle to such activity, however, is the limited number of people in the country who understand the importance of design promotion. In particular, there is the lack of interest on the industry side, which must act as a core element of promotion activity. The lack of interest is seen in the following four aspects.

First of all, there is the lack of awareness of as to what effects (benefits) can be expected from the use of design. A majority of manufacturing enterprises, particularly smaller ones, are too busy or too content with the status quo to respond to new kinds of inquiries from the buyer. Few of them think about how they will be able to develop their business if they develop original products by obtaining the design capability. Even government organizations that are responsible for design promotion do not fully understand its potential.

Secondly, most foreign buyers working in Indonesia are not interested in original product development using local resources and ideas. This is partly because they tend to view Indonesia as a production center characterized by a low-cost labor force and natural resources[3]. More importantly, however, few local manufacturers propose new products and designs.

Thirdly, foreign-affiliated companies and local companies that have introduced foreign technology (particularly large enterprises) are content with current technology and products or are not confident about local design capabilities, and continue to rely on external design sources.

Finally, consumers constitute a major obstacle to design promotion. While the country has large population, its market is still small in terms of purchasing power. A high percentage of people still earn low income and do not use many industrial products. Furthermore, low-income people in urban and rural areas make their purchase decisions based on price. As local manufacturers target the low income class to avoid competition with large corporations, their products are primarily designed to meet minimum performance requirements for cost reduction, far from original design.

2) Constraints on designers

Designers as the supplier of design are not ready to raise awareness of industry. While excellent designs are seen in some fields, particularly interior design and some areas of craft design, designers have still to demonstrate their capabilities in other fields, especially industrial design and package design. Designers are expected to demonstrate what design can do for industry. In particular, they fail to use communication skills to make hypothetical presentations effectively.

3) Constraints on the promotion organization

Perhaps, the overall system to drive design promotion is most problematic. First of all, it stands on a very weak foundation; industry does not realize the effectiveness of design in the industrial development process, while design promotion has not yet become a national priority or public concern.

There are several organizations spearheading design promotion activities, including the Design Council and the Design Center, but they are facing the following constraints in addition to the lack of support from industry:

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[3] Some buyers and foreign companies propose new products by using local resources, such as a Japanese wood furniture maker that moved its production base to Indonesia in an attempt to incorporate Indonesia's wood carving techniques into their products in a form appealing to the Japanese market.

1) Their activities do not cover all regions and industries. While the Design Council is represented by related government authorities, its activities are virtually planned and implemented by MOC&SME.
2) The Design Council, therefore, depends on a single ministry for financial source and is susceptible to budgetary limitation.
3) The Design Council is made up of representatives of many ministries as well as universities and industries. Nevertheless, it is dominated by members representing government organizations and its meeting is not attended by formal members, making it difficult to discuss broad issues covering all industries and regions.
4) On the other hand, the Design Center, which was established as a core design resource, has volunteer staff from universities and designer organizations, and can be flexible in planning and conducting promotional activities compared to government organizations. However, its activities are fairly limited due to a budget constraint and the absence of full-time staff.

1.3 Basic Strategy for Design Promotion

(1) Definition of design promotion

Design promotion is defined as an act of creating and empowering a chain of flow consisting of processes that ensure that 1) good design is created and proposed, 2) applied to objects; and 3) the applied objects are utilized, for the purpose of improving the cultural and living environment or developing industry, trade or the national economy as a whole.

The design process should involve: 1) designers who propose the design; 2) design educators and researchers; 3) private enterprises, government authorities, and other organizations which apply the design to objects; 4) consumers and businesses which use objects designed, such as systems, space, media; and 5) government authorities and organizations which plan and implement design promotion initiatives.

Thus, design promotion represents activities participated in by all the above parties to improve the design process to the desirable level as viewed by each party, including: 1) the improvement of design and presentation skills of designers and the development of the social environment so as to encourage design creation and supply; 2) the raising of awareness of the usefulness of design as well as the method for design use by implementers (e.g., government and private enterprises; together with support for introduction of the design process; and 3) the raising of awareness of design value by users (private enterprises and consumers) and the improvement of the ability to identify a good design.

Furthermore, it is important to mobilize resources and develop the system to plan and implement the design promotion process.

(2) Primary targets for design promotion

The use of design is not limited to invigorating industrial and economic activities, but it is critical for the betterment of daily life of people in terms of convenience, comfort and amenity. Also, design plays an important role in formation and tradition of culture.

Nevertheless, the current situation of Indonesia indicates that revitalization of the industrial sector, which constitutes the backbone of economy and society, is the most important and urgent agenda item that affects the improvement of the standard of living of the people as well as cultural development. Thus, design promotion needs to start in this area.

In particular, the focus of design promotion should be placed on nurturing of capability at product development that incorporates or embodies unique characteristics of

Indonesia, paying attention to SMEs that have high potential to create a large number of employment opportunities, since it constitutes one of major important factors for strengthening the industrial sector through export promotion, SME development, promotion of industrial linkages, regional industry development and job creation. The following types of product development are particularly important:

1) Development of products that meet the market needs;
2) Development of products that incorporate local characteristics peculiar to Indonesia; and
3) Product development based on raw materials and parts that are locally available.

At the initial stage, design promotion activities will be carried out in industries and areas where their effects can easily be realized, as well as those related to industrial development. Then, the results of the pilot projects are made known to the public and form the basis of subsequent projects to follow.

It is recommended to select "priority" industries and areas for pilot projects according to the following criteria: (1) the areas where export-oriented industries or those serving foreign customers are established; (2) the industries producing final products that have export potential and having relatively strong ties among the enterprises to undertake projects jointly; and (3) the industries assembling final products with future prospects for local procurement of raw materials and parts.

Note that all the criteria except for (3) contain exports (or foreign customers) because in the short run the design-focused strategy will only appeal to export markets; for manufacturers serving the highly price-sensitive domestic market, it is very difficult to attract attention of consumers with non-price features. Secondly, the areas where a specific type of industry is concentrated, and the industries having strong ties within each industry, will be selected because design promotion projects need to be implemented with active participation of local communities and industries.

In overall consideration of the above requirements, industries that should be given of priority in the design promotion process have been identified as follows:

1) Small- and medium-sized, local industries using locally available resources, which export their products or have export potential: They will be encouraged to develop the ability to identify the market needs and propose new products accordingly by giving them direct contact with the market or via an adequate intermediary, thereby to create or upgrade export opportunities.

   Major opportunities identified are summarized as follows:

   a) To identify and promote product differentiation for local industries that are

specialized in crafts, furniture and other areas, observed in various regions, establish local brands and promote exports of their products.

b) To improve the reputation of Indonesian products in the market by inducing the industries relying on products with imitated designs to develop original products.

c) To help those industries which have made their products without grasping the market needs, and which targeted to the markets only within reach, to learn merchandising and marketing techniques and develop products that serve broader markets under more favorable terms.

d) To supply products having designs unique to Indonesia, which will enable Indonesia to attract new buyers who buy products giving attention to the design characteristics, instead of the current buyers who view Indonesia as low-cost production centers.

2) Small- and medium-size machinery, electrical equipment and plastics manufacturers serving the domestic market: The focus should be placed on understanding of the design process and development of the ability to plan and propose products that meet consumer needs and customer requirements, thereby to go beyond the present business practice relying on price competitiveness, and to enable them to become suppliers for large enterprises, conducive to the deepening of the industrial structure.

3) Large and medium-sized enterprises that can serve as the core of intra- and inter-industrial linkages: They will serve as contract manufacturers of parent companies, buyers or foreign partners, by making products according to designs provided from external sources. Design promotion will help unfetter them from their present subservient role and empower them with the true ability to develop original products. Particular emphasis should be placed on the encouragement of product development that addresses the market needs and uses local materials.

4) Labor-intensive, export industries (also those serving the domestic market): They will be encouraged to create products using design resources available in the country and disseminate unique design concepts to the world market.

Introduction of design will be useful not only for industrial development, but also for the Indonesian economy as a whole. Namely, pursuing the above goals will help Indonesia improve its investment climate for foreign investors, in the following respects: (1) further improvement of product development capabilities to relatively high levels of currently available production technology; (2) industry-led regional development to increase the purchasing power of consumers and create potential demand for a wide range of products; and (3) revitalization of labor force at smaller companies through the strengthening and expansion of intra- and inter-industrial linkages.

(3) Strategic thrusts for design promotion

Strategic thrusts for design promotion assuming the priority target as indicated above are as follows:

1) To encourage industries/enterprises to introduce design on their own initiative to leverage the ability of design for product development and market exploration, eliminating any restrictions on introduction of design

Most importantly, private enterprises and government organizations, key players in the design promotion process to introduce and use the design process, are aware of importance of design and have still to introduce it, apparently because they are uncertain if they will be able to gain benefits that are worth new investment and various risks accompanying it. In fact, this is why industry gives little support for design promotion activities so far.

Public awareness of design can only rise when design is widely used by industry and government in a visible way, which will encourage a further use. The widespread use stimulates designers to improve design skills. In Indonesia, however, there are a number of restrictions to prevent industry from introducing the design process smoothly. To overcome the situation, pilot projects should be carried out as a successful example to convince industry of benefits created by design and encourage them to make their own initiatives.

2) To build up the system for design promotion in a stepwise manner, concentrating resources and efforts to the most viable and effective method and approach while understanding the current restraints such as the shortages of funds, manpower and experience, etc.

Successful design promotion is carried out by a permanent system capable of developing and implementing a well-defined plan on a continuous basis. Such system has not been developed in Indonesia. At present, there are a variety of resources that can be used for design promotion. There are universities and training institute which provide design education. There are several designers' associations and organizations specialized in promotion of the craft industry. In the public sector, the Design Council is positioned as an official organization to discuss design promotion policy, and the Design Center is responsible for implementing individual policies. What lacks at present is an institutional framework to ensure systematic and continuous design promotion activities. As a result, promotion activities by various organizations are carried out separately and sporadically and fail to form a consistent process with

mutually complementary or supportive relationships. It is therefore important to build up the system to effectively mobilize and concentrate available resources on the most effective design promotion activities, parallel to pilot projects that are intended to create successful examples.

In the design promotion process, the design promotion system and actual design adoption are inseparable from each other. For instance, the former must be developed at a pace that allows the latter to catch up, and vice versa. In particular, the design promotion system must be built up according to the actual progress of design adoption among potential users and beneficiaries, so that it can support it by providing necessary resources in an effective and timely manner.

As pointed out earlier, strong support from industry cannot be expected as long as the government lacks funds and manpower to pursue design promotion policy consistently. As the design promotion system must be developed under these unfavorable realities, it is important to select the most optimum and effective approach available in the country by learning from experiences in other countries and apply limited resources to the efforts that promise to produce the most results.

3) To produce creative designers, together with development of the environment to support their creative activities.

Many industrial products made in the country are based on foreign designs or simply copy them. As they fail to differentiate themselves from other products in terms of design and performance, they inevitably compete fiercely in the domestic market to result in price wars and relentless cost cutting. As Indonesia needs to guide its industry to an advanced stage of development, it is important, among other things, to create original products that represent the country's unique identity. In other words, Indonesian industry must have the ability to develop products that meet market needs by analyzing current market conditions and by taking advantage of local resources, including raw materials, production skills and design resources, which enable Indonesian products to gain non-price competitiveness.

The product development process must be driven by designers who are capable of proposing an innovative product concept spontaneously. The innovative designer goes beyond the traditional role of devising a design solution in response to the customer's request.

Obviously, education is not sufficient, although essential, to produce innovative designers who must bear various risks when they propose a new product design. Thus, design promotion activities need to include the efforts to develop the business environment that supports innovative designers who take such risks as an entrepreneur

(e.g., prior investment for product conceptualization). Such support including provision of financial assistance schemes, will empower designers and attract new talent.

4) To raise general design levels by learning from the available precedents of excellent designs and case studies on successful design use, and improve ability to appreciate design and its quality.

One of major objectives of design promotion is to approach industrial development from an international perspective. In other words, design promotion should aim at raising industry's design capabilities to an internationally acceptable level. To this end, it is useful and important to learn from experiences in advanced countries in the design fields, especially at an early stage of design promotion.

While this can be accomplished by collecting information through formal channels including publications and overseas missions, it is important to take a participatory approach to give local designers and design-related personnel hands-on experience, such as by holding design workshops attended by first-rate foreign designers, design evaluation under their participation, and the planning of design events by foreign producers.

5) To create a favorable image of design resources in the country, disseminating originality and quality of Indonesian designs, materials and designers to the international scene.

If the country as a whole transmits positive messages on quality and performance of its products, or production activities (e.g., environmentally friendly), which are acceptable to the world, they will form a favorable image of the country and its industry and can be used as the basis of new product development. Again, there are plenty of design resources in the country that are not fully exploited, including talented designers. While introduction of the design process is expected to produce good results for the design promotion purpose, conscious efforts to make most use of design resources are critical in establishing the country's identity in design ability and expressing it as an industrial asset.

1.4 Roles of the Private and Public Sectors in Design Promotion

Design promotion activities in Indonesia need to be carried out under government leadership for the time being, due to the reasons that: (1) participation of the private sector cannot be expected much, as industry does not generally recognize the importance of design promotion; and (2) local industries, particularly SMEs, are suffering from serious damages, and the design process must be introduced urgently as an effective tool to improve the situation.

While design promotion is to be under government leadership, showing good examples of design use, and encouraging the active participation of private sector in the design promotion, the government's role should be scaled down step by step to eventually leave those which cannot be accomplished without government participation, while the private sector should increasingly take leadership in the promotion process.

(1) Basic premise

Given the recent trend in industrial policy to minimize government intervention by leaving the industrial development process to the market mechanism, design promotion activities, which are of highly private-initiative nature, should preferably be led by the private sector[1], with the minimum involvement of government.

In fact, the private sector has often been involved in design promotion activities, as discussed below. Nevertheless, there are a relatively small number of cases where the private sector plays a central role in broad activities on a continuous basis. Also, the private sector cannot conduct its activities without an adequate infrastructure. As a result, there is a high risk of failure involved in promotion activities that are carried out by the private sector alone. In fact, many promotional activities are carried out directly by a government agency or a third party organization established under the government leadership. Indonesia is no exception to this. As there is the general lack of design awareness by industry, government leadership and initiative seem to be indispensable for the time being.

Design is an interactive process involving autonomous activities of users, including government and industry, and providers, mainly designers. Users apply the design process to business activities (including government) that embrace both internal business processes (planning, system design and management tools) and customer service. On the other hand, designers provide their service within the framework of its role, potential and benefit defined in a contract.

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[1] The private sector is defined here as a sector not having any public administrative function and thus includes state enterprises and cooperatives.

For the purpose of design promotion, what role should government (both central and local) play in fostering design activities that take place between individual organizations autonomously[2] ?

To encourage spontaneous adoption of the design process by industry, the government's activities in the design promotion process should be, in principle, limited to the following areas where the government can leverage its advantages:

1) Activities that are very difficult for the private sector to carry out and are essential in driving the design promotion process;
2) Activities required to pave the way for the private sector to carry out its own activities smoothly;
3) Coordinating activities that must be done from a neutral position to ensure fairness; and
4) Activities that are widely needed and would interfere with design activities unless provided on a regular, non-commercial basis.

However, it is important to note that governments in many countries have been playing an active role in design promotion, producing appreciable results in proliferation and improvement of design[3].

To maximize end results, it is recommended to let the Indonesian government serve as the core of design promotion initiatives at an early stage in order to demonstrate tangible benefits to the private sector and induce their spontaneous participation in the subsequent stage.

1) Activities that are very difficult for the private sector to carry out and are essential in driving the design promotion process

As pointed out earlier, the industrial sector in Indonesia is generally not aware of the importance of design and does not feel the need to actively participate in the promotion process. As a result, the private sector cannot be expected to assume leadership in most areas of promotion efforts. In particular, various initiatives to reward and encourage good design – very important to raise design from its present low levels that were caused by harmful effects of previous industrial policy measures applied at an

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[2] The discussion here focuses on activities undertaken for design promotion, not including the use of design and design process in government policymaking, information disclosure, and communication with the public and local residents, or the use of design in a particular business of a particular industry or region.

[3] As seen in the UK's COID and the German government's direct involvement in design promotion, there are a lot of examples of government-led promotion, where it establishes an organization, single-handedly or jointly with the private sector, to spearhead promotion activities.

initial stage of design promotion – must be jump-started under the leadership of the public sector. Also, smaller enterprises often lack adequate access to information, product markets, technology and/or financial services, and will be increasingly handicapped in competition with foreign companies and large local enterprises under conditions of the open economy. Again, the public sector must help SMEs to survive and grow in an increasingly competitive environment. Finally, the public sector is expected to sponsor a broad range of advertisement and public education campaigns that the private sector has little incentive to carry out because of the lack of direct profits.

2) Activities required to pave the way for the private sector to carry out its own activities smoothly

Development of infrastructure to support design creation, proliferation and maintenance is an essential element of the design promotion process and must rely on the public sector at its initial phase. Public support should cover software aspects ranging from the development of networks for design creation to the development of human resources, the modification of export/import procedures and immigration procedures to facilitate introduction of the design process and the exchange of persons, provision of a financial scheme suitable for design businesses, and the buildup of the legal and institutional environment for design protection, as well as hardware aspects, including the provision of facilities to exhibit products and designs, information service through the Design Center, and supply of design equipment and devices. Further, provision of a system to encourage participation of the private sector in design promotion may be one of the important developments of the promotional environment, including preferential tax treatment for the enterprises which offer opportunities of joint research with universities, or provide financial contribution to design promotion organizations.

3) Coordinating activities that must be done from a neutral position to ensure fairness

In particular, the government is expected to play an intermediary role in establishing standard forms of contract between the designer and the user, as the designer does not have negotiating power.

4) Activities that are widely needed and would disturb design activities unless provided on a regular, non-commercial basis

At present, designs are widely copied in the country, and this practice discourages creative design activities and disturbs normal commercial transactions. The situation

may adversely affect the general image of the country in the international market. The government is required to exercise police power to crack down on illegal copying by taking into account the levels of urgency and effectiveness.

In conclusion, design promotion activities in Indonesia need to be carried out under government leadership for the time being, due to compelling reasons including: (1) participation of the private sector, except for designers' associations, cannot be expected as industry does not generally recognize importance of design promotion; (2) the designer community does not have resources to carry out design promotion activities on its own; and (3) local industries, particularly SMEs, are suffering from a lack of competitiveness, in both price and non-price terms, partly because of the economic crisis in the region, and the design process must be introduced urgently as an effective tool to improve the situation.

Then, as general awareness of the importance of design promotion rises on the industry side and active participation is seen, the private sector should assume leadership in the promotion process and the government's role should be scaled down to meet the above requirements.

If the private sector is expected to assume any of the above roles to serve the public interest, a semi-government organization should be established with close cooperation of the government. This should be the best way to mobilize and unite strengths of the two sectors, and in fact, a partnership seems to be required in many cases.

At the same time, the development of visions for design promotion and necessary coordination to materialize them should also be advanced under government leadership. It is important, however, to encourage the private sector to participate in the process by contributing its opinions. And eventually, the private sector should fully participate in the policymaking process by leading discussions in the Design Council.

(2) The private sector's role

The private sector related to design consists of the design supplier led by designers' organizations and the design implementer and user, mainly private enterprises.

While the public sector is expected to play a central role in design promotion until the private sector is ready to take the helm, an active element of the private sector, namely designers' associations, should plan and conduct their own activities under government support. In fact, the design community can and should propose its initiatives to the government and support government activities in many aspects.

In many countries including Japan, the private sector including third-sector (hybrid public-private) organizations has been actively involved in design promotion, as described below.

1) Activities by design organizations and designers' associations

The designers' association is a professional organization with the mission of protecting the interests of its members and establish their proper status in society. On the other hand, the design organization promotes design-related campaigns as one form of cultural development activity. In practice, however, the boundary is not clearly drawn and there are many organizations that serve dual purposes.

Most designers' associations, while carrying out activities for their members, such as the establishment of a design fee system and the adoption of the code of conduct, work to improve design levels through international exchanges and information gathering. Also, they provide designer information for clients.

In addition to designers' associations, some designers organize themselves into business cooperatives to conduct similar activities.

On the other hand, design organizations are established by designers and some obtain public support. These organizations often play an important role in setting directions in design activities in many countries by proposing and showing examples of new design concepts. A primary example is the Sweden Craft Association which advocated a new furniture design "Swedish Modern" that established earned a strong reputation in the international market after World War II.

2) Design-related industries

Design-related industries means industries which are closely associated with or heavily use design, ranging from publications, events, advertising, to department stores, packaging and mass media. The definition varies among countries according to level of industrialization and commercial activities. These industries often take part in public advertising and education on design by awarding various prizes, displaying and selling products of good design, and holding competitions. Some of them do so to serve the public interest, such as mass media. It should be noted that such activities are feasible only when consumers recognize the value of design and industry is capable of benefiting from the fruit of design promotion activities.

3) Other industries

Other industries, not strongly associated with design, also conduct design promotion activities such as selection and exhibition of "good design" products and the sponsoring

of competitions. They are relatively design-intensive industries, such as apparel, automobiles, home appliances and furniture. Again, their activities need to be supported by industry's strong interest in design use, while understanding the need for design promotion.

In addition, various industries or individual enterprises make indirect contributions to design promotion in various forms, including financial contributions to a local or national Design Center and participation in its events.

4) Third-sector organizations

Activities by the private sector are dwarfed by those of so-called third-sector organizations, i.e., joint public-private entities. Promotion activities conducted by third-sector organizations are of two types, those carried out in line with government (central or local) policy, and those planned by the third-sector organization. Naturally, third-sector organizations are classified into those founded by government (central or local) for the purpose of implementing a specific policy, and those founded on a voluntary basis. The former takes the form of either a government organization or a quasi-government organization established jointly with the private sector.

Many design centers are classified as third-sector organizations and conduct a variety of activities including public education, encouragement, information exchange and gathering.

Exhibitions and good design campaigns by art museums are examples of activities by the third-sector organization. For instance, the Good Design Movement made by the New York Museum of Modern Arts in 1950 is renowned as a modern design campaign from consumer perspective.

5) Educational and training organizations

In many countries, latest design movements have been led by universities, technical colleges or vocational training schools. The Bauhaus in prewar Germany is a primary example.

The most important activity that the design community should undertake is the development and management of a database of designers. The inventory taking of the major design resource can be conducted by designers' associations, while its effective utilization requires some degree of government support.

Similarly, designers are expected to take a position of leadership in setting the direction of design promotion activities and a strategy for its deployment. In fact, they are in the best position to propose central themes of various projects such as exhibitions,

competitions and workshops from a medium- or long-term perspective by identifying latest design trends. Also, they must provide necessary support for the public sector that implements such projects to ensure that the selected theme is effectively reflected in each project and the project evolve to a continuous undertaking with a consistent objective. This is considered to be one of the missions of the designers' associations.

As for the issues related to the establishment of generally acceptable conditions of design service and business practice, while they must be eventually resolved by the government which makes its judgement from a neutral position, the design community is to take the initiative in raising the issues and requesting government support. They need to act aggressively to establish a leadership position in the design promotion process.

Naturally, designers' associations are expected to assume a leadership role in these activities representing the supply side. However, they are currently not in a position to fulfill this role because: (1) their activity base is not well defined or established; (2) they have still to establish cooperative relations with one another; and (3) they do not have the organizational structure to support claim them to be representative of the design industry.

First of all, the designers' associations do not have detailed activity plans nor define the scope of activities. As a result, their members do not feel a high level of involvement in nor gain tangible benefits from their associations, which are in turn operated with little regard to the needs and wants of their members In fact, secretariats of the associations are busy in making arrangement for participation in international conferences and seminars proposed by foreign organizations and fail to plan any initiatives that serve the interest of their members. The absence of a well-defined activity plan (policy) makes it difficult to evaluate the results of their activities. To enable the designers' associations to take the initiatives, the Design Center can and should provide useful support by providing various "back-office" functions, including the provision of the necessary infrastructure (the means of communication and the place for meeting) and accounting and other administrative functions.

Secondly, the lack of a collaborative relationship among the associations is considered to be a major cause for their unclear status in the design industry. Again, the Design Center can act as the bridge to promote their close linkage.

Further, it is not realistic to expect designers' associations to represent the design industry, due to the nature of their membership and objectives. Rather, a business cooperative or a trade association representing the design industry may have to be established to serve the purpose as the industry expands.

Industry must participate in the process wherever feasible and acceptable under the current constraints. In particular, industry can contribute in the following areas:

1) To express opinions and views in the design policy making process, in particular, active participation in the Design Council.
2) To provide hands-on experience for designers, especially in the field of industrial design. To encourage individual enterprises to provide such opportunity, the government should provide tax and other incentives.

Then, participation needs to evolve to a high level of contribution by providing funds and human resources. Again, the government needs to provide a tax incentive by allowing deduction of expenses related to such contribution.

At the same time, the "third-sector" approach in the form of a government-industry joint project is considered to be effective in various areas as it can combine resources of the private and public sectors[4]. It should be promoted by providing incentives for participating companies.

[4] In some cases, the third-sector organization will be established to secure competent personnel who cannot be fully compensated under the government salary system.

1.5 Recommended Direction of Design Promotion Policy

The emphasized of strategic theme for design promotion changes according to the stage of development. As **the first stage**, emphasis should be placed on creation of successful cases of design process implementation, which will be good examples to encourage various industries and enterprises to introduce the design process, while the design promotion system should be developed so as to support the implementation. It is important to note, however, that the development of the promotion system should be limited to a minimum level required in the short run because industry is not ready to provide sufficient support and government lacks necessary resources including funds, manpower and experience. Thus, a full-fledged development initiative must wait until industry's support is mobilized.

Promotion activities in the first stage are expected to boost design demand to a certain level and will enter **the second stage** where the focus will be shifted to the fostering of creative designers who can take the initiative in design proposals. One of the key activities is to provide a learning opportunity for local designers by inviting foreign designers with the view of imparting an impact on design activities as a whole.

As design promotion reaches a more advanced level and successful results emerge in the country as model cases, they can be used to advertise the country's unique design capability and to transmit a new image to the world, as **the third stage** of promotion activities.

Major players in activities related design promotion measures will also change depending on the stage of industrial development and progress of design use. As discussed alone, in the case of Indonesia, the government sector is required to play a major role at the initial stage of design promotion. However, with increased participation of private sector in design promotion, the private sector is expected to take leadership in the future.

Major players in the design process primarily consist of: (1) designers who create and propose design work[1]; (2) government and industry which implement and use designs; and (3) end users of design including consumers[2]. Design promotion should be targeted at each of the players and be driven by projects and programs designed to meet specific needs

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[1] Including in-house designers working for individual companies and design offices acting as organizations, in addition to independent designers, and those engaged in design education and research activities, who are included in the category for the purpose of the study.

[2] Government organizations and business enterprises can also become end users.

of each group. These projects and programs are roughly divided into the following six categories according to the target group and the goal, including those intended for design promotion organizations as well as design education and training institutes.

1) Projects and programs for designers
   - Those intended to improve design skills and levels
   - Those intended to develop the environment to encourage design creation and supply
2) Projects and programs for design implementers and users
   - Those intended to raise awareness of design's usefulness and its method of use
   - Those intended to promote implementation of the design process
3) Projects and programs for design users
   - Those intended to raise awareness of design's value and improve the ability to identify it
4) Projects and programs for design promotion organizations and educational institutions
   - Those intended to build up a system to carry out or support the above projects and programs

(1) Priority of design promotion projects and programs

As discussed in II-1.3, strategic thrusts for design promotion in the country are as follows:

1) To encourage industries/enterprises to introduce design on their own initiative to leverage the ability of design to contribute to for product development and market exploration, eliminating any restrictions on introduction of design
2) To build up the system for design promotion in a stepwise manner, concentrating resources and efforts on the most viable and effective method and approach while fully taking into account the current restraints such as the shortages of funds, manpower and experience, etc.
3) To produce creative designers, together with development of the environment to support their creative activities.
4) To raise general design levels by learning from excellent designs and case studies on successful design use, and improve the ability to appreciate design and its quality.
5) To create a positive image of design resources in the country, disseminating originality and quality of Indonesian designs, materials and designers to the international scene.

Note that the degree of importance of the strategic thrust changes according to the achievement of design promotion, and priority among the projects and programs will change accordingly. Figure II-1.5-1 shows the change in emphasis of the strategic thrusts over time, conceptually.

The following sections describe how actual projects and programs will be prioritized at each of the three stages and for each objective (for details, see III-2).

(2) To raise awareness of design implementers regarding effectiveness of design and application method

Enlightenment of design implementers

Current state

Industry is still in the infancy stage of introducing design and the design process. Only a handful of enterprises have started to use design as a product development tool. Although many enterprises recognize importance of design's role in creating competitive products, they are reluctant to develop their own design resources because product development is left in the hands of their parent companies or buyers. Also, those developing their own products are content with imitating designs available on market, for they fear that unique designs would be reflected in higher prices and thus would not be appealing to the domestic market that is highly price-sensitive (particularly target segments of local enterprises).

Implementation strategy for promotion projects and programs

The enlightenment campaign targeting design implementers must encourage many enterprises that are effectively prevented from introducing the design process under the unfavorable conditions. Clearly, merely showing good designs does not give them much incentive. Instead, it is important to send a clear message to them that the development of their own products by using the design process will bring more profits than the continued reliance on parent companies or buyers.

Once a sufficient number of enterprises acquire an interest in design and its implementation, they should receive further encouragement by providing them with opportunities to create actual designs, including prototype products, and showing good designs at workshops and other settings. In this conjunction, it is important to devise a more structured plan for the enlightenment campaign and develop an infrastructure to implement and support various projects and programs.

(3) To raise awareness of design users regarding design's value and improve their ability to evaluate design

Enlightenment of design users

Current state

Design users, primarily general consumers, opt to make purchase decisions based on price due to financial limitation, while they have general interest in well-designed products, living space, environment and systems.

Implementation strategy for promotion projects and programs

Penetration of good design into the market is driven by the ability of consumers to identify it, which must then lead to purchase decisions on the basis of design quality.

At present, however, it is very difficult to transform the potential ability of consumers to understand design quality to an actual desire to purchase well-designed products by an enlightenment campaign alone. In other words, the effective campaign must have more breadth and depth than that contemplated within the scope of the study. The enlightenment campaign for consumers is therefore given low priority in terms of urgency and effectiveness.

Nevertheless, it is important to develop an aesthetic sense among consumers, which should be sharpened to become one of the factors in purchase decision. For this purpose, it is desirable to start general design education during elementary education (say, the latter half of primary school years), for which the design community should provide support[3].

(4) Promotion of design implementation

Promotion and support

Current state

Private enterprises intending to introduce the design process, particularly small- and medium-sized enterprises, will presumably face difficulty in the following respects when they actually attempt to do so:

1) Technical difficulty in incorporating design and the design process into products;
2) Difficulty in finding competent designers and communicating with them effectively, including contract administration; and
3) Difficulty in funding the implementation cost (e.g., hiring of designers, market study, product development, and prototype) and absorbing it within the production cost.

[3] In 1998, the Design Center published a booklet entitled "What is the Design?" for public education purposes, in cooperation of the Japanese government.

At present, there are no programs and projects that help design implementers to overcome any of the above difficulties.

Implementation strategy for promotion projects and programs

Projects and programs to support design implementation efforts are therefore devised to mitigate the above difficulties through three stages.

At the first stage, pilot projects are initiated at selected enterprises that are ready to introduce the design process by providing broad support, thereby to use them as showcases to advertise the effectiveness of design implementation. Also, the scope of the project can be extended to prospective enterprises or products for which it is difficult to conceptualize the design implementation process. Support should include basic study and research as well as technical assistance covering the provision of raw materials and the manufacture of a prototype.

At the second stage where more and more enterprises desire to introduce the design process, the support system should be expanded in scope and capacity. Most importantly, the support staff needs to be increased to meet demand. In fact, research and study activities provide a good opportunity to educate support staff. For this reason, research and study will be intensified in the second stage, while an official system to provide technical assistance is initiated, such as the establishment of an organization specialized in technical guidance in design and the designer adviser system. In the process, care should be taken to educate support staff with adequate design skills by inviting foreign designers as instructors.

Then, in the third stage where a sizable number of enterprises will participate in design implementation, emphasis should be placed on projects and programs that facilitate the initiatives of enterprises, including: (1) provision of information on designers to enterprises; (2) incentives for design implementers such as exhibitions, publicity and awards; and (3) financial support and a tax incentive to pave the way for design implementation. In addition, proper protection of design and designers' rights are critical in ensuring steady growth of design implementation, requiring special measures (as discussed separately).

(5) To improve design skills and levels of design work

Encouragement of good design

Current state

Several design competitions have been held to improve design skills and raise the levels of design work in the country as a whole. However, they failed to produce

notable results so far. There are several reasons for this. First of all, the competitions have not been widely announced so as to attract a large number of proposals. Secondly, there is little incentive to participate in the competition because demand for design (in particular, domestic demand for industrial product design) is very small. Thirdly, the result of each competition does not represent high levels of design work, and thus does not attract the attention of industry.

Implementation strategy for promotion projects and programs

The success of the activities to encourage good design depends on growth of design activities until they reach a sufficient level. Thus, the first stage of design promotion programs in this field should focus on activities to promote design implementation, such as study and research.

On the other hand, activities to encourage good design play a more important role when the pace of design implementation among enterprises begins to pick up. Thus, they should be given priority in the second stage or later. More importantly, activities to encourage good design should not be limited to a domestic level; they should not be content with selecting from local designs. Instead, efforts should be made to learn from excellent designs made in other countries. This should include the planning of design events. Know-how in event planning should be learned by hiring foreign planners and producers as required, otherwise the quality of design events would remain at the current level. Thus, the second stage of promotion programs should include the use of foreign designers and event planners for the purpose of educating and stimulating the local design community.

Use of design information and exchange with foreign industries and organizations

Current state

As pointed out earlier, learning from good design and successful cases of design use is very important to improve design skills and raise the levels of design work. In reality, however, it is difficult for most designers in Indonesia to obtain such learning opportunities (except for highly reputed designers having a lot of design projects with foreign partners). Also, it is generally difficult to obtain design-related information.

Implementation strategy for promotion projects and programs

While information gathering efforts such as studying abroad or the sending of a special mission cannot be easily carried out, there are various methods to collect design-related information relatively easily and less costly. For instance, periodical publications of foreign design associations and trade magazines carrying the notices of

design competitions are good information sources, not to mention numerous web sites on the Internet. Information can be collected and made available at the Design Center. The establishment of a centralized information source should constitute the first stage of activities in this field.

On the other hand, it should be noted that strong support of industry is a prerequisite to promotion of design exchange activities with foreign counterparts. Also, the design community in the country cannot benefit from such activities until design promotion efforts have reached a sufficiently high level and all the design-related parties have gained a certain amount of experience. For this reason, the exchange with foreign counterparts should be limited to special events and other opportunities initiated by others.

Design research and study and dissemination of results

Current state

Research and study related to design are highly valuable in the design promotion process as they provide useful information for enterprises who intend to use the design process, for guiding designers in new directions of design and emerging design fields, and for developing design expertise of the support staff through the process of gathering, analyzing and disseminating information. While some universities conduct various research products in the design field and joint design development projects with individual enterprises, most research efforts are less concerned with commercialization of their results, while there are few cases of joint efforts.

Implementation strategy for promotion projects and programs

Design research and study is one of the activities that should be started at the first stage of design promotion activities. Specific subjects of research and study need to be determined by taking into account the actual state of design use by industry and society as well as other key trends. In particular, all the related parties should agree on what key trends they are to focus on, and research activities should be carried out accordingly in order to wisely utilize scarce resources and obtain highly focused, useable results. The first activity should therefore be the establishment of a formal fixed place to discuss and agree on an agreeable research policy and direction and announce the results. This can be accomplished by revitalizing the Design Council and building research networks consisting of research institutes, universities and other related parties. Also included are the development of basic design information required to help create original designs and studies on craft resources that should form the basis of selecting a specific industry for focused development in the future.

In the second stage, where the research and study infrastructure is assumed to be in working order, research activities should be launched with care to ensure that they are abreast of latest world trends and are conducive to commercialization. This can be done by acquiring help from foreign experts who may work as resident advisers to supervise projects. At the same time, joint research projects by university and industry should be encouraged as industry is expected to recognize importance of design research at this stage.

In the second and third stages, the focal point of research and study should be shifted to a direction meeting future needs. The possible subjects include design in the post-industry society, as seen earlier as a subject of attention in industrialized countries.

Education and manpower development

Current state

Major goals for design education and human resource development in the country are twofold: (1) education of innovative designers who can take the initiative in proposing original designs; and (2) education and training of design promotion personnel. Design promotion personnel includes those who provide guidance for design implementers, government officers who plan and carry out design promotion activities, and persons who provide guidance and consultation for the former. At present, design education is primarily carried out by education institutions, with very little being provided by other organizations.

Implementation strategy for promotion projects and programs

The primary goal for the first stage of design education activities is to offer education and training opportunities at workshops that are held in various areas, for dissemination of design information and to provide an opportunity to train experts who can support pilot projects that are contemplated here. Also, research and study activities must be encouraged for education of designers to improve the ability to create original design.

(6) To develop the environment to encourage creation and delivery of design

Environment fostering the design industry

Current state

To develop the environment to encourage creation and delivery of design by designers, the following activities are required: (1) promotion of public recognition of the designer and the design industry; (2) standardization of design contracts and business practices; (3) expansion of design opportunities; and (4) support to establish the foundation of design business. At present, several programs related to (4) are underway, targeting SMEs, but

do not seem to meet their needs.

Implementation strategy for promotion projects and programs

While the primary goal should be the expansion of design opportunities, it cannot be achieved in the first stage by simply implementing a special program or two. Rather, efforts to induce design implementation by industry will serve the purpose by creating actual demand for design. For instance, the design adviser program, as proposed above, provides selected enterprises with hands-on experience in using the designer and his service. Once they understand the value of the designer and the way to deal with him, design opportunities are spawned in more industries and enterprises. Thus, the first stage of activity should focus on support for public recognition of the "design profession and professional" by designers' associations, and organization of designers into a business cooperative to win contracts from government and related organizations.

In the second stage where design demand is expected to grow, support should be shifted to standardization of design contracts and business practices and the establishment of the foundation of design business.

Design protection

Current state

Activities to protect design and designers' rights include: (1) the development of the legal infrastructure including laws and regulations, and their enforcement system; (2) actual enforcement by government; and (3) voluntary regulation by industry.

While the legal infrastructure is the underpinning of design protection efforts, it is not enough to assure a full effect. Legal enforceability must be combined with voluntary regulation by industry. Indonesia is currently in the process of building the basic portions of the legal infrastructure.

Implementation strategy for promotion projects and programs

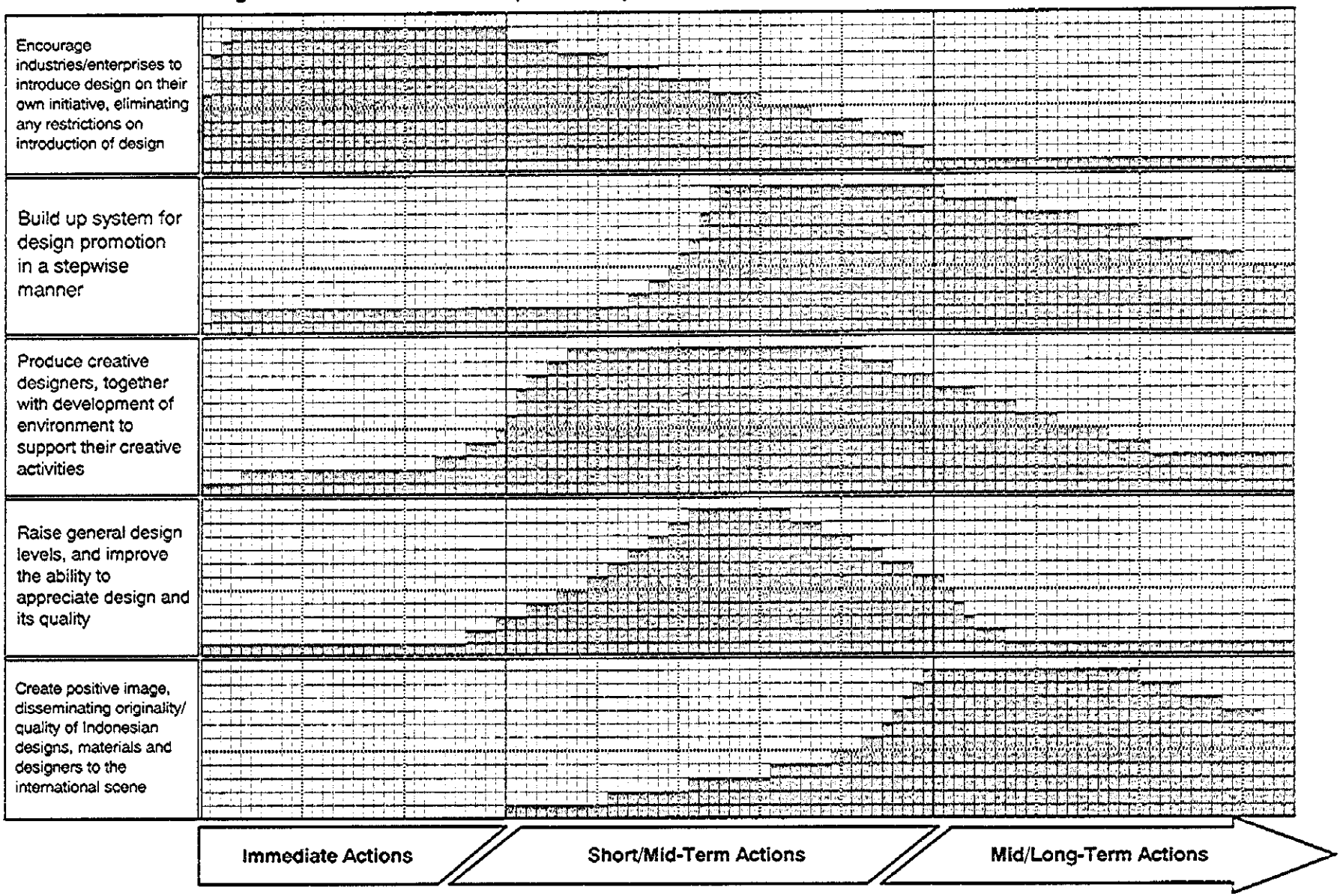
To enforce design protection effectively, voluntary regulatory efforts by industry must be activated in close coordination with legal enforcement by government. Effective voluntary regulation can only be driven by a trade association that is active in serving the interest of the industry and members it represents[4]. With the active participation and trust of its members, the trade association can enforce an voluntary design protection agreement that is binding on the members. Thus, voluntary regulation becomes effective only when design implementation becomes pervasive in various industries that

[4] Most of industrial associations are of nature of a salon among the members.

begin to realize the need for design protection. As a result, actual programs to encourage voluntary design protection efforts should be planned in the second or later stage.

Finally, government enforcement of design protection can only serve the purpose of design promotion after a sufficient number of original designs are created and incorporated into products available in the country. Thus, related programs should preferably be devised in the second stage or later.

Figure II-1.5-1 Shift in Priority of Strategic Thrusts for Design Promotion (Conceptual)



1.6 Organizations Responsible for Design Promotion and Demarcation of Their Roles

Design promotion activities in Indonesia need to be carried out under government leadership for the time being, due to the reasons that: (1) participation of the private sector cannot be expected much, as industry does not generally recognize the importance of design promotion; and (2) local industries, particularly SMEs, are suffering from serious damage, and (3) the design process must be introduced urgently as an effective tool to improve the situation.

With design promotion under government leadership, showing good examples of design use, and encouraging active participation of the private sector in design promotion, the government's role should be scaled down step by step to eventually make up only functions which cannot be accomplished without government participation, while the private sector should increasingly take leadership in the promotion process.

Organizations responsible for design promotion are roughly classified into two hierarchical levels according to function: (1) the policymaking level responsible for formulating, aligning and operationalizing national-level, design promotion policies; and (2) the implementation level to carry out individual design promotion projects and programs. Generally, design promotion projects and programs are carried out by government, the public sector and/or the private sector according to their predetermined roles. If the public sector or the private sector plans its own project that cannot be carried out on its own due to the lack of resources or support, as happened in many cases, it will find a sponsor (grant organization) or establish the third-sector organization jointly with the public or private sector, as the case may be.

It should be noted that some of promotion activities carried out by government organizations should be in the hands of the private sector, but they are temporarily taken care of by government due to the inability of the private sector to handle them for various reasons. Such activities should be transferred to the private sector's control when it becomes ready to carry them.

1.6.1 Formulation, alignment and operationalization of design policy

In most cases, formulation, alignment and operationalization of design policy are taken responsibility by the government agencies or organizations which may be positioned in-between the following cases at both ends: namely, (1) a certain department of the central

government that almost exclusively takes the responsibility; or (2) an independent, ad-hoc organization in private sector involving representative of government. When the private sector plays a more important role, the council-type organization assumes leadership, while government has no representative or participates as the secretariat that only contributes in the process of operationalizing proposals and recommendations made by the council. On the other hand, when government assumes a dominant role, no council is established or a council controlled by government staff is used.

To encourage autonomous activities of the private sector, it is desirable to select the council-type organization with broad participation of industries, whereby they are involved in the policymaking process. In Indonesia, however, industry is not ready for full participation, and the government is expected to lead the process. At the same time, the existing Design Council should be fully utilized to collect and reflect opinions of the private sector. Then, as industry begins to recognize the importance of design promotion, the council should be expanded in terms of its organization, to encourage full participation in the policymaking process.

It is recommended here to assign a department of the government to the function of formulating, aligning and operationalizing design policy, referred to as the "central policymaking organization for design". On the other hand, the Design Council, which is positioned as the foundation for the future policy council, is called the "design policy deliberation organization". Each organization and its role are defined as follows.

(1) Policymaking organization of the central government

The policymaking organization, a department or division of the central government, will be responsible for drafting and reviewing of design promotion policy on a national level, legislation to authorize such policy, and budgeting. In addition, it is expected to develop promotion policies and programs on a regional basis to make up for the lack of resources at the local government level, and it serves as secretariat of the Design Council. Further, it will supervise Design Center in the latter's implementation of various programs that reflect the central government's design promotion policy and help achieve its goals, and it will coordinate policies of related authorities and organizations.

Generally speaking, national design policy is not systematically established but rather is formed in a continual process to meet the changing needs of each country over time. Also, not all design-related policies and programs are established and managed by policymaking organization alone. As discussed later, design promotion activities are often conducted as part of other ad-hoc programs engineered by government organizations responsible for such objectives as industrial development, SME and cooperatives promotion, regional development, export promotion, and so on. In the case

of a government program that needs to be strictly enforced, for example, one related to protection of personal life or safety, it must be managed by a specifically designated ministry or department having jurisdiction, even if the program contains interdisciplinary elements. Otherwise, prior consultation is required with other ministries or departments which intend to implement related programs. However, design promotion does not require such strictness. It does not need to be implemented and controlled by a designated policymaking organization in a unified manner.

Rather, the role of the policymaking organization is to set forth the direction of design promotion activities that are carried by various organizations, together with coordination being made as required. In addition, it may implement a specific program on behalf of another organization which is unable to do so, if the program is considered to be highly important in carrying out the overall objective of design promotion.

Ministries that may possibly take responsibility for policymaking include MOIT, MOC&SME, Ministry of Education and Culture, and agencies such as BAPPENAS. It is up to the Indonesian government to decide which ministry should take responsibility for policymaking. However, it is important that the organization should be in a position (in terms of both authority and ability) to formulate policy in consideration of overall factors, rather than the interest of the ministry it belongs to, and coordinate the interests of related ministries.

(2) Organization to deliberate design policies

An organization (or a council) should be established to deliberate design policies, reflecting opinions and intents of related organizations on national design policy and its direction, and to provide related parties with an opportunity to participate in the policymaking process. The council will convene annually or bi-annually to: (1) review activity reports of government organizations responsible for implementation of design promotion policy; (2) discuss their action plans; and (3) review and revise design policies and programs as required.

As discussed earlier, Indonesia already has a similar organization called Design Council, which consists of representatives of related ministries and organizations, but does not well represent industry circles and local government bodies. The design policy council proposed here is to establish a larger organization with participation by much more industries and regions and capable of discussing a wider range of issues. Such a deliberation process is expected to encourage active participation of the relevant industries and regions in design activities and its promotion. The council will convene

annually, while its secretariat (possibly provided by the Design Center) will be fully equipped to draft and implement most of the council's activities. Also, ad hoc committees will be established for specific fields or themes to ensure that a critical program or project is implemented as planned.

Although most ad hoc committees are established and abolished as the needs arise, the following will be expected to become main subjects of discussion. Initially, more than two subjects may be handled by one committee, which will be divided according to each subject in keeping with expansion of the council's activities:

- Design center management
- Industrial/regional design promotion
- Encouraging of design introduction
- International exchange
- Design protection

The organization and convening of the Design Council will be the responsibility of the policymaking organization, although its organization should be prepared in consultation with related ministries and agencies.

1.6.2 Implementation organizations and resources

Organizations that are expected to participate in the design promotion process include: (1) government departments responsible for design policy formation and implementation, and organizations established upon recommendation of the policy council to implement design promotion projects and programs; (2) government organizations (including local government) responsible for industrial development, the fostering of SMEs, export promotion, regional development, and education, which logically perform some forms of design promotion functions; (3) private or third-sector design related organizations and associations (designers' associations, trade organizations representing industries that have strong interest in design promotion, and design promotion organizations); (4) trade organizations representing industries that introduce or use the design process; (5) private organizations serving public interest (including corporations, companies, associations); and (6) educational institutions related to design.

Key promotional activities to be introduced in the country were compared with the above organizations to identify which activity should be carried by which organization, including the temporary demarcation of roles under the present conditions and restraints. The result is summarized in Table II-1.6-1.

If the above organizations are capable of carrying out promotion activities according to their own objectives, plans and resources, only a central coordination function may be required to integrate individual activities into a concerted effort. In reality, however, the situation is not that simple. It is difficult to obtain sufficient support from industry to assist promotion activities, while most government organizations face resource constraints in terms of funds, manpower and experience. Furthermore, private organizations, third-sector organizations and educational institutions will not likely be able to conduct autonomous activities due to financial limitations.

Under these circumstances, efforts should be made to concentrate the limited funds and manpower available on the Design Center, which is to serve as a design utilization base, as well as on government organizations closely associated with design promotion policy. Activities of the Design Center should then be aligned with those of the related organizations so as to maximize the efficiency and effectiveness of various design promotion projects. The result-oriented approach is expected to raise the motivation of industry to use design for business purpose and draw the support of industry, which will secure the basis of expanding promotion activities in the future. The proposed arrangement for the roles of the relevant organizations, as shown in Table II-1.6-1 (previously cited), was developed to accomplish the immediate objective.

Table II-1.6-1 Design Promotion Organizations and their Role for Design Promotion

	Design Center (IDC)(*)	Government agencies in charge of development of industry, SMEs, export, and regions	Design related organizations in private sector/ the third sector	Industrial associations of non-design related industries	Private organizations contributing to work for common welfare	Design-related educational institutes
		MOIT, NAFED, MOC-SME, Regional Governments	Designers' associations, industrial associations of design-related industries, design promotion organizations		Non-profit corporations, Mass media	Universities, vocational training organizations
(1) Enlightenment of design implementers	▼ ▽ ○	● Creation of pilot cases	○	○		
(2) Enlightenment of design users	▼ ▽ ●		○		○	○
(3) Promotion and support	▼ ▽ ○	● Design guidance				
(4) Encouragement of good design	▼ ▽ ●	○	○	○	○	○
(5) Use of design information and design exchange	▼ ▽ ●		○		○	
(6) Design research and study and dissemination of results	▼ ▽ ●	●	○	○		●
(7) Education and HRD	▼ ▽ ● Support for design training	○	○	○		●
(8) Environment fostering the design industry	▼ ▽ ○	○	●	○		
(9) Design protection	▼ ▽ ○		●	●		

Note: ▼ Planning of integrated projects and programs, ▽ Coordination among the relevant organizations, ● Undertaking of activities, ○ Support for the activities

(*) Basic policy making and its deliberation are the functions of "Design policy making body of the central government", and "Design Council", respectively.

1.7 Desirable Role of the Design Utilization Base

The design utilization base is an organization that plays a central role in carrying out design promotion activities. The existing Design Center (fully, the Indonesia Design Center, IDC/PDN) was established with this objective in the case of Indonesia. The center is managed and operated with the government being the major source of operating funds, while the government and design community provide staff. The government is required to continue to be the major source of operating funds for the time being, because of the fact that (1) participation of the private sector cannot be expected much, as industry does not generally recognize the importance of design promotion; and (2) local industries, particularly SMEs, are suffering from serious damage, and (3) the design process must be introduced urgently as an effective tool to improve the situation. However, the budget constraint is also a serious matter for the government, and it could become the major impediment factor for design promotion. Thus, as to be discussed below, it is hoped that the private sector will become the major player as soon as possible.

The following discusses the desirable role of the design utilization base, in view of its role and activities, establishment and management structure, location and equipment.

The design utilization base may take the form of a national organization, a regional organization or an organization focusing on a particular industry and could the referred to as the Design Center.

On the other hand, the design promotion organization (or association) also takes part in design promotion activities that cover a specific area (country, region, etc.) and/or a specific field (industry), but it differs from the design utilization base in that it is concerned with only a part of design promotion efforts required for the area or industry, often where it has special interest, rather than coordinated activities in line with a specific policy.

The equivalent of this design utilization base has been used in many countries as the springboard for implementation of their design policies, particularly at an initial stage of design promotion. Then, in countries having a matured design industry, including Japan, the leadership of design activities has been moved to the private sector (industries and/or trade associations) and the design utilization base has become specialized, by a shift to meeting the needs of a particular area or field. At the same time as this, the focal point of design promotion efforts at a national level were shifted to support for SMEs in the use of design, support for the design industry to establish itself as a key industrial sector, and international exchange of designers and design skills. Table II-1.7-1 compares national-

level design utilization bases in neighboring countries, their activities, ownership and management structure.

Indonesia has IDC (Indonesia Design Center; Pusat Desain Naional (PDN)) that is positioned as a national-level design utilization base, while there is no regional base.

As for the design utilization base focusing on a specific subsector or field, Jakarta Design Center (JDC) has been established to serve as a general exhibition center for furniture and interior products under the support of the Interior Designers' Association. Functionally, however, it is considered as a design promotion organization. Similarly, the Design Development and Training Center and the Indonesia Handcraft Design Development Foundation are also positioned as design promotion organizations.

In the following conclusion, IDC is assumed as the national-level design utilization base in Indonesia.

(1) IDC's role and activities

The Design Center is responsible for carrying out projects and programs planned by the design policy formulation department, which cannot be implemented by other organizations, and for assisting other organizations in project implementation.

In the process, the Design Center serves as a bridge among major players in the design promotion process, namely the central and local governments acting as design policy makers and implementers, designers who create and propose actual designs, industries (and government organizations) introducing and using the design process, and consumers as design users. Notably, previous Design Center activities in many countries, particularly in Asian countries, tended to overemphasize support for cultivation of business activities while largely neglecting the role of bonding actual design communication and transaction among the participants. In the future, the role should be further expanded to support for revitalization of a specific region and its industry and the development of networks with foreign organizations and resources. Key functions of the Design Center, which are considered imperative for fulfilling the above roles, are summarized in Table II-1.7-2.

Typical functions of Design Center

1) To communicate the effects and benefits of design to citizens, government organizations, industries and other users;
2) To serve as a bridge between design and its users (citizens, government and industries);
3) To develop and operate systems required to upgrade design capabilities in each region;
4) To identify and define design needs in each region and provide them for designers as potential market information;
5) To spur, support and encourage design resources and skills to enable designers and design community to meet the local needs for diverse design functions including planning tools;
6) To build up an integrated ability to provide design resources according to the local needs by forming networks of designers and other experts in and outside the country;
7) To develop and maintain a system to store information on local assets related to design (cultural, technical, manpower, and financial, etc.) in an accessible form, thereby enabling conscious designers to propose necessary initiatives and actions to responsible organizations in each locality;
8) To conduct continuous research and study on what design elements will become important in the future and which will be feasibly delivered in a particular region or area;
9) To conduct business-oriented activities to aim at self-financed operation of the center; and
10) To conduct research and study on worldwide design trends, particularly of Asian countries and regions.

In the short run, the Design Center should focus on activities those directly or indirectly related to the construction of the foundation for design promotion. More precisely, it promotes assignment of design staff to relevant organizations and provides training for them, thereby to support the organizations in making the first step in design promotion activities. Also, it is responsible for preparing design development programs to assist the promoting organizations and provide support for implementation as required.

In the longer term, the Design Center will shift its focus to activities furthering the

encouragement of good design as well as the effective use of design. Particular attention should be paid to increased participation by industry by motivating them properly.

(2) Ownership and management structure

The ownership and management structure of the Design Center, when positioned as the national-level design utilization base, may take any of the following forms: (1) a government organization or a department or other functional unit; (2) a non-profit organization jointly established by the private and public sectors; or (3) a profit-seeking organization (e.g., joint stock company). In selecting the most suitable ownership and management structure, various factors need to be taken into account, including: (1) priority in goal setting for design promotion[1]; and (2) possibility of contribution by the private sector to the establishment and management of the Design Center.

As shown in Table II-1.7-1 (previously cited), the design utilization bases in neighboring countries are generally established and operated as government organizations financed by government budgets. This approach is feasible in a country where government has sufficient financial resources to provide firm support for implementation of its industrial policy at large. However, as the private sector becomes increasingly involved in design promotion activities, the government organization is unable to meet the diverse needs of various parties involved in the process because of its rigidity inherent in the bureaucratic system. As a result, the design utilization base is isolated from the mainstream of design promotion activities that are now driven by the private sector. In fact, the neighboring countries where the design utilization base is successfully operated by government will face reality in due course and will have to incorporate private initiatives in most part of design promotion activities, except for those intended to support SMEs. Support for SMEs is intrinsically of public nature. Yet, flexibility is required to address the needs of individual enterprises that change over time, and the locus of the design utilization base must be shifted from the national level to the local level.

Although participation of the private sector in foundation and management of the design utilization base is desirable to permit flexibility in design promotion activity, the approach is not taken in the neighboring countries because of the same situation facing Indonesia; industry is not aware of importance of design promotion and accordingly it is

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[1] Basically, two options are available: (1) To focus on the SMEs and other specific sectors that do not have adequate access to information, technology and/or market; and (2) to focus on development of the industrial infrastructure. This implies that the design utilization base must have different functions with industrial development.

difficult to draw active participation. This is a typical problem commonly seen in the initial stage of design promotion efforts, and government has no choice but to give an initial push by establishing and operating the design utilization base. As pointed out earlier, however, this approach does not work well if government lacks a healthy financial base to allocate the operating budget on a continuous basis, as seen in the Philippines and Indonesia.

To overcome the situation, the current operating structure of the design utilization base in the country must be reorganized to secure the legal ground, financial base and manpower to support its activities, while capitalizing on the strengths of the joint organization by the private and public sectors.

First of all, the Design Center needs to have a steering committee that gives advice on the center's day-to-day activities and provides necessary support (or the committee may be founded as a special committee of the Design Council). The committee members should include representatives of organizations that can give technical support, such as designers' associations, just like the existing committees of the Design Center.

The Design Center should be established as a ramification of existing IDC to avoid difficulty involved in the establishment of a new organization. However, the current activity level of PDN under MOC&SME does not meet requirements for the national-level design utilization base. While the Design Center may be placed under jurisdiction of MOC&SME, its scope of activity should be expanded to the national level by enlarging the Design Council or other means.

As for staffing, at least one full-time employee should be added. This is the minimum requirement in consideration of the current difficulty in increasing government staff. The new person can be a specialist in operation and coordination of the center's activities, while voluntary staff from the design industry will provide technical support. In future, however, the center should have its own full-time staff who has design background.

The Design Center should be financially self-supportive in the long run, with minimum support from the government budget. This is critical to ensure sustainable operation of the center. Major financial sources of the Design Center are:

- government budget
- contributions by the government and the private sector (including income from investment of the basic fund), and
- operating revenues.

Clearly, it is very difficult to raise enough funds from contributions by the private sector alone, while operating revenues can be limited as service rates must be set at relatively low levels for policy consideration. Again, government support will play a central role at the initial stage and the financial plan must be made accordingly. Then, as design promotion activities gain momentum and public awareness rises, increases in contribution and operating revenues can be expected. Note that deficits must be financed by government support or other sources.

Private funds can be collected in the form of: (1) membership fees; and (2) special contributions. In the latter case, the Design Center may receive contributions directly as its operating funds or a special fund may be established to pool the raised funds and disburse them to the center on request. For the Design Center, it is recommended to establish a separate fund that will finance design promotion activities in general, in addition to the center's activities, for the following reasons:

1) The fund can easily be managed and is the best instrument to collect contributions of varying sizes.
2) By disbursing money through the fund, the Design Council can manage the Design Center's activities on the basis of a prearranged plan.

(3) Location of the Design Center by function

The Design Center's functions can be classified into the following four types on the basis of their locational requirements. The following reviews the requirements for each function and the criteria for site selection.

1) Head office and coordinating functions

These functions include project development and international exchange and require communication with outside organizations. As a result, they need to be located in a large city where government and business facilities are located and an adequate mean of communication is available. Building or finding a new facility is difficult due to various constraints, and it is desirable to use the existing Design Center.

2) HRD function

The function is concerned with development and management of training courses and should also be located in a large city in order to maintain close communication with various organizations and secure good access for persons who receive training. However, the communication facility may be separately located from the training facility. This function may be accommodated in the present office.

3) Exhibition function

This function requires a standing exhibition space, though it is not necessarily a permanent facility, to obtain an established recognition of existence of the space by customers, and for their convenience in visiting it repeatedly. This space must be easily accessible by customers and other related parties. In particular, it must be located in an area where business facilities are concentrated, with good access to transportation. In addition, the physical facility needs to be designed to allow quick entry and exist of a large number of people. For this reason, the exhibition function should be located in an appropriate location by renting a new facility.

4) R&D function

This function needs to be in a location attractive to R&D personnel and should be accessible from and to related research facilities. Candidate sites include the use of an industrial research and guidance organization in Bandung (such as B4T).

Table II-1.7-1 Design Promotion Centers in East and South East Asia

	Korea	Malaysia	Singapore	Thailand	Taiwan	China
Name of Organization	Korea Institute of Industrial Design Promotion	Malaysia Design Council	Design Center, Singapore	Design Service Center	Design Promotion Center	China Industrial Design Association
Form of Organization	Government Organization under Ministry of Trade, Industry & Energy	Government Organization under Ministry of Science, Technology & Environment	Division of Singapore Trade Development Board, Ministry of Trade & Industry	Division of Department of Export Promotion, Ministry of Commerce	Managed by China External Trade Development Council under Industrial Development Bureau	Semi-state body supported by State Economy & Trade Commission, etc.
Year of Foundation	1970	1993	1992	1992	1979	1987
Number of Staff (designers)	146 (50)	13	N/A	N/A	80 (60)	N/A
Purpose and Activities	<Purpose, Aim> -Strengthen competitiveness of Korean Industries by promoting industrial design activities <Activities> -Information service -Publishing (book, periodicals) -Research & Development -Competitions, awards, exhibition -Seminar and workshop -Membership service -Designer reference	<Purpose, Aim> -to lead and to coordinate design activities in order to enhance the competitiveness of Malaysian products -to promote good design generally <Activities> -Information service -Publishing (book, periodicals) -Press and publicity -Competitions, exhibition -Conference, seminar and workshop -Selection Malaysia Good Design Award	<Purpose, Aim> -to help Singapore manufactures upgrade design -to assist the local design industry to upgrade design ability -to educate consumers to appreciate good design <Activities> -Design referral -Competition, award, exhibition -Seminars & workshops -Exchange	<Purpose, Aim> -to support and encourage manufacturers/exporters to produce new and innovative products with original designs <Activities> -Design referral -Competition, award, exhibition -Seminars & workshops -Membership service (design clinic, etc.)	<Purpose, Aim> -to help raise the level of industrial design -to improve quality, image and competitiveness of Taiwan-made products <Activities> -Information service -Competitions, exhibitions, seminars -Selection and promotion of Taiwan's "Good Design Mark" -Promotion of new concepts & technologies -Liaison & coordination	<Purpose, Aim> -to level up industrial design -dissemination of design mind -to support designers <Activities> -Information service -Design referral -Awards -Design Exchange -Press & publicity -Membership service

Table II-1.7-2 Function of Design Center

Function	Project Program
1) Communication (dissemination of information)	• Manpower supply, consultation and coordination • Sponsoring of design competitions • Publication of design and similar magazines • Development of design database and management of library
2) Human resource development	• Operation of a design academy or similar educational institution
3) Business development	• Provision of advanced design tools (e.g. CG, CAD/CAM systems) with lending service for designers and companies • Joint projects to work with design-related issues (business research activities) • Technical and financial support • Support for protection of design-related rights
4) Study, research and development	• Joint research and study with companies and designers, concerning most advanced issues (e.g., methodology for product development in the aging society) • Research and development on human resource development related to design personnel and educational programs • Research on design development techniques • Research on design evaluation
5) International exchange	• Exchanges with design-related organizations and institutions in foreign countries • Active linkage and alliance with design-related associations in Asia including JDF
6) Exhibition	• Planning and sponsoring of design events and exhibitions