

## **Chapter 3.**

**The master plan for SASO activities for consumer protection**

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## Chapter 3. The Master Plan for SASO activities for consumer protection

In this chapter, an overall description about SASO's role for consumer protection is summarized in Clause 3.1. Each item in the Master Plan is described in Clause 3.2, through 3.8., respectively. The five year schedule for the development of the Master Plan is listed up in Clause 3.9.

### 3.1. The target role for SASO regarding the consumer protection scheme

Figure 3.1.-1. SASO's role at present and infuture.

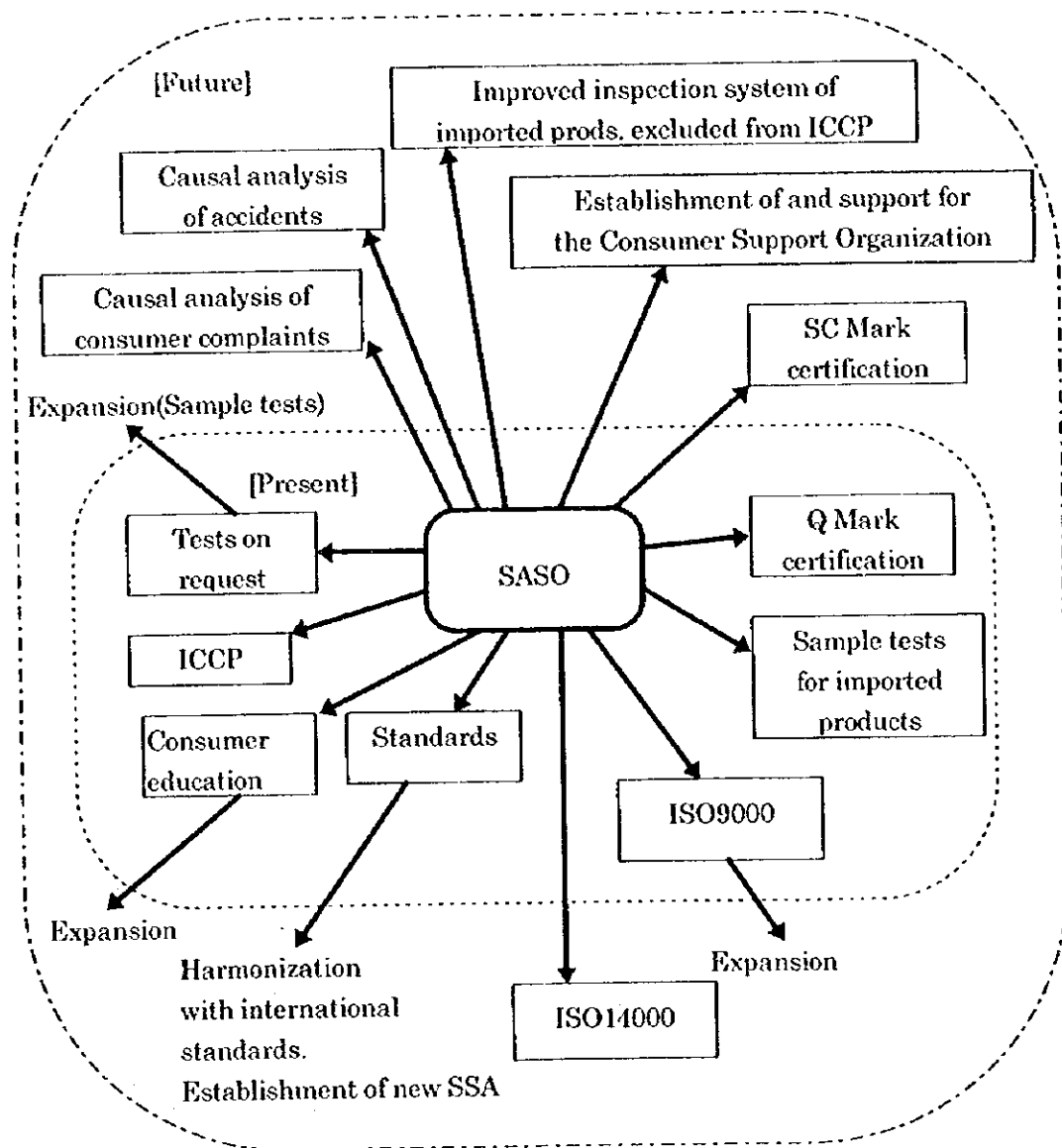


Figure 3.1.-1. SASO's role, present and future

**SASO's target role (objectives)**

The SASO's target role is to strengthen its technical support capability to the related organizations and cooperate with them more actively and closely for better consumer protection. Fundamental functions set for SASO, standardization, certification, registration, accreditation, inspection/testing and consumer education will still be its major functions for consumer protection still in future. The quality control of the domestic and imported products, the causal analysis of consumer accidents and complaints and support for CSO are major SASO's role in future.

**SASO's position regarding consumer protection**

SASO is standing in a good position and in a good environment to promote strong and comprehensive technical support for consumer protection in Saudi Arabia and GCC. SASO has been supporting the technical side of the Saudi Arabian consumer protection scheme in cooperation with many governmental organizations which implement consumer protection or enforce laws/regulations relating to consumer protection. As SASO is the sole body to formulate national standards, SASO has been keeping in close contact with related governmental organizations, industries and consumers. In addition, SASO is very much influential to GCC through GSMO.

Each objective in the target role of SASO is summarized as follows. The objectives are classified into two groups, the short-term objectives and the middle-term ones in which the "short-term objectives" are intended to be realized in one to three years and "middle-term objectives" in three to five years. Figure 3.1-2, 3, 4, 5 and 6 shows a rough layout of the schedule.

**1) Standards**

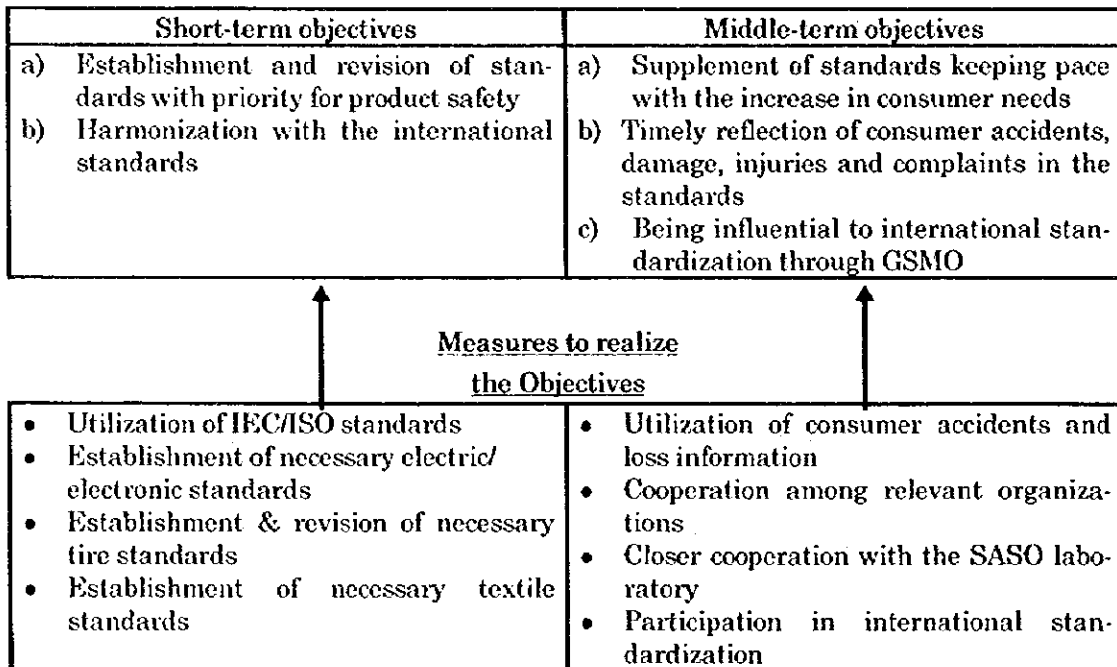
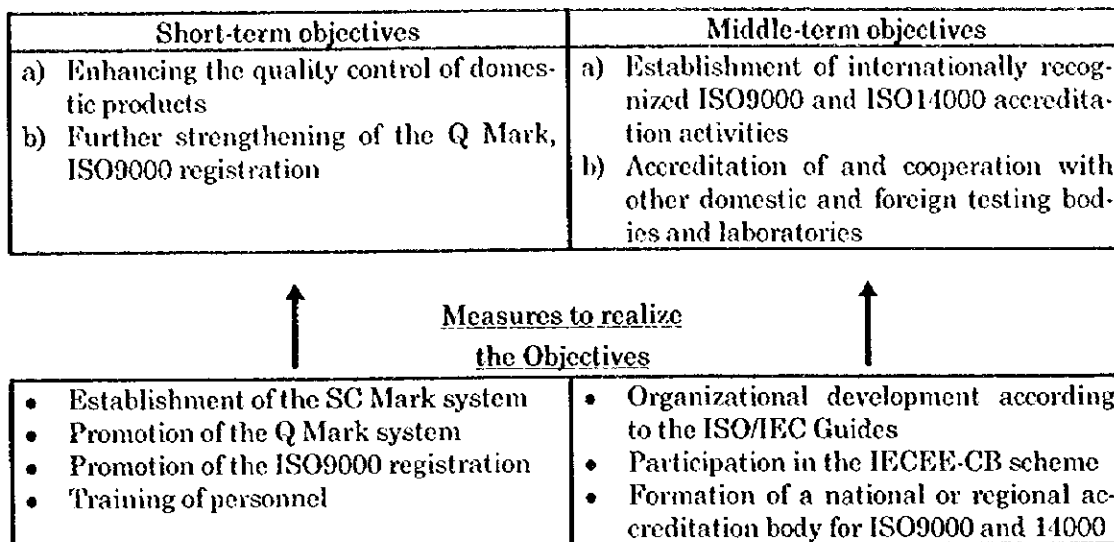


Figure 3.1-2. SASO's target role for standards

Figure 3.1-2 shows the short-term and middle-term objectives and measures to realize them.

## 2) Certification/Registration/Accreditation

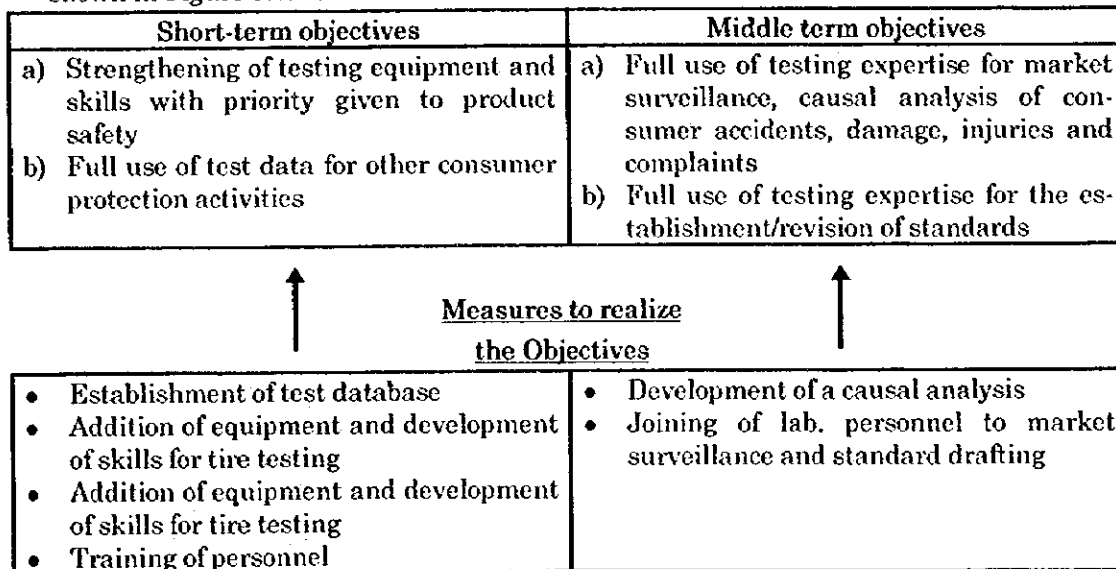
The short-term and middle-term objectives and the measures to realize them are shown in *Figure 3.1.-3.*



*Figure 3.1.-3.* SASO's target role for certification/registration/accreditation

## 3) Inspection/testing

The short-term and middle-term objectives and the measures to realize them are shown in *Figure 3.1.-4.*



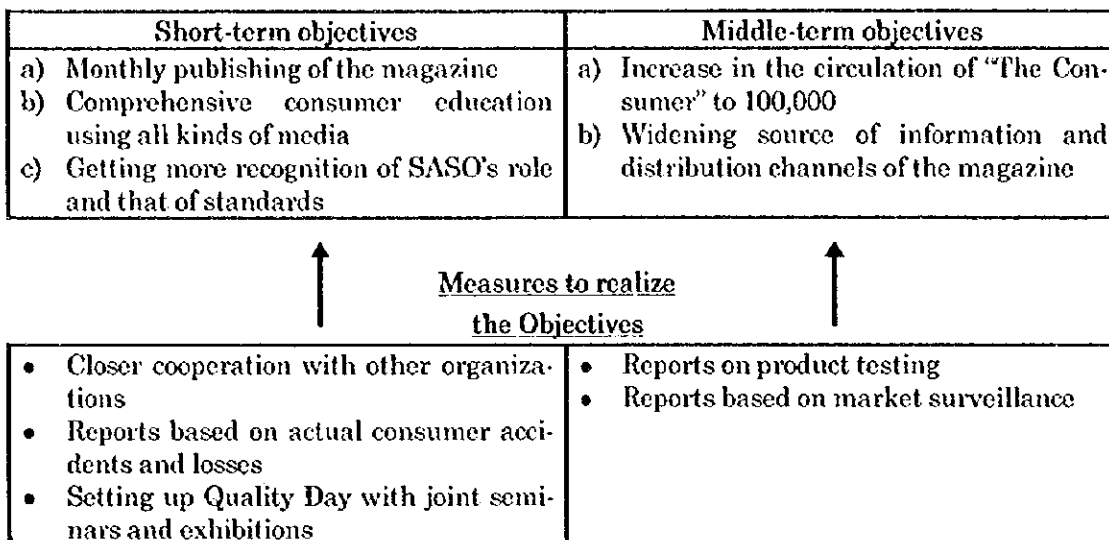
*Figure 3.1.-4.* SASO's target role for test/inspection in the laboratory

Test and inspection conducted mainly at the SASO laboratory should be intensified and expanded in the following four categories.

- Test to assure the standards
- Test and inspection to check products' conformity to the standards
- Test to investigate causes of consumer injuries, damage and complaints
- Test to investigate causes of fire, traffic and other accidents

4) **Public relations and consumer education**

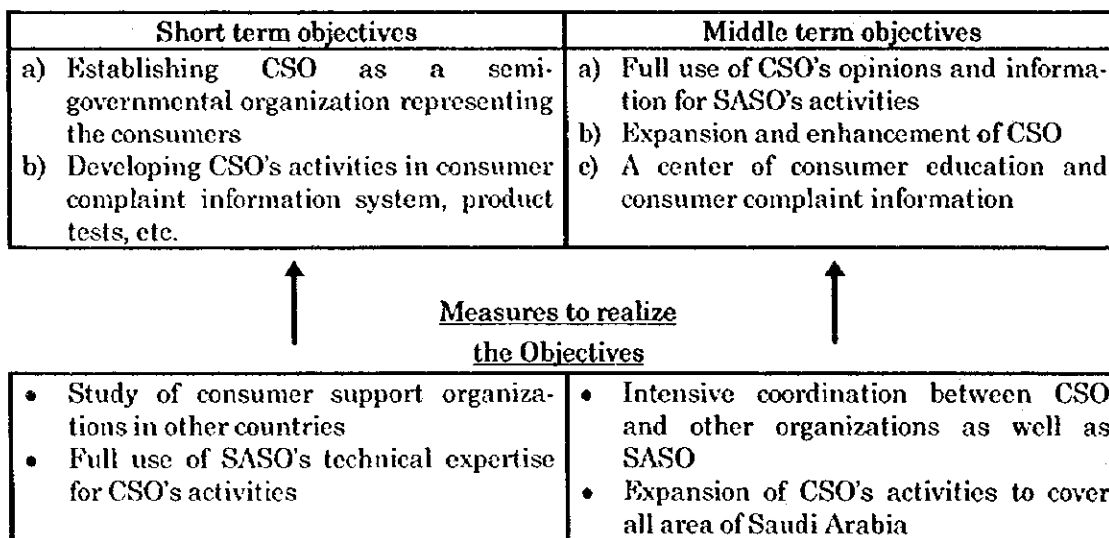
The short-term and middle-term objectives and the measures to realize them are shown in *Figure 3.1-5*.



*Figure 3.1-5.* SASO's target role for public relations and consumer education

5) **Establishing and fostering the Consumer Support Organization (CSO)**

The short-term and middle-term objectives and the measures to realize them are shown in *Figure 3.1-6*.



*Figure 3.1-6.* SASO's target role for the Consumer Supporting Organization

### 3.2. Information gathering and processing function

The information system in SASO and its utilization closely, which is related to consumer protection, is divided into the following two fields.

- a) A database in the headquarter with access to the outside databases in the Civil Defense, the Traffic Police, MOC, etc.
- b) A local database for testing at the SASO laboratory

A simplified schematic of the information system is shown in *Figure 3.2-1*. SASO should collect outside data and analyze them in how they are related to SASO activities.

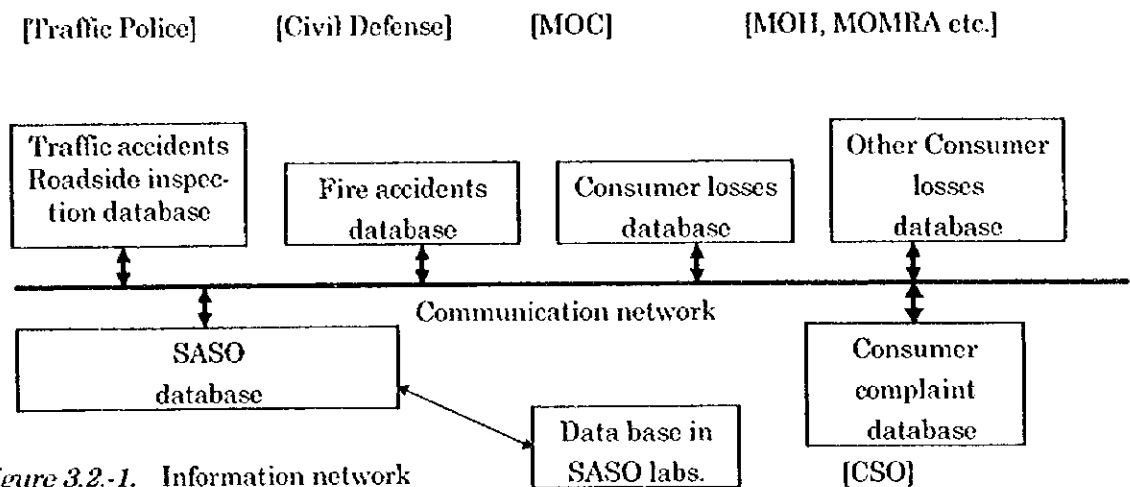


Figure 3.2-1. Information network

#### How to make use of the SASO data base

The data available from the databases should be analyzed and used for the following SASO tasks. The information based on the facts will be effective to reach solutions to the point and improve greatly this country's consumer protection.

##### 1) Standards

Standards should be established and revised quickly based on the obtained data. Statistically and scientifically analyzed data are effective to reflect Saudi Arabian natural and social environment in the standards.

##### 2) Quality control

Data should be used to improve procedures for the quality control of products and factories.

##### 3) Laboratory tests

Data should be used to improve the test procedures and test facilities.

##### 4) Consumer education

In general, Saudi Arabian consumers are not conscious about product safety and their proper use. Consumer education based on the actual accidents, injuries and damage will give consumers a good incentive.



SASO should analyze the outside data for effective use at SASO. Especially, SASO should analyze the consumer complaint information obtained from CSO carefully and use it intensively to improve and advance SASO's activities as well as give CSO necessary support for causal analysis.

As for the database in SASO laboratory, descriptions in Clause 3.7.1. 1) and 2) in this chapter is to be referred to.

### **3.3. Standards**

#### **3.3.1. General**

The establishment of SSA is a work of the short-term objective. The revision of SSA also is very important. However, the revision work may be in the middle-term objective in consideration of the capability of SASO.

The following items should be done;

##### **Short-term objective**

- 1) Drawing up and implementation of one-year plan and five-year plan
- 2) Harmonization of SSA with ISO and IEC standards
- 3) Setting up of a system to reflect the information of accidents and complaints in SSA
- 4) Closer communication between the Standards General Department and the Laboratory General Department regarding the application of the standards

##### **Middle-term objective**

- 1) Education of technical personnel
- 2) Cooperation with Gulf countries

#### **3.3.2. Policy of establishment of standards**

Where SSA will be established, the following items should be taken into account.

- 1) Standardization of requirement levels
- 2) Harmonization with International standards, if any
- 3) Industrial development , trend and needs
- 4) Consumer complaints and accidents
- 5) Periodical review of SSA (every three year, in principle) after their publication to follow the modern technology
- 6) Participation of a representative consumer support organization in the technical committees of SASO who draft SSA

#### **3.3.3. Electrical/Electronic Products**

The number of SSA is small in comparison with kinds of products in the market. Therefore, SSA should be published with the priority in order of the following;

##### **Short-term objective**

- 1) SSA for mains configuration adapters and extension cord set (many problems in the market)

2) SSA for applying to 17 product categories covered by ICCP

The relationship between IEC standards and 17 product categories to be published is shown in *Table 3.3.3.-1*.

*Table 3.3.3.-1. IEC standards corresponding to 17 product categories*

IEC Standard	product category
IEC335 series	<ul style="list-style-type: none"> <li>• Household cooking appliances except electric range</li> <li>• Clothes drying machines to 10kg</li> <li>• Food processors (Non industrial)</li> <li>• Meat choppers and grinders (Non industrial)</li> <li>• Household microwave ovens</li> <li>• Electric ovens up to 10kw</li> <li>• Household electric heaters</li> <li>• Tea &amp; coffee brewing appliances and appliances for heating liquids</li> <li>• Water pumps up to 12kw except for centrifugal type</li> <li>• General use mains voltage converters and power supplies</li> </ul>
IEC598 series	<ul style="list-style-type: none"> <li>• Incandescent, fluorescent and discharge luminaires</li> <li>• Immersed swimming pool lights</li> </ul>
IEC950	<ul style="list-style-type: none"> <li>• Fax and telex machines</li> <li>• Copy machines</li> <li>• Computers (Desktop and portable) and monitors</li> </ul>
None	<ul style="list-style-type: none"> <li>• Mains configuration adapters</li> <li>• Domestic pressure cookers</li> </ul>

#### Middle-term objective

- 1) Establishment of SSA
  - SSA for components used for products covered by ICCP
  - Other products not covered by ICCP and popular in the country
  - Other components
- 2) Revision of SSA including the harmonization with IEC standards

### **3.3.4. Tires**

#### Short-term objective

- 1) SSA1275/1997 "Standards for characteristics of retread tyres and testing method:"
 

The SASO should study the revision of the use of the retread tires for passenger cars and buses, and the confinement for trucks.
- 2) SSA1066/1995 "Requirements for tire storage"
 

The SSA should introduce the requirements for the tire storage to prevent any deformation in the tires during storing.
- 3) New SSA for drivers;
 

A new SSA is for the user maintenance of tires and should include requirements and check methods of the residual groove depth, internal air pressure and crack and cut of tires, which are major causes of the tire burst.

### **3.3.5. Textile products**

#### Short-term objective

- 1) SSA to be published for safety:
  - a) Babies' items containing harmful substances such as formaldehyde, azo dyestuff, etc.
  - b) Underwear for both of women and men containing harmful substances such as formaldehyde, azo dyestuff, etc.
  - c) Flame resistant items such as curtains, carpets and rugs.
  - d) Toxic gas generated from flame retardant items.
  - e) Prevention of static electricity of the floor covers.
- 2) SSA for test methods:

Test methods of rubbing and dry cleaning for colorfastness should be added to the relevant SSA.
- 3) SSA to be improved;

Concerning SSA 784/1994, the location of indication of the fabric composition and country of origin should be specified like that "every 1m on the side edge of fabrics"

#### Middle-term objective

- 1) SSA should be published for general garments such as women's and men's jackets:
- 2) SSA is greatly needed in the future:

The sewing specification should be established for ensuring the workmanship.

### **3.4. Certification/Registration/Accreditation**

#### Short-term objective

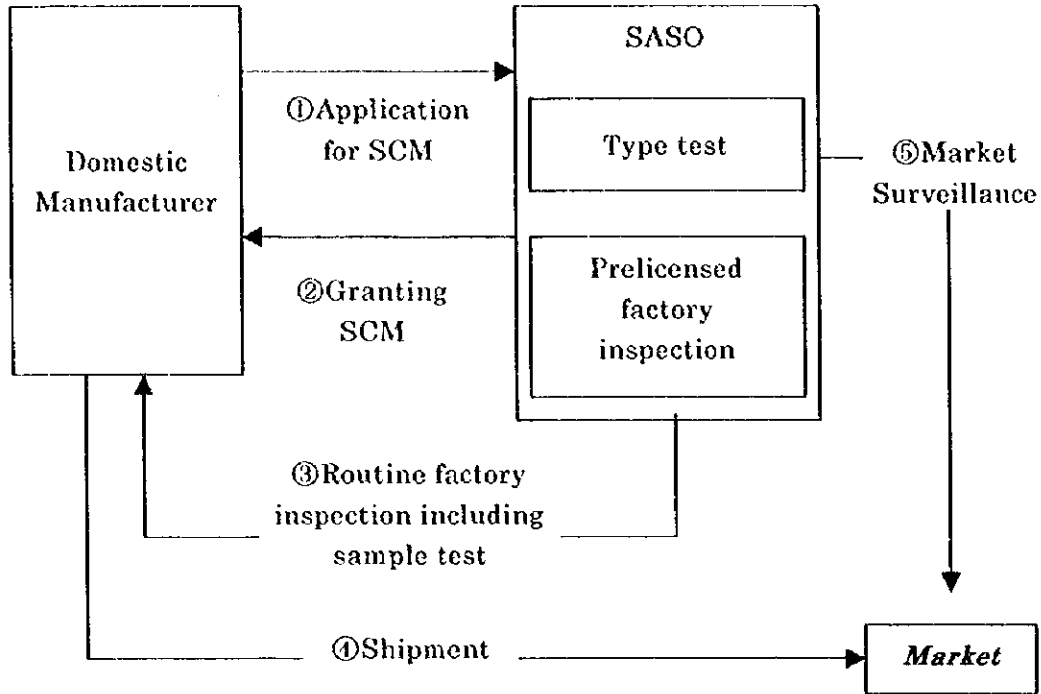
- Standard Conformity Mark (SCM) (Clause 3.4.1.)
- Participation in the scheme of the IECEE for Recognition of Results of Testing to Standards for Safety of Electrical Equipment (Clause 3.4.5.)

#### Middle-term objective

- Quality Mark System (Clause 3.4.2.)
- ISO Registration System (Clause 3.4.3.)
- Laboratory Accreditation System (Clause 3.4.4.)

### 3.4.1. Standard Conformity Mark (SCM)

SASO should carry out the certification/testing/inspection based on the SCM system for domestic products as mentioned in Clause 2.4.2. Therefore, the procedure of the SCM system is shown in *Figure 3.4.1.-1*.



*Figure 3.4.1.-1.* Procedure of the new Standard Conformity Mark.

### 3.4.2. Quality Mark system

The Quality Mark system should introduce the following items so that the manufacturers can more easily obtain the Quality Mark.

- ① Implementation of testing in manufacturing premises(TPM)
- ② Utilization of test results developed by the manufacturers(SMT)
- ③ Utilization of CB Test Certificate under the IECEE-CB Scheme
- ④ Recognition of test results developed by testing organizations in foreign countries
- ⑤ Simplification of factory inspections (Utilization of the results of ISO9000 Registration)
- ⑥ Recognition of results of factory inspections performed by inspection organization in foreign countries

### **3.4.3. ISO Registration system**

SASO should take an initiative of establishment of National Accreditation Body for designating Certification Bodies and Auditors and Training Bodies of auditors. The registration should be utilized for the factory inspections of the Quality Mark system and Standard Conformity Mark system to simplify the procedure and to reduce the burden of the manufacturers.

### **3.4.4. Laboratory Accreditation system**

The Laboratory Accreditation Department should cooperate with the Quality Mark and Certification Department in establishing the procedure for utilization of test results developed by manufacturers.

### **3.4.5. Participation in the Scheme of the IECEE for Recognition of Results of Testing to Standards for Safety of Electrical Equipment**

#### **1) Participation of SASO in the Scheme:**

SASO should participate in the Scheme because SASO should utilize CB Test Certificate (CBTC) and CB Test Report (CBTR) for acceptance of imported products.

##### **a) First step (1998)**

Application for the participation of SASO in the Scheme as the member body of IECEE and Recognizing NCB

##### **b) Second step (2001)**

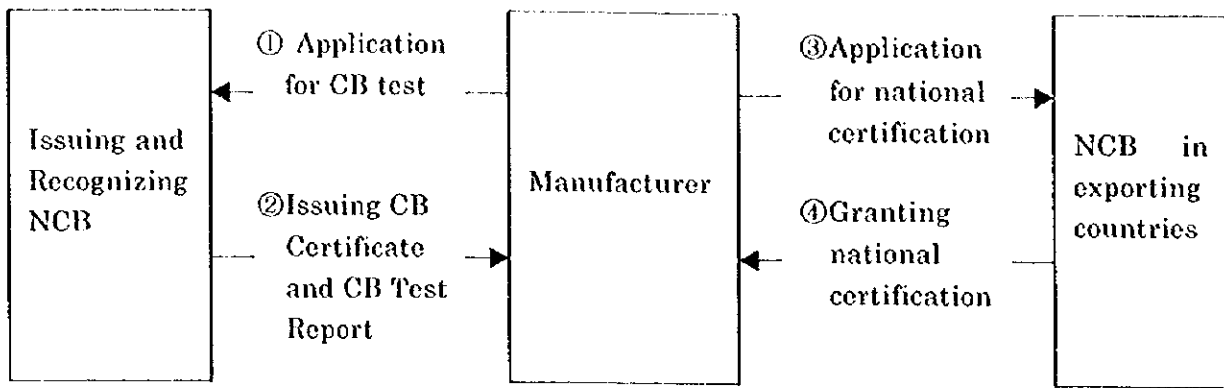
Application for Issuing and Recognizing NCB

##### **c) After the second step**

Application for the expansion of the scope of product categories/standards

#### **2) Introduction of the Scheme:**

At present, 38 countries in Europe, North America and Asia are participating in the Scheme. The Scheme is based on the principle of mutual recognition (reciprocal acceptance) by its members of test results for obtaining certification or approval at national level. The Scheme is intended to reduce obstacles to international trade. The procedures for obtaining the CB Test Certificate are shown in *Figure 3.4.5.-1*.



*Figure 3.4.5.-1. Procedures for obtaining the CB Test Certificate*

**3) Advantage of the participation in the Scheme:**

- a) SASO can utilize the CBTC and its CBTR officially under the Scheme.
- b) SASO can issue the CBTC and its CBTR that are utilized at the national certifications of other countries participating in the Scheme.
- c) SASO can promote the certifications such as the Quality Mark, etc.
- d) Imported products are guaranteed to ensure safety before entering the country.
- e) Domestic manufacturers can easily export their products to other countries with the CBTC and its CBTR.
- f) SASO can obtain confidence in the certification/testing ability from the world.

### **3.5. Public relations and consumer education**

In order to solve the problems in *Table 1.12.1-1 "5. Consumer education and public relations"*, SASO's activity for the subject should be strengthened in the following points.

#### Short-term objectives

- Taking part in education and public relations activities in close cooperation with related organizations.
- Editing committee of "The Consumer" should be supported by the concerned ministries.
- Support for school education related to consumer protection such as dispatching lecturers and preparing teaching materials.
- Complementary use of media, such as news papers, TV/radio, magazines, etc.

#### Middle-term objective

- The magazine "The Consumer" should be published monthly and the target number of circulation should be over 100,000. To make the contents more attractive and interesting, the Team would like to advise on a few points as shown below based on analysis of the magazine contents.

#### The improvement of "The Consumer" magazine

The followings are ideas to make the magazine more attractive.

- a) It is better to separate the standard information and consumer life information into separate volumes.  
The publication of the separated volume on consumer life information can be entrusted to in future. This issue should be studied as the middle-term objectives.
- b) Besides consumer protection related articles, articles on better home life should be added to make the magazine more attractive.
- c) Taking subjects from actual accidents while fresh memories of accidents.
- d) Using easier context for general readers even if it sacrifices technical accuracy.
- e) Reports on the comparison of test results of products on the market.
- f) Featuring the magazine with top articles focused on traffic and fire accidents, food poisoning, etc., asking the concerning ministries to join the editorial meeting.
- g) Reprinting popular articles from consumer magazines of other countries



### 3.6. Human resources development

Planning & Development Department should introduce "Career Development Program" (hereafter referred as CDP), and make a long range plan to develop human resources for SASO on its own initiative in cooperation with other departments. Also the plan should be submitted to the training committee for discussion and approval.

CDP is a method to train young staff systematically, using the CDP sheet like *Figure 3.6-1*.

CDP sheet		The name of trainee												
Date of filling out Year /Month	Training item												Target at the age of 33	
	age	22	23	24	25	26	27	28	29	30	31	32		33
1997/4														
1998/4														
1999/4														

Remark: 1) Fill in main training items each year, considering the target at the age of 33.  
2) Fill in three-year training plan starting at each year, using one column for a year.

Figure 3.6-1. CDP sheet

#### **1) Training of personnel for establishing standards**

The personnel in charge of preparing standards should keep knowledge abreast with rapidly-progressing technology and its products.

In order to meet such requirements, it is necessary to educate and train the personnel considering the career path in the following steps:

##### **Basic training**

- a) Training in SASO labs.
- b) Training at an appropriate manufacturer

The training mentioned above should be carried out on recruited newly graduated Saudi Arabians, according to a three-year training plan, through the actual revising work to enable them to work as specialists in the future in their respective category.

##### **Advanced training**

After the training has been completed, it is essential for the trainees to work in close cooperation with the relevant laboratories to keep and develop their potential participating as the member of TC (Technical Committee) of ISO/IEC.

When it is impossible to do so, the second best would be that they study the ISO/IEC draft standards under deliberation and follow the results of the international convention.

#### **2) Training of personnel for causal analysis**

The personnel in charge of causal analysis should have long experience, advanced technical knowledge and deep insight in their specialized subjects. For that purpose it is desirable that Saudi Arabians be selected, be trained for causal analysis together with engineers in other subjects and be sent to overseas testing institutions even for short period of time.

#### **3) Training of testing personnel**

In order to attain the higher level of testing capability, the effective way is that a specialist of a particular field should be invited to train the testing personnel at SASO laboratories or the testing personnel be sent to overseas testing institutions.

#### **4) Training of accreditation personnel**

It is recommended that the training of accreditation personnel be carried out in the following steps:

- a) Training of the personnel using ISO/IEC Guide for Accreditation as textbook
- b) Training of the personnel at a leading accreditation organization overseas
- c) Raising the technical level of the personnel through the participation in the actual task of accreditation
- d) Analyzing the requests and complaints relating to accreditation process, making an actual improvement plan and carrying out the plan

5) **Training of Consumer Protection Coordination Department personnel**

The personnel of Consumer Protection Coordination Department should have wide knowledge and experience of making standards and tests in their fields as specialists. During the training period, they belong to standard making or laboratories and they should be shifted each other at appropriate interval to accumulate the experience.

6) **Training of managerial personnel**

The managerial personnel should be trained so as to perform the basic acts of "plan, do, check and action" and repeat the cycle introducing "Management by Objectives" as practiced in Japan. *Table 3.6-1* shows the example of a control sheet for "Management by Objectives" For the systematic and total management of SASO, the "Management by Objectives" is sure to be quite useful.

*Table 3.6-1. Control Sheet for Manager Training*

Degree of importance / Degree of difficulty	Important objectives	Measures for achievement & time schedule	Records of practice (fill out by yourself and checked by your boss)	Review and evaluation (fill out by yourself and checked by your boss)		
	Achievement criteria			A	B	C
( Ordinary Business Objectives)						
Total Evaluation (fill out by yourself and checked by your boss)						

Remarks: A excellent, B ordinary, C inferior

### **3.7. Improvement of test functions in laboratory (General, E/E, Tires, Textile)**

#### **3.7.1. General**

SASO Lab. should be strengthened in its facilities, testing skills and amount to solve the problems in *Table 1.12.1.-1. "7.3. Laboratories."* The role of SASO Lab. is as follows:

##### **1) Test and inspection of products and materials according to SSA**

Test and inspection should be proceeded according to the manual, and test results should be written in the test format.

##### **2) Improvement of data processing in the laboratories**

The data is basic to the analysis and improvement of present conditions. The following data should be available whenever necessary.

- Names of organizations and enterprises who made a request for tests
- Total number of test cases and their classification by product group, etc.
- Number of products which do not comply with standards and their contents
- Accumulation of the above data for establishing and revising standards

##### **3) Market surveillance**

SASO experts should go to the market in cooperation with MOC personnel to drive off defective products from the market. The products should be tested in SASO laboratories if necessary.

##### **4) Trial test of requirements**

When a standard is drafted or revised, a trial test should be carried out in SASO Lab. before issue to confirm whether the new draft is reasonable or not.

##### **5) Investigation of causes of accidents and troubles**

If an accident has occurred due to a consumer product, SASO Lab. should organize a specialist group including the specialists of related agencies and investigate its cause. The process of the accident should be made public to prevent the recurrence of the accident or the trouble.

##### **6) Factory inspection**

As for the Q-mark and SC mark systems, SASO Lab. experts visit factories and check them for a quality control(QC) system, etc.

##### **7) Tests requested from outside**

SASO Lab. is requested to carry out tests from other agencies, industries, importers and the Consumer Support Organization (CSO). Even if there is no SSA for a product, SASO Lab. should carry out the test from the viewpoint of safety.

### 3.7.2. Amount of tests, personnel and equipment

SASO Lab. should, in principle, be provided with all the equipment necessary for carrying out the tests specified in SSA. Some tests requiring big and expensive test facilities can be requested to outside test stations including foreign test stations.

#### 1) Amount of tests to be done in future in SASO Lab.

*Table 3.7.2-1. Estimated amount of tests to be done in future in SASO*

Tests	Change	Reason
Sample test		
• for ICCP	No change	
• for customs clearance	No change	
• for Q-Mark	Increase	For the promotion of Q-Mark
• for SC-Mark		Introduction of SC Mark
• for accidents	Increase	For investigation and analysis
• for market	Increase	More frequent market surveillance
• Tests requested from outside	Increase	Market surveillance and introduction of Standard Conformity Mark and CSO

The total amount of tests will be on the increase.

#### 2) Testing personnel

The testing personnel need education and training on the job. The appointment of experts from outside SASO Lab. should be taken into account for the training period.

#### 3) Testing equipment

Since testing equipment is usually expensive, its special yearly budget plan is necessary. If certificates of other test stations are utilized, plural pieces of testing equipment is not necessary except at least one set of equipment.

a) The priority of installing equipment in SASO is as follows.

- Testing equipment according to SSA (full test if any) for type tests
- Testing equipment for investigating the causes of fires, traffic accidents and injuries by electric appliances, tires and harmful clothes respectively.

b) Reliability and easy maintenance

Priority should be placed on the reliability. The equipment to be purchased in the future should be designed with climatic conditions considered so that it may be simply operated, easily maintained and its spare parts easily obtained. Some members of the laboratory must be trained so as to be able to repair simple troubles.

#### 4) Tests at laboratories

a) Strengthening of testing ability

Preparation of testing manuals and accumulation of judgments of test results

b) Increase of tests requested

SASO Lab. should try to increase the tests requested in order to assist local manufacturers who don't have sufficient testing equipment.

### 3.7.3. Electric and electronic products

At present most fundamental tests are carried out . In future, all requirements specified in the standards should be conducted. Therefore testing equipment and technicians should be increased. Their increase should be planned step by step and yearly.

1) Strengthening of testing equipment

Table 3.7.3-2 shows the list of testing equipment to be introduced according to the priority and its approximate prices.

2) Increase of testing personnel

A plan of testing personnel in Electrical Lab. is shown in the Table 3.7.3-1.

Table 3.7.3-1. Plan of testing personnel increase in Electrical Lab.

Year	Personnel increase	Role of increased personnel
1988	Three persons (Two persons) (One person)	For the test of connecting apparatus For statistical processing of data
1999	No person	<ul style="list-style-type: none"><li>• Education and training of new staff</li><li>• Preparation of manuals for education and training</li></ul>
2000	Two persons	<ul style="list-style-type: none"><li>• For increased test of connection apparatus and materials</li><li>• For the test of motor-operated appliances and electric heating apparatus</li><li>• For the test of increased samples picked up by market surveillance</li></ul>
2001	Two persons	<ul style="list-style-type: none"><li>• For the temperature rise test of motor-operated appliances and electric heating apparatus</li><li>• For the test of increased samples picked up at market surveillance</li></ul>

- Since most electronic products are imported and they have little to do with consumer safety, increase of testing personnel in the Electronic Lab. is excluded from this personnel plan.

- The members of Electrical Lab. should be divided into two or three groups. Each group should be managed to conduct the work evenly and to cooperate each other.

### **3) Training of testing personnel**

The ability of SASO laboratory fundamentally depends on the ability of individuals. The development of the ability of members of Laboratories is essential for raising the efficiency of tests, meeting the requirements of new standards as technology advances. Systematic training will be necessary.

Table 3.7.3.2. Testing equipment to be increased for the test of electric and electronic products

The increase of testing equipment is planned supposing that tests are carried out in accordance with IEC standards in consideration of future adoption of IEC standards. The increase of testing equipment aims at the early realization of the test of extension sockets and configuration adapters.

○ The testing equipment to be increased by the standards concerned

Note) P: Priority or the order of year of plan  
St.: Applicable standard for extension socket (IECSS4)

△ The testing equipment which can be applied to other standards

Testing equipment	P	St.	IEC 335-1	IEC 65	Reason for priority
• Test finger	1	○	○	△	<ul style="list-style-type: none"> <li>• Placing the priority on the test of extension socket</li> <li>• Contact prevention to live parts</li> <li>• These standard apparatus (test finger, probe, tension gauge) can be commonly used.</li> </ul>
• Test probe	1	-	○	△	
• Test pin	1	△	○	△	
• Test hook	1	○	△	△	
• Test chain	1	-	-	△	
• Pin gauge	1	○	△	△	
• Test gauge	1	○	△	△	
• Tension gauge	1	○	△	△	
• Fingernail tension gauge	1	-	△	○	
• Creepage distance gauge	1	-	△	△	
• Torque driver	1	○	△	△	
• Withdraw force apparatus (plug)	1	○	△	△	
• Cord retention apparatus (Flexible cables and their connection)	1	○	△	△	
• Cord flexing apparatus (Flexible cables and their connection)	1	○	△	△	
• Conductors twisting apparatus	1	○	△	△	
• Ball pressure apparatus	2	○	△	△	<ul style="list-style-type: none"> <li>• Inspecting molding resin for deformation and deterioration caused by overheating when a current flows</li> <li>• Performing only the tests of connecting apparatus made of resin</li> <li>• Checking ignition resistance and spread of fire resistance</li> <li>• Thermal cut-outs are important components to prevent overheating</li> </ul> Their reliability is also important.
• Glow wire apparatus (IEC695-2)	2	○	△	△	
• Tracking test apparatus	2	○	△	△	
• Thermal cut-outs test apparatus (Operating test apparatus) (Endurance test apparatus)	2	-	○	-	



Testing equipment	P	St.	IEC 335-1	IEC 65	Reason for priority
<ul style="list-style-type: none"> <li>Mechanical strength tester (Pins of plugs and portable socket-outlets)</li> <li>Mechanical strength tester (drop) apparatus (Pins of plugs and portable socket-outlets)</li> <li>Tumbling barrel</li> <li>Lateral strain apparatus (Fixed socket-outlets)</li> <li>Mounting block (for mounting test samples)</li> <li>Test wall</li> <li>Compression test device (Thermal stability of plugs)</li> <li>Abrasion test apparatus (Insulating sleeves of plug pins)</li> <li>Abnormal heat test apparatus for insulating sleeves (plug pins)</li> <li>Heat cycle apparatus</li> </ul>	3 3 3 3 3 3 3 3 3 3	○ ○ ○ ○ ○ ○ ○ ○ ○ ○	- - - - - - - - - -	- - - - - - - - - -	<ul style="list-style-type: none"> <li>Mechanical strength test and endurance test of power plugs including extension sockets</li> <li>One of the causes of product failure is deformation and deterioration due to the use for a long period of time.</li> <li>The objective is a complete test of IEC 884.</li> </ul>
<ul style="list-style-type: none"> <li>Needle flame apparatus</li> <li>Withstand burning test (Bunsen burner)</li> </ul>	4 4	- -	○ ○	△ △	<ul style="list-style-type: none"> <li>Ignition resistance and spread of fire resistance of resin materials used in appliances are required for the prevention of fire.</li> </ul>
<ul style="list-style-type: none"> <li>Splash-proof (IEC 529)</li> <li>Jet-proof (IEC 529)</li> <li>Vertical rain apparatus</li> <li>Spray type rain test apparatus</li> <li>Arch type rain test apparatus</li> <li>Aging test apparatus (for rubber)</li> <li>Test corner (temperature rise test)</li> <li>Starting current test device</li> <li>Scratch tester and test pin</li> <li>Surge tester (impulse tester)</li> <li>Vibration tester</li> </ul>	5 5 5 5 5 5 5 5 5 5	- - - - - - - - - -	○ ○ ○ ○ ○ ○ ○ ○ ○ ○	- - - - - - ○ ○	<ul style="list-style-type: none"> <li>These are important apparatus used for the test of appliances using water.</li> <li>These apparatus are planned in the last stage because of the following reasons: <ul style="list-style-type: none"> <li>1) less frequency of use,</li> <li>2) for individual appliances,</li> <li>3) for expensive</li> <li>4) not urgently needed</li> </ul> </li> <li>Data of other testing stations and accredited laboratories can be used.</li> </ul>

Testing equipment	P	St.	IEC 335-1	IEC 65	Reason for priority
• Bump tester	5	-	-	○	
• Load apparatus for switches	5	△	△	○	
• X-ray radiation meter	5	-	-	○	
• Impact tester	5	-	-	△	
(mechanical strength for CRT)					
• LCR tester	5	-	○	○	
• Horizontal burning tester	5	-	△		
• Spark tester (flammable gases)		-	△		

Note) Test equipment concerning individual standards other than listed above should be introduced one after another.

The approximate total value of prices of testing equipment to be introduced in a five-year plan is 79 million Yen or 658 thousand Dollars.

### 3.7.4. Tires

The analysis of troubled tires in traffic accidents and roadside inspection will increase in future, but it will be covered by five personnel.

**1) Improvement of test method**

The current method to prepare specimens is inadequate and should be improved.

**2) Additional testing equipment and test items**

From the viewpoint of the safety, the following test items shown in *Table 3.7.4.-1* should be added.

*Table 3.7.4.-1. Testing equipment and test items*

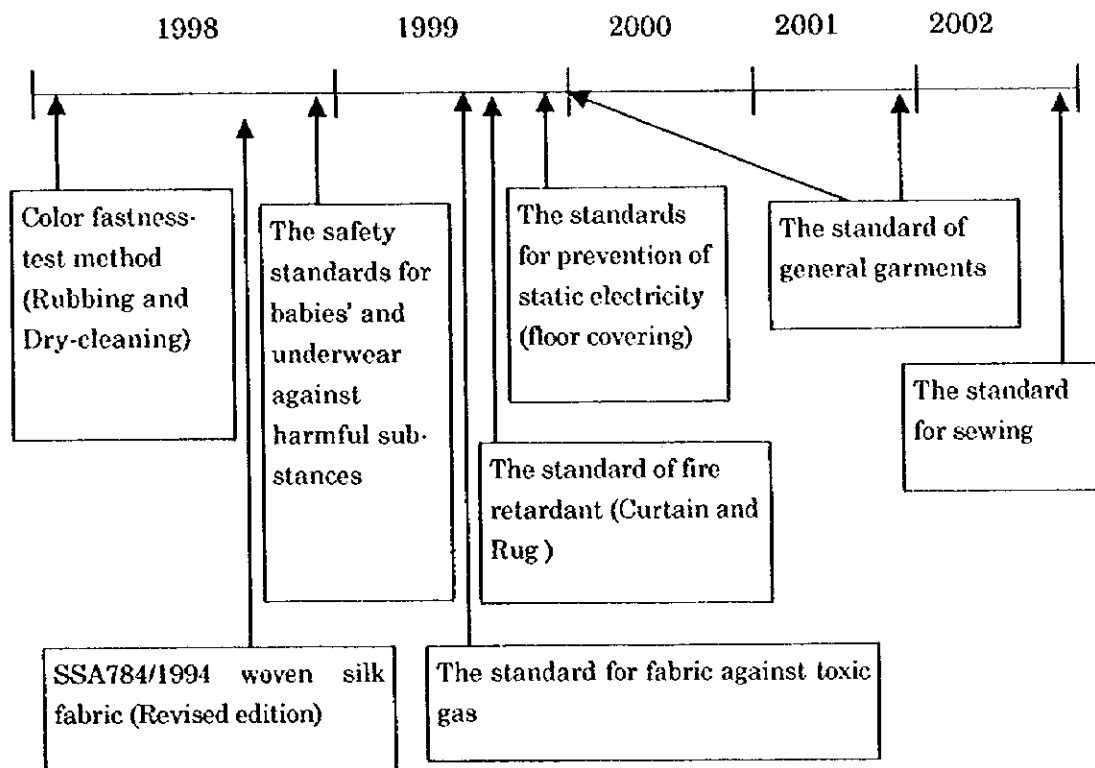
	Strengthening of testing equipment	Test items to be added	Increase of testing personnel
1	Air chuck for autograph	Test items such as peeling test between carcass layers, tensile strength and elongation tests of single cord in cord layers for burst protection. For raising measuring accuracy of tensile strength, elongation for side tread rubber.	—
2	Tire cutter for steel cords	Measurement of tire cross section should checking the symmetry and uniformity of tires.	One person
3	Plunger/ Bead unseating tester	Measurement of breaking energy strength of passenger car tires and by rejecting weak strength tires.	One person
4	Dynamic balancing tester	Measurement of uniformity level of tires.	One person
5	Indoor drum Tester	High-speed performance test and endurance test.	Three persons for crew work

### 3.7.5. Textile products

The plan of standards establishment, test items to be strengthened, testing equipment and increase of testing personnel are described in the following.

#### 1) Establishment and revision of SSA

Figure 3.7.5.-1 shows a five-year plan for SSA. Reinforcement of the laboratory should be made with progress of standard preparation.



**Policy of a five-year plan**

Completion of fundamental test methods. Firstly, establishment of the standard for unfair indication of silk, then safety standards against skin injuries, physical shock by static electricity and toxic gas within two years. Standard for general garments within three to four years, and the standard for sewing in the fifth year.

Figure 3.7.5.-1. Five-year plan for standards

**2) Reinforcement of test and inspection items.**

- Extension of the safety test
- Investigation of causes of the consumer's complaint
- Trial test of requirements
- Market surveillance

**3) Testing equipment**

As the standards are established, some pieces of testing equipment should be renewed and added. The following *Table 3.7.5-1* shows the reason and year of introduction.

*Table 3.7.5.-1. Five-year plan for testing equipment*

Name	Testing equipment	Reason	Year
Xenon tester	Color fastness to light	<ul style="list-style-type: none"> <li>• It is becoming old.</li> <li>• The existing machine is insufficient in capacity for sample processing.</li> </ul>	1998
Washing machine approved by IEC	Dimensional change.	The existing testing machine is household use and improper.	1998
Spectroscopic photometer.	Content of formaldehyde	For analyzing the content of harmful substances.	1998
Smoke analyzer of toxic gas	Toxic gas and smoke from fabric.	For analyzing toxic gas and smoke from textile products, especially fire retardant fabric.	1999
Electric static machine "walk method"	Static electricity	For the measurement of static electricity generated from floor covering.	1999
Total amount of prices : 26.7 Million Yen / 222.6 Thousand Dollars			

**4) Increase of testing personnel**

*Table 3.7.5-2* shows the plan for the increase.

An inspector should be selected among the textile lab staff and trained for market surveillance because the inspector must have professional knowledge of fiber composition to detect unfair indication of fabric rolls and garments.

*Table 3.7.5.-2. Five-year plan for personnel*

	Manager	Analysis testing personnel	Total
The year of introduction	One person in 1998	One person in 1999	Two persons

### 3.8. Organizational development

#### 3.8.1. Establishment of a Quality System

To execute SASO's activities effectively and with international acceptance, the Team recommends that SASO should conform their related organizations' structure, management and activities with the following ISO/IEC guides.

- ISO/IEC Guide 65 : General requirements for bodies operating product certification system
- ISO/IEC Guide 25 : General requirements for the competence of calibration and testing laboratories
- ISO/IEC Guide 39 : General requirements for the acceptance of inspection bodies
- ISO/IEC Guide 62 : General requirement for bodies operating assessment and certification/registration of quality systems
- ISO/IEC Guide 58 : Calibration and testing laboratory accreditation systems  
General requirements for operation and recognition

#### Reconstruction of organization

Figure 3.8-1 shows a comparison between the present organization and the proposed one by the Team.

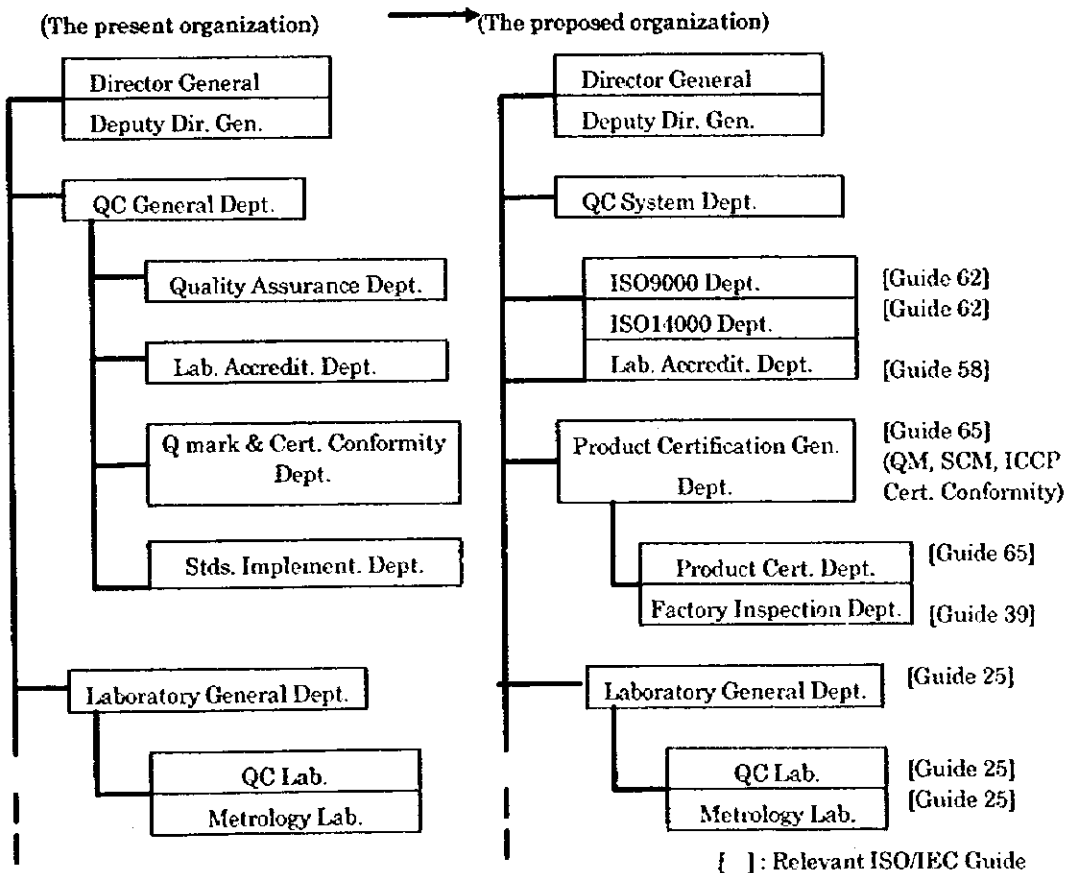


Figure 3.8-1. Comparison between the present and proposed organization

As all the guides mentioned above require establishing total and independent management for each activity, the Team recommends a reconstruction of the relevant organizations. The new departments, ISO9000, ISO14000, Laboratory Accreditation, Product Certification, Factory Certification and Laboratory General Department should have a governing committee and expert committee of their own respectively to adapt the management of each department to the relevant guide, and also segregation between assessment and certification functions is required for each of ISO9000, ISO14000 and Laboratory Accreditation departments. The Quality System Department conducts organizational development and organization auditing.

### **3.8.2. Consumer Protection Coordination Department**

#### Necessity of cooperation

SASO should strengthen its active cooperation with related organizations and bodies as well as a closer linkage among the departments inside SASO. Major cooperative tasks for SASO will be as follows :

- a) Closer cooperation with CD and TP to participate in causal analysis of fire/traffic accidents and improvement of their investigating procedures
- b) Closer cooperation with MOC to investigate consumer injuries, damage and complaints from a technical standpoint and make a joint market surveillance
- c) Utilization of results and findings obtained from 1) & 2) in the Standards General Dept. in SASO for rapid reflection in the standards.
- d) Utilization of results and findings obtained from 1) & 2) in CSO, the Public Relations Dept. and GSMO for timely consumer education.
- e) Analysis of consumer accidents and loss data and maintaining of the SASO database
- f) Intensive support for CSO

#### Establishment of the Consumer Protection Coordination Department

For the above-mentioned tasks, a new department "Consumer Protection Coordination Department" should be established. This department should carry out comprehensive consumer protection activities and coordinate other organizations and SASO to conduct the above-mentioned cooperative tasks for SASO. The department should be positioned under the direct control of the Director General of SASO. *Figure 3.8-2* shows the proposed new organization the "Consumer Protection Coordination Dept." and its relationship with other relevant organizations.

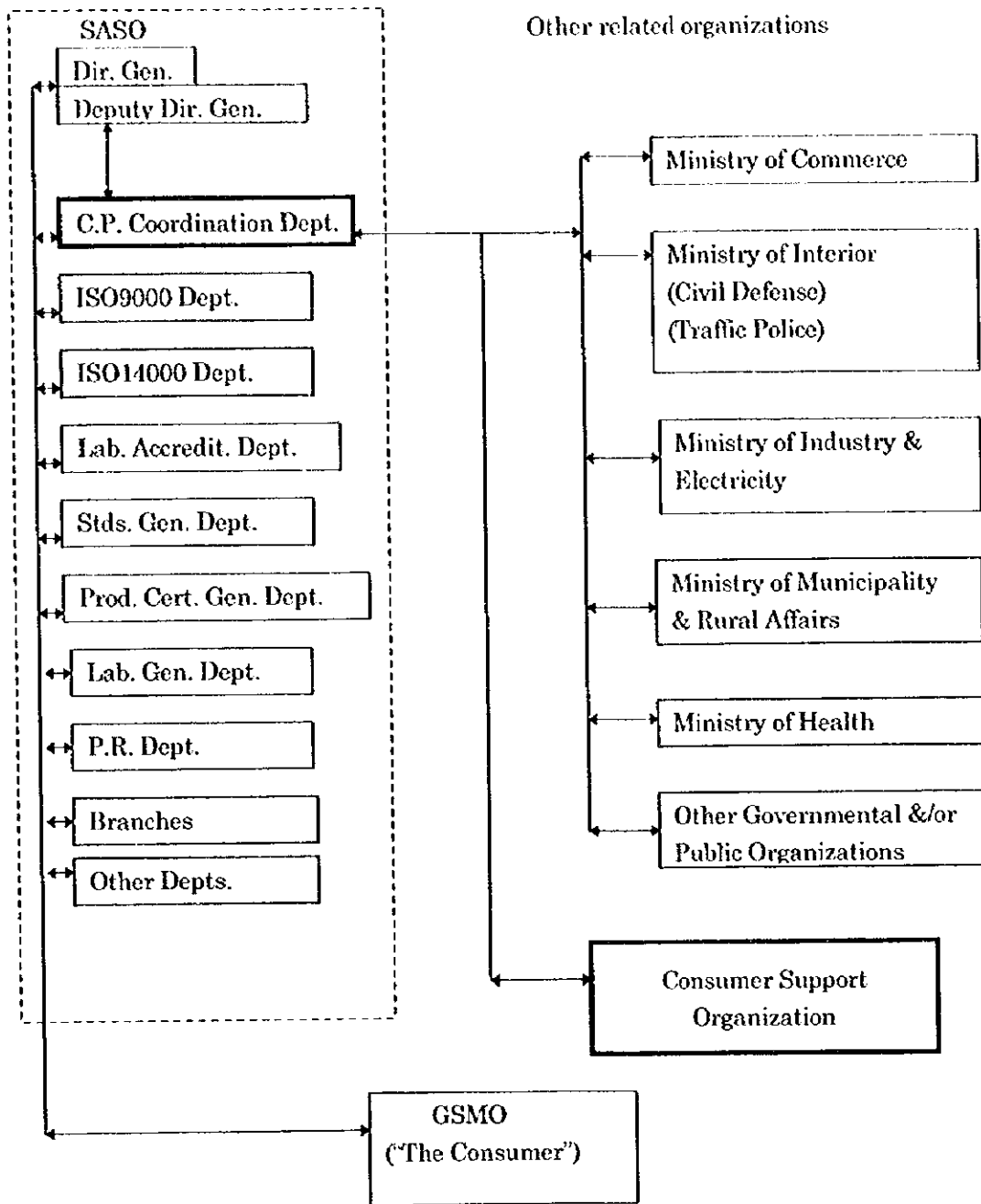


Figure 3.8.-2. Organizational structure of C. P. Coordination Department



### **3.9. The five year plan for activities and expenditure**

The time schedule of the master plan for the development of SASO should include the planned activities of SASO together with closely related activities conducted by other organizations and the annual expenditure especially for reinforcement of SASO laboratory.

The five year plan listed in *Table 3.9-1* in this clause gives a basic idea how to develop activities and capability of SASO as well as related ones. The test equipment and experimental facilities are planned to be installed according to development of total consumer protection activities (i.e. demand for test) in Saudi Arabia.

Table 3.9.-1. The five year plan for the development of SASO

Subject	1998	1999	2000	2001	2002
<b>Legal system</b>					
Legislation and enforcement of Consumer Protection Fundamental Act	Legislation		Enforcement		
Legislation and enforcement of Products Safety Law	Legislation		Enforcement		
Legislation and enforcement of Interior Wiring Law	Legislation		Enforcement		
Reinforcing the Civil Defense Law for usage of fire resistant fabrics	Legislation	Enforcement			
Legislation and enforcement of Indication Law	Legislation		Enforcement		
Legislation and enforcement of Traffic Safety regulation	Legislation	Enforcement			
Legislation and enforcement of harmful substance regulation for textile	Legislation	Enforcement			
<b>Consumer Support Organization</b>		Establishment	Starting activities	Strengthening and	expansion of activities

Subject	1998	1999	2000	2001	2002
<b>Standards</b>					
Electric/electronic products	Config. adapters std. Prod. stds. Covered by IEC 835, 598 & 950 under ICCP	Components for appliances stds.	Other prod. Covered by IEC 335, 598 & 950 stds.	Electric tools stds. Components for bldg. installation stds.	Follow up
Interior wiring	Saudi Application Guide		(Qualification system for wiring electrician)		
Tires	Rev. retread std.	Maintenance std.			
Textile products	Rev. color fastness std. Rev. silk fabric std. Harmful substance std.	Static elec. std. Fire retardant std. Toxic gas std.	General garments std.		Sewing std.
Accreditation/Certification/Inspection	Use of manufacturer's data and facilities				
Q mark system					
Std. Conformity Mark	Preparation work		Implementation	(Grace period of 3 yrs.)	
Confirmation of test certificates by importers	Preparation work		Implementation		
Participation to IECEE-CB Scheme	Preparation work for participating as member & Recognizing NCB	Application to IECEE		Preparation work for participating as Issuing & Recognizing NCB & CBTL	Application to IECEE
Accreditation] of interior wiring inspection bodies	Establishing system	Accreditation of inspection bodies			

Subject	1998	1999	2000	2001	2002
<b>Market surveillance</b>					
<u>General</u>					
Visual inspection of "Country of origin"					
"Name of importers/manufacturers"					
<u>E/E products</u>					
Visual inspection of marking of rating and plug configuration		Periodical survey			
Sample test of connecting apparatus					
Sample test of other household appliances					
Interior wiring inspection					
<u>Tires</u>					
Visiting inspection at retailers					
Roadside inspection					
<u>Textile products</u>					
Visual inspection for labeling & quality	(Labeling)	(Labeling & quality)			
Sample test of quality	(Composition)	(Composition & other quality)			

Subject	1998	1999	2000	2001	2002
Information gathering and processing function					
Reinforcing causal and statistical analysis for consumer complaints and accidents in MOC, CD and TP	Improvement of existing system	System development	Utilization	Improvement	
The data base and Information network	↑	System development	Utilization	↑	↑
SASO data base in the head quarter and in the laboratory	System development	↑	Utilization	↑	↑
Improvement and Reinforcement of test function in electric/electronic labs.					
Equipment	Connector testers	Connector mat. testers Parts safety testers	Connection strength & Durability testers	Material testers (IEC335-1, 65)	Testers less frequently used
Manpower	Add. 3		Add. 2	Add. 2	
Estimated expenditure for equipment	¥ 9 million (\$ 75 thousand)	¥ 13 million (\$ 108 thousand)	¥ 15 million (\$ 125 thousand)	¥ 2 million (\$ 16.7 thousand)	¥ 40 million (\$ 333.3 thousand)

Subject	1998	1999	2000	2001	2002
Improvement and Reinforcement laboratory test function in material (tires) labs.					
Equipment	Air chuck Tire cutter	Plunger/Bead unseating tester	Dynamic balance tester		Drum tester
Manpower	Add. 1	Add. 1	Add. 1		Add. 3
Estimated expenditure	¥ 0.5 million ¥ 35 million (\$4.2 thousand) (\$291.7 thousand)	¥ 27 million (\$225 thousand)	¥ 40 million (\$333.3 thousand)		¥ 35 million (\$291.7 thousand)
Improvement and Reinforcement laboratory test function in textile labs.					
Equipment	Xenon tester Wash machine by IEC Spectro. photometer	Static electric "walk method" machine Smoke analysis tester			
Manpower	Add. 1 (manager)	Add. 1			
Estimated expenditure for equipment	¥ 4.7 million (\$39.2 thousand)	¥ 22 million (\$183.3 thousand)			

Subject	1998	1999	2000	2001	2002
Human resources development	Setting up carrier development plan	Implementation			
Consumer education	Monthly publication	Articles based on actual accidents	Articles on comparison of appliances		
"The Consumer"	Cooperation with other organizations	Cooperative consumer education with various media			
General education	Starting organization	Starting new organization structure for certification, registration & accreditation work	Improving organization structure		
Organizational development in SASO	Starting Quality System Dept. & auditing relevant organizations				
Consumer Protection Coordination Dept.					
Organizational development					

## **Chapter 4.**

**Four important and essential objectives to improve  
consumer protection in Saudi Arabia and comprehensive  
action plans to realize them**



**CHAPTER 4. Four important and essential objectives to improve consumer protection in Saudi Arabia and comprehensive action plans to realize them**

4.1. General.....	4- 1
4.2. Providing consumers with sufficient and correct information about products which they buy and use.....	4- 1
4.3. Providing consumers with safe and reliable products.....	4- 2
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4.5. Reducing traffic accidents caused by tires .....	4- 7

## **Chapter 4. Four important and essential objectives to improve consumer protection in Saudi Arabia and comprehensive action plans to realize them**

### **4.1. General**

In the scope of the Study, the Team selected the following four objectives as being important and essential. In this chapter, action plans to realize them are described.

#### The four objectives

- 1) Providing consumers with sufficient and correct information about products which they buy and use
- 2) Providing consumers with safe and reliable products
- 3) Reducing fire accidents due to electricity and flammable textile products
- 4) Reducing traffic accidents caused by tires

The action plans for each objective are described in Clause 4.2, 3, 4 and 5 respectively and are listed up in *Table 4.1-1*. They are based on the following ideas as key points to strengthen consumer protection in Saudi Arabia.

#### The key points for the action plan

- 1) Preparing a relevant legal system and the standards
- 2) Strengthening of mutual collaboration among the ministries and agencies
- 3) Ensuring quality of products in the market and proper usage of products
- 4) Utilizing Consumer Support Organization effectively
- 5) Full and positive use of SASO's technical expertise and facilities
- 6) Establishing total information feedback loop for consumer protection

### **4.2. Providing consumers with sufficient and correct information about products which they buy and use**

#### Major action for realizing the objective :

- Expelling products with fake or misleading indication from the market
- Providing consumers with instruction manuals in Arabic and educational information

1) **Role assignment among relevant organizations**

The relationship among relevant organizations is as follows :

<b>MOC [Head of the project]</b>	<b>SASO</b>	<b>Others</b>
<ul style="list-style-type: none"> <li>• Establishing the Indication Law</li> </ul>	<ul style="list-style-type: none"> <li>• Support in establishing the Indication Law</li> </ul>	<ul style="list-style-type: none"> <li>[CCI]</li> <li>[CSO]</li> <li>• Support of the project</li> </ul>
<ul style="list-style-type: none"> <li>• Market surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• Support of market surveillance and sample testing</li> </ul>	
<ul style="list-style-type: none"> <li>• Import inspections at customs</li> </ul>	<ul style="list-style-type: none"> <li>• Support to inspection and sample testing</li> </ul>	

2) **Expelling products with fake or misleading Indication from the market**

Outline of action

Stipulating favorable and unfavorable indication methods and penalties for violators in Indication Law and conducting inspections at customs and market surveillance are the major activities to expel bad products from the market.

Action program for SASO

- SASO should cooperate with MOC for legislation of the Indication Law.
- SASO should cooperate with MOC for market surveillance from 1998 and sample testing in the laboratory from 1999 as described in Clause 2.4.4. Inspectors in the QC General Dept. and the Laboratory General Dept. should participate in this surveillance.

3) **Providing consumers with instruction manuals in Arabic and educational information**

Outline of action

Strict enforcement of the relevant SSA at customs and in market surveillance should be carried out continuously.

Action program for SASO

- SASO should cooperate with MOC for market surveillance as described in Clause 2.4.4.

**4.3. Providing consumers with safe and reliable products**

Major action to realize the objective :

- Imposing obligations to confirm safety and standard conformity of products on importers and distributors
- Strengthening of quality control for domestic products
- Intensifying tests for samples from the market and collection of consumer accidents and loss information

1) **Role assignments among the relevant organizations**

The relationship among relevant organizations is as follows:

<u>MOC</u> [Head of the project]	<u>MOIE</u>	<u>SASO</u>	<u>Others</u>
<ul style="list-style-type: none"> <li>Establishing the Product Safety Law</li> <li>Market surveillance</li> </ul>	<ul style="list-style-type: none"> <li>Promoting a quality control system among the manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>Establishing and revising necessary SSA</li> <li>Technical support for education for manufacturers</li> <li>Introduction of SC Mark system</li> <li>Promotion of Q Mark and ISO9000</li> <li>Support of surveillance and sample testing</li> <li>Technical support</li> <li>Technical support</li> </ul>	<ul style="list-style-type: none"> <li>Establishing the Consumer Protection Fundamental Act and Consumer Protection Council</li> </ul> <p>[CSO]</p> <ul style="list-style-type: none"> <li>Causal investigations regarding consumer complaints</li> <li>Product testing</li> </ul>

2) **Imposing obligations to confirm safety and standard conformity of products on importers and distributors**

Outline of action

Obligations of the importers and distributors to handle safe and good quality products should be clearly stipulated in Consumer Production Fundamental Act. Enforcement of the law should be conducted mainly through market surveillance. The distribution route and standards for which the products should conform to are easily traceable by means of importer's name sticker, etc. as described in Clause 2.4.1.

Action program for SASO

- SASO should cooperate with MOC regarding market surveillance as described in Clause 2.4.4.

3) **Enhancing quality control of domestic products**

Outline of action

MOIE and SASO should promote advanced quality control among the domestic manufacturers through SC and Q Mark systems and ISO9000 certification, etc.

Action program for SASO

- SASO should establish SC Mark System in 1998 and promote the system intensively as well as Q Mark and ISO9000 certification.
- SASO should promote education on quality control through seminars, manufacturers/distributors education and Quality Day as described in Clause 2.6.2. 2) and in 3. 5.)

#### **4) Intensifying testing of samples taken from the market and collection of consumer accidents and loss information**

##### **Outline of the action**

Intensive market surveillance accompanied by the sample testing and collection/analysis of consumer information are essential and basic measures to improve consumer protection in Saudi Arabia. MOC and SASO should start market surveillance and sample testing as soon as possible even though their capability to do so is limited. A step by step increase in surveillance will be effective for this purpose.

##### **Action program for SASO**

- SASO should cooperate with MOC for market surveillance and sample testing in the laboratory. Especially, SASO should try to test problem type products as much as possible.
- SASO should build up causal analysis capability step by step and support intensively causal analysis of accidents and consumer complaints.
- SASO should collect consumer accidents and loss information from the Civil Defense, the Traffic Police, MOC, etc. and analyze them to reflect in SSA, quality control (Q Mark, SC Mark, etc.), test/inspection system and consumer education as described in the Clause 2.3. and Clause 3.2.
- SASO should provide the Consumer Support Organization with intensive support and assistance for their investigation regarding consumer complaints and product testing using SASO's facilities and technical expertise.

#### **4.4. Reducing fire accidents due to electricity and flammable textile products**

##### **Major actions to realize the objectives :**

- Reducing bad interior wiring
- Expelling inferior electrical connecting apparatuses from the market
- Reducing wrong use of the two different supply voltages
- Use of flame retardant textile products for specific places

**1) Role assignment among the relevant organizations**

The relationship among the relevant organizations is as follows :

<u>Civil Defense</u> (Head of the project)	<u>MOIE</u>	<u>MOC</u>	<u>SASO</u>	<u>Others</u> (MOMRA)
	<ul style="list-style-type: none"> <li>Establishing the Interior Wiring Law</li> <li>Reviewing and enforcing wiring workers qualification system</li> </ul>		<ul style="list-style-type: none"> <li>Accreditation of inspection bodies</li> <li>Establishing Saudi Application Guide</li> <li>Technical support</li> </ul>	<ul style="list-style-type: none"> <li>Inspection</li> </ul>
		<ul style="list-style-type: none"> <li>Market surveillance of connecting apparatus</li> </ul>	<ul style="list-style-type: none"> <li>Technical support to surveillance &amp; sample test</li> <li>Establishing SSA for connecting apparatus</li> <li>Addition of SSA for fire retardant items</li> </ul>	(GOTEVOT) Training course for qualification
<ul style="list-style-type: none"> <li>Civil Defense Law for flame resistant textile products</li> </ul>			<ul style="list-style-type: none"> <li>Technical support</li> </ul>	(MOMRA) Inspection of interior wiring of houses
<ul style="list-style-type: none"> <li>Inspection</li> </ul>				

**2) Reducing bad interior wiring**

Outline of action

As described in Clause 2.2.4. 1) and 2.6.1. 5), Interior Wiring Law and Saudi Application Guide set the rule for low voltage interior wiring for both buildings and houses, that is, technical standards, obligation to building/house owners and constructors and also penalties for violators.

As described in Clause 2.5.2. and 2.5.1. 5), the inspection system, accreditation of inspecting bodies, inspection practice and qualification of interior wiring workers ensure enforcement of the law.

Action program for SASO

- SASO should establish Saudi Application Guide by 1998.
- SASO should establish an accreditation system of interior wiring inspection bodies by the middle of 1999 and start accreditation work in 1999.
- Occasionally SASO should join the interior wiring inspection probably starting from 2000 together with the inspection bodies to study actual situations.
- SASO should give technical support to MOIE, GOTEVOT and other relevant organizations.

**3) Expelling inferior electrical connecting apparatuses (configuration adapters, extension cords etc.) from the market**

**Outline of action**

First of all, lacking standards for the connection apparatuses should be established and necessary facilities for testing should be prepared in SASO laboratory. The testing equipment indicated as priority 1 in *Table 3.7.3-2* are necessary for this purpose. Then, as described in Clause 2.4.4. 1), intensive market surveillance together with sample testing will expel inferior products from the market. Market surveillance and the sample testing should be started as soon as possible. Before establishing SSA, the existing SSA can be temporarily adopted for connecting apparatuses as described in Clause 2.4.4. 1), b).

**Action program for SASO**

- SASO should establish the standards by 1998.
- MOC and SASO should start market surveillance and the sample testing of connecting apparatuses from 1999.
- SASO should prepare the necessary testing equipment and test skills in the laboratory by 1998.

**4) Reducing the wrong use of the two different supply voltages**

**Outline of the action**

As described in Clause 2.6.1. 4), in the first stage, strict control of usage of exclusive plugs and connectors (enforcement of SSA) should be necessary, by custom control and market surveillance. In the second stage, reconsideration of SSA for plugs and connectors and unification of two different source voltages should be studied.

**Action program for SASO**

- SASO should cooperate with MOIE for assuring better enforcement of SSA through the Interior Wiring Law. The law will be legislated in 1999.
- MOC and SASO should cooperate in to strengthen the quality control of imported and domestic products and market surveillance as described in Clause 2.4.1, 2 and 4.
- SASO should study to improve the relevant SSA.

**5) Use of fire resistant textile products for specific places**

**Outline of the action**

The dry weather in Saudi Arabia causes textile products to easily catch fire. As described in Clause 2.6.3. 3), b), use of flame resistant textile products for specific places as well as penalties for violators should be stipulated in Civil Defense Law and the Civil Defense should make inspection in cooperation with MOMRA.

**Action program for SASO**

- SASO should cooperate with the Civil Defense for stipulating use of fire resistant textile products for specific places in 1999.
- SASO should support MOMRA technically for better inspection of houses and buildings. The inspection will start in 2000.
- SASO should establish SSA for fire retardant curtains and carpets and conduct sample tests in the laboratory.

## 4.5. Reducing traffic accidents caused by tires

### Major action to realize the objective :

- Strengthening the proper use and maintenance of tires
- Banning the use of unsafe tires

### 1) Role assignments among the relevant organizations

The relationship among the relevant organizations is as follows :

Traffic Police [Head of the project]	MOC	MOE	SASO	Others
<ul style="list-style-type: none"> <li>• Road Traffic Safety Law for proper use and maintenance of tires</li> <li>• Roadside inspections</li> <li>• Causal analysis of accidents</li> <li>• Driver education</li> </ul>	<ul style="list-style-type: none"> <li>• Market surveillance for retailers</li> <li>• Regulation against the sale of used tires</li> </ul>	<ul style="list-style-type: none"> <li>• School education for proper use and maintenance of tires</li> </ul>	<ul style="list-style-type: none"> <li>• Technical support</li> <li>• Consumer education</li> <li>• Technical support</li> </ul>	<ul style="list-style-type: none"> <li>(CCI) Support</li> <li>(CCI) Support</li> </ul>

### 2) Strengthening the proper use and maintenance of tires

#### Outline of the action

The subject is of special importance in Saudi Arabia. Consumer education should be strengthened through all possible educational means, such as high school education, driving institutions, instruction manuals and explanation by retailers and various media including "The consumer" magazine. Drivers should also be obligated regarding proper use and maintenance of tires. As described in Clause 2.4.4. 2), b), periodic roadside inspections with some penalty for violators will improve the present situation. The roadside inspections should be started as soon as possible. Until legislation of Traffic Safety regulation, the inspection should be conducted for data accumulation and public awareness of importance of proper use of tires. Causes of traffic accidents related to tires should be analyzed by the Traffic Police and in the SASO laboratory. Testing facilities listed in Table 3.7.4.-1 are necessary for this purpose.

#### Action program for SASO

- SASO should support technically school and consumer education and should use actual traffic accidents and findings from roadside inspections for consumer education.
- As for the roadside inspections, SASO should support the inspection technically and try to get information from these inspections. The Traffic Police and the distributor group, experts about tires, should conduct inspections as described in Clause 2.4.4.



- SASO should establish a tire maintenance standard in 1999.
- MOC and SASO should cooperate with market surveillance as described in Clause 2.4.4.
- SASO should build up equipment and skills for tire testing step by step. As there is no domestic tire manufacturers, assistance of experienced foreign engineers will be necessary for this purpose.

### **3) Ban on usage of unsafe tires**

#### **Outline of action**

The specifications for retread tires for passenger cars and buses should be studied to delete them from the relevant SSA and regulations which stipulates the banning of the sale of used tires should be established. Then strict enforcement of the SSA and regulations through market surveillance, inspection at customs, etc. should be carried out.

#### **Action program for SASO**

- SASO should revise SSA for retread tires and tire storage by 1998.
- Saudi Arabian natural and social environment necessitate special consideration regarding tires and their use. SASO should study this situation and reflect it in relevant SSA.



Table 4.1-1. Action plan for four major objectives for consumer protection

Objectives	Cooperation work among organization	Major actions to realize the objectives Measures to be taken by the relevant organizations for each action	SASO's action				
			Standards	Certification/ Registration/ Accreditation	Test/Inspection	Facilities and skills in the laboratory	Coordination/ consumer education
1. Providing the consumer with sufficient and correct information about products	MOC SASO CCI CSO	Expelling products with fake or misleading indication from the market ◎ Legislation of Indication law ◎ Market surveillance ◎ Custom inspection for indication			◎ Support for the market surveillance and sample tests		○ Giving a seminar on and information about labeling including Q, SC Mark for distributors and consumers
	MOC SASO CCI CSO	Providing consumers with instruction manuals in Arabic and educational information ◎ Market surveillance ◎ Custom inspection for attachment of instruction manuals			◎ Support for the market surveillance and sample tests		○ Giving information about instruction manuals for distributors and consumers through "the Consumer," etc.
2. Providing consumers with safe and reliable products	MOC SASO	Imposing obligation to confirm safety and standard conformity of products on importers and distributors ○ Legislation of Consumer Protection Fundamental Act ◎ Legislation of Product Safety Law ◎ Labeling importer's name on products ◎ Market surveillance	◎ Establishment or revision of safety SSA		◎ Support for market surveillance and sample tests		○ Consumer education through "the Consumer," etc.
	MOIE SASO	Enhancing quality control of domestic products ◎ Establishment and enforcement of the S C Mark system for domestic products ○ Promotion of quality control over the country		◎ Introduction of SC-Mark system ○ Promotion of Q Mark system and ISO 9000 certification	◎ Inspection based on SC-Mark system		◎ PR of SC-Mark system to consumers ◎ Seminars on quality control for manufacturers
	MOC Civil Defense Traffic Police SASO CSO	Intensifying market surveillance and collection of consumer accidents and losses information ○ Legislation of Consumer Protection Fundamental Act ○ Establishment of Consumer Protection Council ◎ Product Safety Law ◎ Development of consumer information system and analysis of consumer information			◎ Support for the sample tests and causal analysis		○ Consumer information data base ○ Consumer education based on consumer information ◎ Set up C.P. Coordination Dept

Note : ◎ Top priority  
 ○ Second priority  
 — New activity



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Objectives	Cooperation work among organization	Major actions to realize the objectives Measures to be taken by the relevant organizations for each action	SASO's activities				
			Standards	Certification/ Registration/ Accreditation	Test/Inspection	Facilities and skills in the laboratory	Coordination/ consumer education
3.Reducing fire accidents due to electricity and easy flammable textile products	Civil Defense MOIE MOMRA SASO GOTEVOT	Reducing bad interior wiring <input checked="" type="checkbox"/> Legislation of Interior wiring law and enforcement of interior wiring inspection <input type="checkbox"/> Enforcement of the qualification system for interior wiring workers	<input checked="" type="checkbox"/> Saudi Application Guides	<input checked="" type="checkbox"/> Accreditation of inspection bodies			<input type="checkbox"/> Information about accidents and good interior wiring
	MOC MOIE SASO CSO	Expelling inferior connecting apparatus from the market <input checked="" type="checkbox"/> Strict use of exclusive outlets and plugs <input type="checkbox"/> Market surveillance	<input checked="" type="checkbox"/> Standardization of configuration adapters		<input checked="" type="checkbox"/> Support for market surveillance and test of samples	<input checked="" type="checkbox"/> Refer to <i>Table 3.7.3-2</i> List of test equipment <input checked="" type="checkbox"/> Training of electricians at Lab.	<input type="checkbox"/> Information about the products
	MOIE MOMRA SASO	Reducing wrong use of the two different supply voltages <input checked="" type="checkbox"/> Strict use of exclusive outlets and plugs <input type="checkbox"/> Unification of voltage	<input type="checkbox"/> Modification of SSA for 220V-use outlets and plugs				<input type="checkbox"/> Information about how to use electric appliances and apparatus
	MOC Civil Defense SASO	Use of flame retardant textile products for specific places <input checked="" type="checkbox"/> Revision of Civil Defense Law and enforcement of using the flame retardant textile products properly	<input checked="" type="checkbox"/> Addition of SSA for flame retardant (Curtain and Carpet)		<input checked="" type="checkbox"/> Test of samples at SASO Lab.		
4.Reducing traffic accidents caused by tires	The Traffic Police CCI MOE MOC SASO	Enhancing proper usage and maintenance of tires <input checked="" type="checkbox"/> Revision of Traffic Safety law <input checked="" type="checkbox"/> Roadside inspection <input type="checkbox"/> Market surveillance <input type="checkbox"/> Causal analysis of accidents	<input checked="" type="checkbox"/> Establishing tire maintenance standard <input checked="" type="checkbox"/> Revising the standard for tire storage		<input type="checkbox"/> Support for market surveillance <input checked="" type="checkbox"/> Support for roadside inspection <input type="checkbox"/> Support for causal analysis	<input checked="" type="checkbox"/> Refer to <i>Table 3.7.4-1</i> List of test equipment <input checked="" type="checkbox"/> Training of technicians at Lab.	<input type="checkbox"/> Closer cooperation and information exchange <input type="checkbox"/> Education on proper tire maintenance and analysis of actual accident
	MOC SASO	Ban on usage of unsafe tires <input type="checkbox"/> Legislation of a regulation prohibiting used tire sales	<input checked="" type="checkbox"/> Revising the standard for retread tires		<input type="checkbox"/> Support for market surveillance		

## **Chapter 5.**

### **Recommendation**

**CHAPTER 5. Recommendation**

5. Recommendation..... 5- 1



## Chapter 5. Recommendation

In order to bring the Master Plan into action, the following points are important. The Team would like to suggest SASO to do its best to accomplish them.

- 1) Closer relationship between SASO and other ministries and bodies should be established as soon as possible, and SASO should cooperate with them actively by carrying out the following items :
  - a) Support for establishing laws and regulations such as Consumer Fundamental Act, Product Safety Law, etc. in order to enforce SSA effectively
  - b) Enforcement of frequent and strong market surveillance together with MOC to drive off defective products from the market
  - c) Support for establishing consumer information system in the Kingdom and quick cooperative action to the consumer information
  - d) Establishment and fostering of the Consumer Support Organization
  - e) SASO should take the initiative in finding solutions to consumer issues in cooperation with relevant ministries and agencies. SASO laboratory must contribute toward finding the solutions in technical and scientific fields.
  - f) The capability of SASO laboratory should be improved, especially in research activities for analysis of accidents. To enhance the capability of causal analysis, SASO should cooperate closely with MOC, CD, TP, etc. and also ask assistance from academic, manufacturers groups or others with necessary expertise.
  - g) SASO should set up "Consumer Protection Coordination Department" to proceed with the above-mentioned activities in cooperation with other ministries and agencies.
- 2) Necessary and lacking SSA should be prepared and the existing SSA reviewed as soon as possible, especially for safety.
- 3) SASO should establish the following new certification systems as follows.
  - a) Standard Conformity Mark system for domestic products
  - b) Verification system of the test certificates for import products
- 4) To deal with increasing number and variety of tests, SASO laboratory should try to adopt advanced laboratory management to improve test productivity and test skills.

Participation in IECEE-CB scheme is an effective way to strengthen its activity and raise its position in the international society.
- 5) The number of subscribers of the magazine "The Consumer" should be increased carrying more popular subjects.







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