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### **Design and Development Planning**

DOST Regional Office No. IX defines, implements, and maintains necessary design and developmental processes to respond effectively and efficiently to the needs and expectations of its customers and other interested parties.

A module is prepared for every training program accepted and exclusively conducted by personnel of the DOST IX. It shows the design and development stages, establishes the appropriate review, verification and validation activities, and defines the responsibilities and authorities for the design and development. Employees are assigned to carry out designing of training modules, based on their expertise. The interfaces of the different units involved in the design and development are managed to ensure effective communication and clear delineation of responsibilities. The plan is updated as the design and development evolves.

#### **Design and Development Inputs**

Inputs to design and development include those coming from external sources such as customer needs and expectations, functional and performance requirements, design considerations, applicable statutory and regulatory requirements, international or national standards, and industry code of practice.

Internal inputs include policies and objectives of the organization, technological developments, competence requirements for people performing the design and development, feedback information from past experience, records and data on existing processes and products, and outputs from other processes.

## **Design and Development Output**

DOST Regional Office No. IX ensures that output of design and development is provided in a form that enables verification against the design and development input and is approved prior to release.

Design output includes data demonstrating the comparison of process inputs to process outputs, product specifications including acceptance criteria, process, material and testing specifications, training requirements, user information, purchase requirements, and qualification tests and reports. Design outputs are reviewed against inputs to provide objective evidence that outputs have effectively and efficiently met the requirements for the process and/or product.

# **Design and Development Review**

At appropriate stages, DOST-IX conducts systematic reviews to determine whether design and development objectives are achieved. Agenda for review include adequacy of input to perform the design and development, progress of the planned design and development process, identification and correction of problems, meeting verification and validation goals, and control of changes and their effects during the design and development process.

Participants in the review include representatives of functional units concerned with the design and development processes being reviewed. Records of the review of any changes and any action taken are maintained.

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	Quality Management Representative	Regional Director

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### **Design and Development Verification**

DOST IX undertakes reviews of the design and development outputs, as well as the processes, in order to satisfy the needs and expectations of customers and people within the organization who receive the output. Verification activities include comparisons of input requirements with the output of the process, testing, simulations or trials to check compliance with specific input requirements and evaluation against lessons learned from past experience.

### **Design and Development Validation**

Validation of the output of the design and development processes is performed to ensure that the product meets the requirements for the specified application or intended use. Records of the results of validation and any necessary actions are maintained.

### **Control of Design and Development Changes**

Design and development changes are identified and records of the same are maintained. The changes are reviewed, verified and validated, as appropriate, and are approved by approving authority before implementation. Reviews of design and development changes include evaluation of the effect of the changes on constituent parts and product already delivered.

Documented information of the results of the review of changes and any necessary actions are retained.

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