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Joint ICTP-IAEA School of Nuclear Energy Management

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Training in nuclear energy domain

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Training in nuclear energy domain

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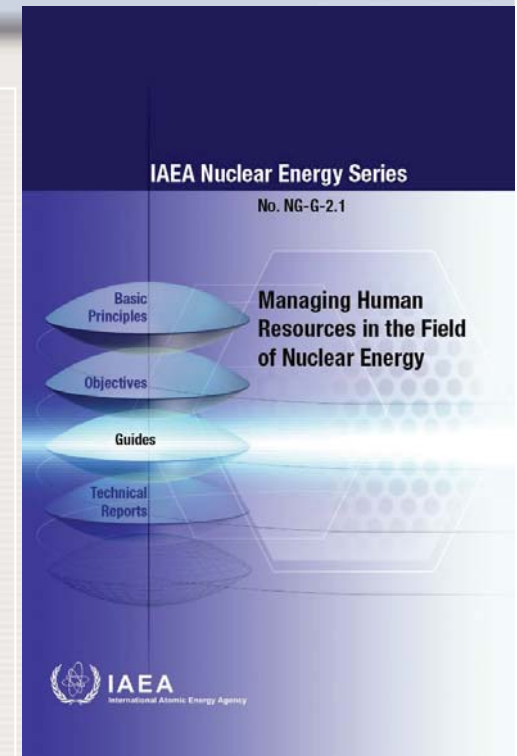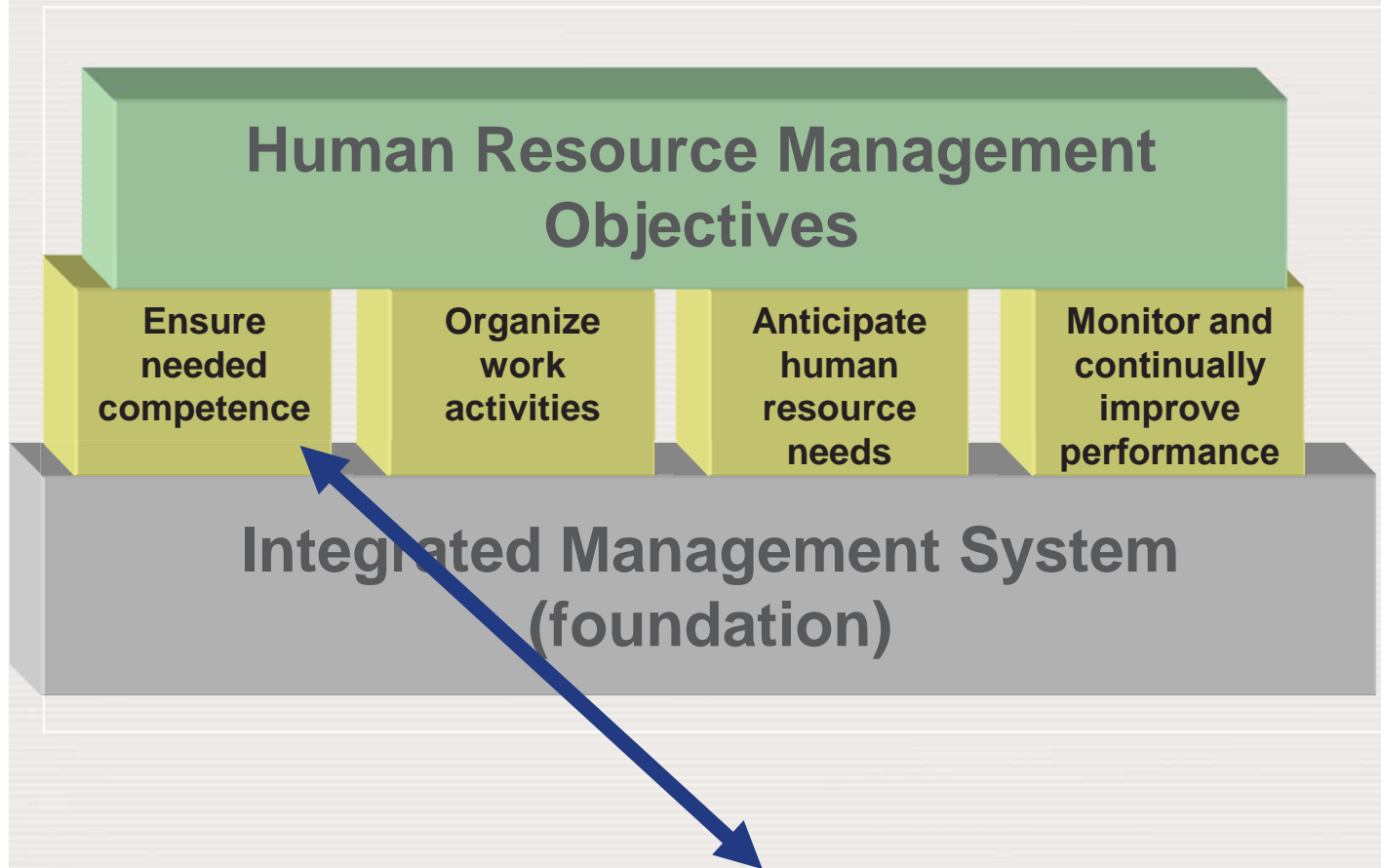1957–2007

Objectives

By the end of this presentation you should be able to:

- State the four 'pillars' of Human Resource Management as part of an Integrated Management System

- Describe the Systematic Approach to Training Model

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Integrated Management System (IMS)

- Main purpose of IMS is to ensure all aspects of Management addressed and aligned to ensure achievement of Company Objectives
- Different management activities are complementary and mutually supportive (Safety, Quality, Productivity, Performance, etc)

The Relationship between HRM and IMS

Human Resource Management Objectives

| Ensure needed competence | Organize work activities | Anticipate human resource needs | Monitor and continually improve performance |

Integrated Management System (foundation)

IAEA Nuclear Energy Series
No. NG-G-2.1

Basic Principles
Objectives
Guides
Technical Reports

Managing Human Resources in the Field of Nuclear Energy

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Focus of Human Resource Development

Ensuring competence (HRD)

- Identify responsibilities/accountabilities of organisational units for delivering business objectives
- Identify individual roles and responsibilities within organisational units, consistent with above
- Identify individual competence requirements
- Use competence requirements as the basis for selection and recruitment of new staff
- Develop individual competence using a Systematic Approach to Training (SAT) process

So, what is SAT?
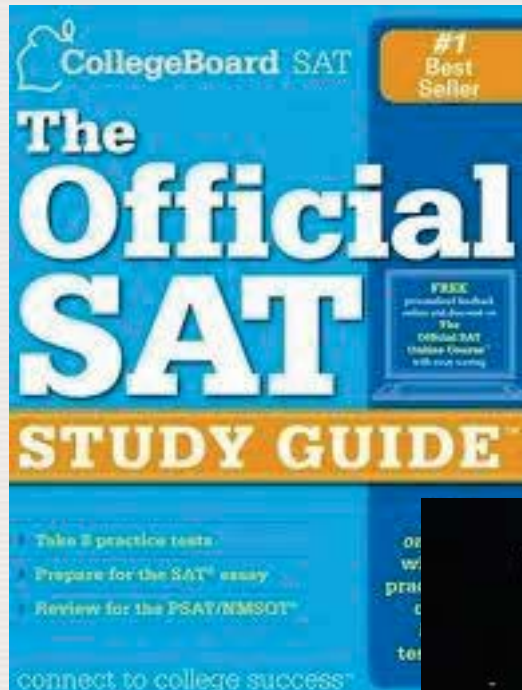
SAT – Systematic Approach to Training

- SAT should be used for attaining and maintaining the competencies of nuclear facility personnel.
- SAT is process based, result oriented and follows a systematic approach.
- SAT based training has been established as a guideline for nuclear facility training programmes through a variety of mechanisms. In some Member States, SAT based training is a regulatory requirement, while in others it is established through industry initiatives or by an operating organization's policies.

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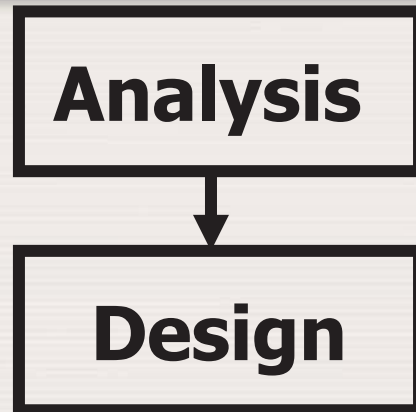*1957–2007*
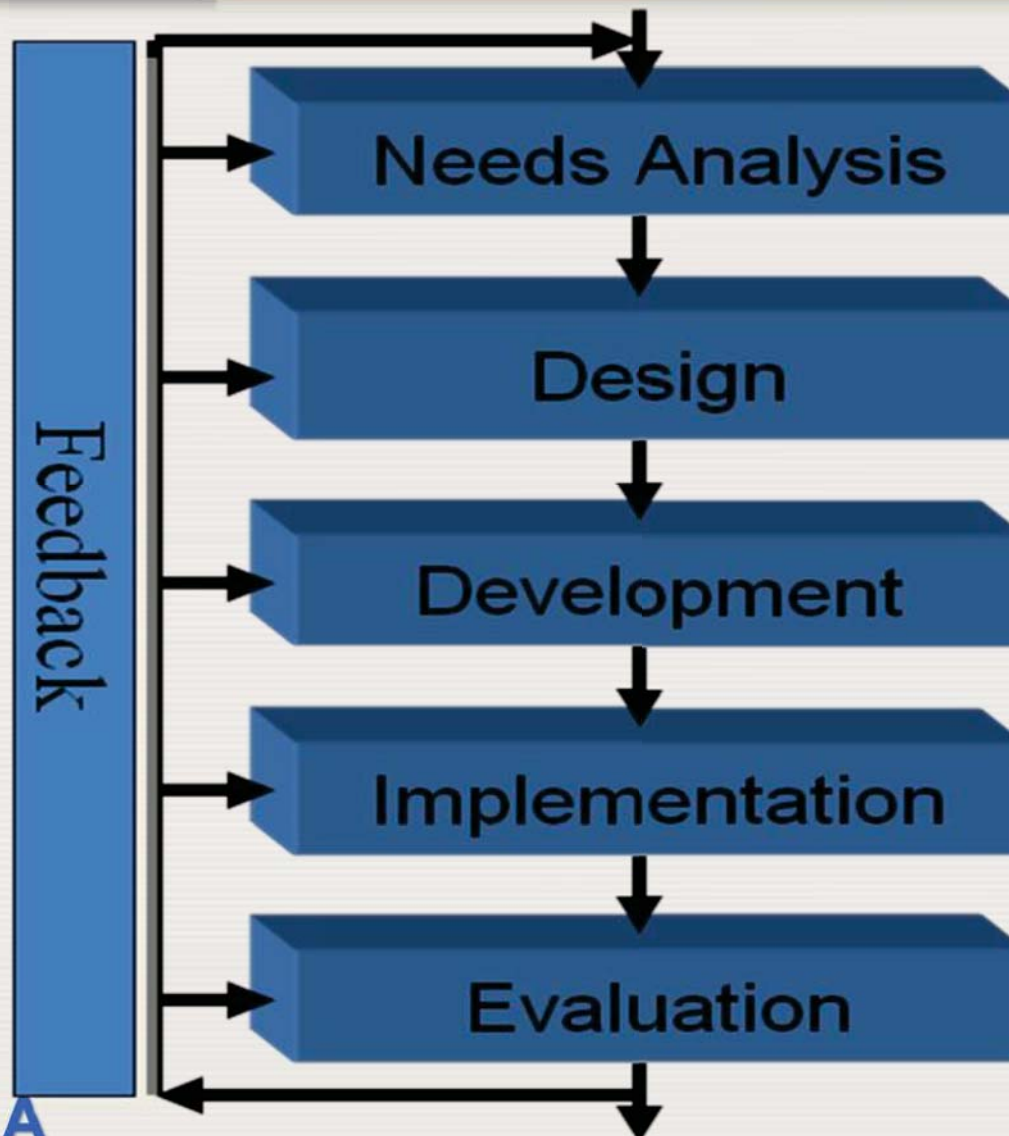
SAT Step 1 – Analysis Phase

Analysis

The purpose of this phase is to identify those jobs and their related tasks and competencies for which training is required. Competencies are defined to be groups of knowledge, skills and attitudes (KSAs) needed to perform a particular job

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SAT Step 2 – Design Phase

Analysis

Design

The purpose of the design phase is to convert the competencies/KSAs that were selected for training during the analysis phase into training objectives, and to sequence these training objectives into a training plan for initial and continuing training.

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SAT Step 3 – Development Phase

Analysis

Design
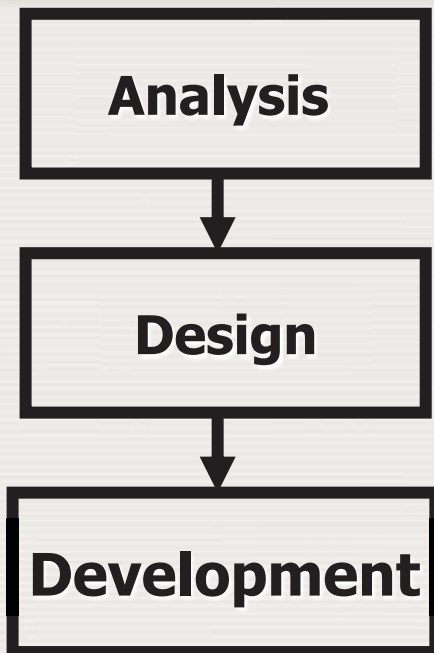
Development

The purpose of the development phase is to produce the materials needed for the implementation of initial and continuing training programmes. All training materials should be consistent with site/plant documentation

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SAT Step 4 – Implementation Phase
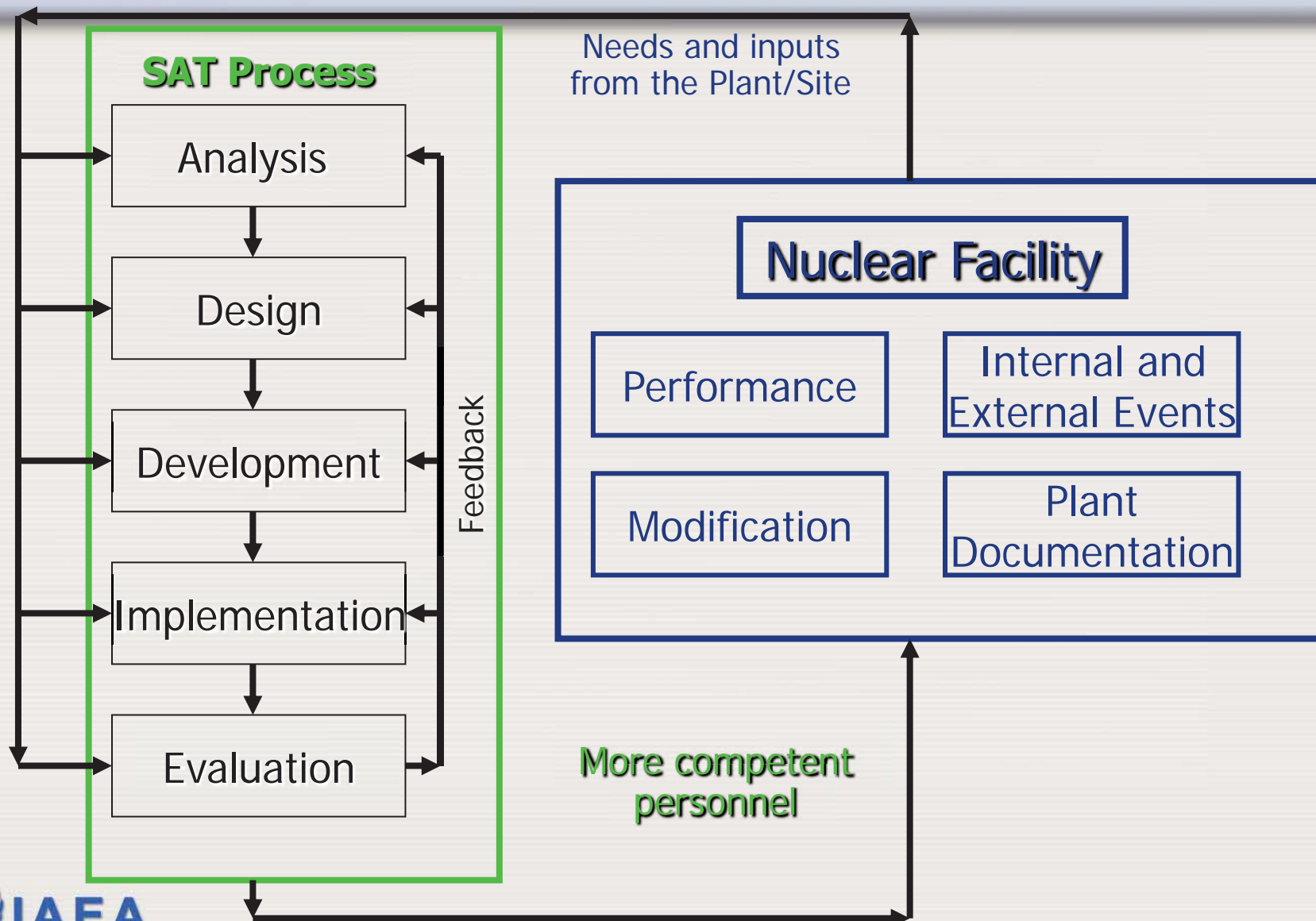
Analysis

Design

Development
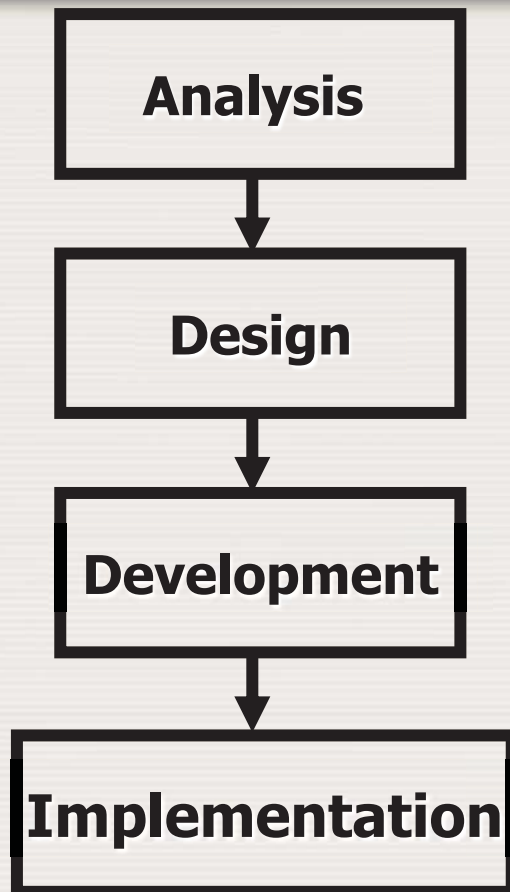
Implementation

Training implementation is the _conduct of training_ using materials and lesson plans developed during earlier phases. Hence, the most relevant input to this phase is the trainees. Similarly the most relevant output is competent personnel.

SAT Step 5 – Evaluation Phase

Analysis

Design

Development

Implementation

Evaluation

Feedback
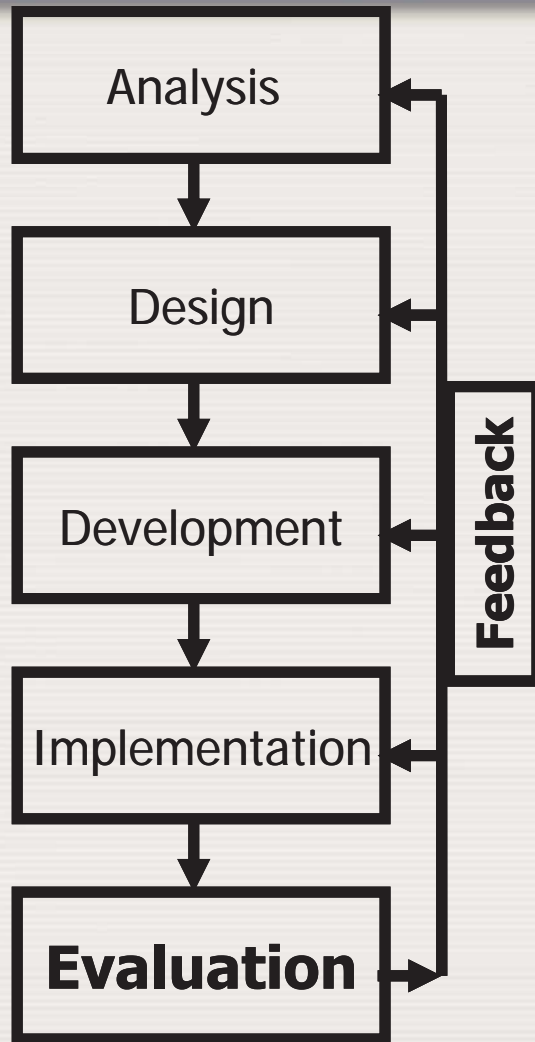
The purpose of the evaluation phase of SAT is to determine the effectiveness, efficiency and impact of training programmes and to identify whether and where revisions or improvements are needed. It emphasizes that the SAT process is not complete without the evaluation phase.

Relationship between SAT Process and Business Requirements

SAT Process
- Analysis
- Design
- Development
- Implementation
- Evaluation

Feedback

Needs and inputs from the Plant/Site

Nuclear Facility
- Performance
- Internal and External Events
- Modification
- Plant Documentation

More competent personnel

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Key points re Human Resource Development

- Training, and competence development, is a continuous process; initial training is needed for job authorisation, continuing training is needed to sustain, and develop, competence

- Continuous improvement, and therefore individual performance improvement is needed throughout the life cycle

- HRM/HRD must be aligned to Business objectives, and other management processes (IMS) and must be flexible and adaptable to meet changing business needs

- Individual development must be consistent with Organisational Objectives

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Objectives – have we met them?

By the end of this presentation you should be able to:

- State the four 'pillars' of Human Resource Management as part of an Integrated Management System

- Describe the Systematic Approach to Training (SAT) Model

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ANY QUESTIONS?

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