

DEVELOPMENT OF CONTAMINATED SITE MANAGEMENT SYSTEM FOR TURKEY

**NATO/CCMS Pilot Study Meeting
“Prevention and Remediation In Selected
Industrial Sectors: Sediments”**

**17 – 22 June 2007
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Tour de Table Presentation

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Overview

- General Project Information
- Scope & Objectives
- Project Workpackages and Output
- Current Status & Progress

General Project Information-1

The project has been jointly undertaken by METU Environmental Engineering Department and the Ministry of Environment & Forestry, GD of Environmental Management. Collaborating Divisions are

- Division of Soil & Water Management
- Division of Waste Management
- Division of Chemicals Management
- Division of Environmental Monitoring & Auditing

General Project Information-2

- Project Funded by TÜBİTAK (KAMAG 106G008)
National funding agency
- Project Duration: 30 Months
(Sept. 2006 – March 2009)
- Project Personnel: Total of 15 Persons
 - Faculty member: 5
 - Information Systems Engineer: 1
 - Student : 3 (1 Ph.D., 2 M.S. Students)
 - M of E&F Personnel: 6

Scope & Objectives-1

The aim is, to develop a sustainable management system & its associated methodologies and the tools that can be used for the **identification, registration, investigation, classification** and, **remediation** of contaminated sites in Turkey.

- It is to be consistent with EU Soil Framework Directive

Scope & Objectives-2

Specific objectives are

- Development of a new SPCR, which serves as a main legal document for the proper management of Contaminated Sites
- Development of a web-based Information System for Contaminated Sites
- Development of Technical Guidance Documents
- Organizing national workshops to provide a common forum for discussion and cooperation amongst the involved parties (decision makers, stakeholders)

Project Workpackages and Output-1

Project Workpackages and Output

- **SPCR Work Package**

- Revised & improved SPCR document
- Risk based soil contaminant guidance (screening) values

- **Contaminated Sites Information System Work Package**

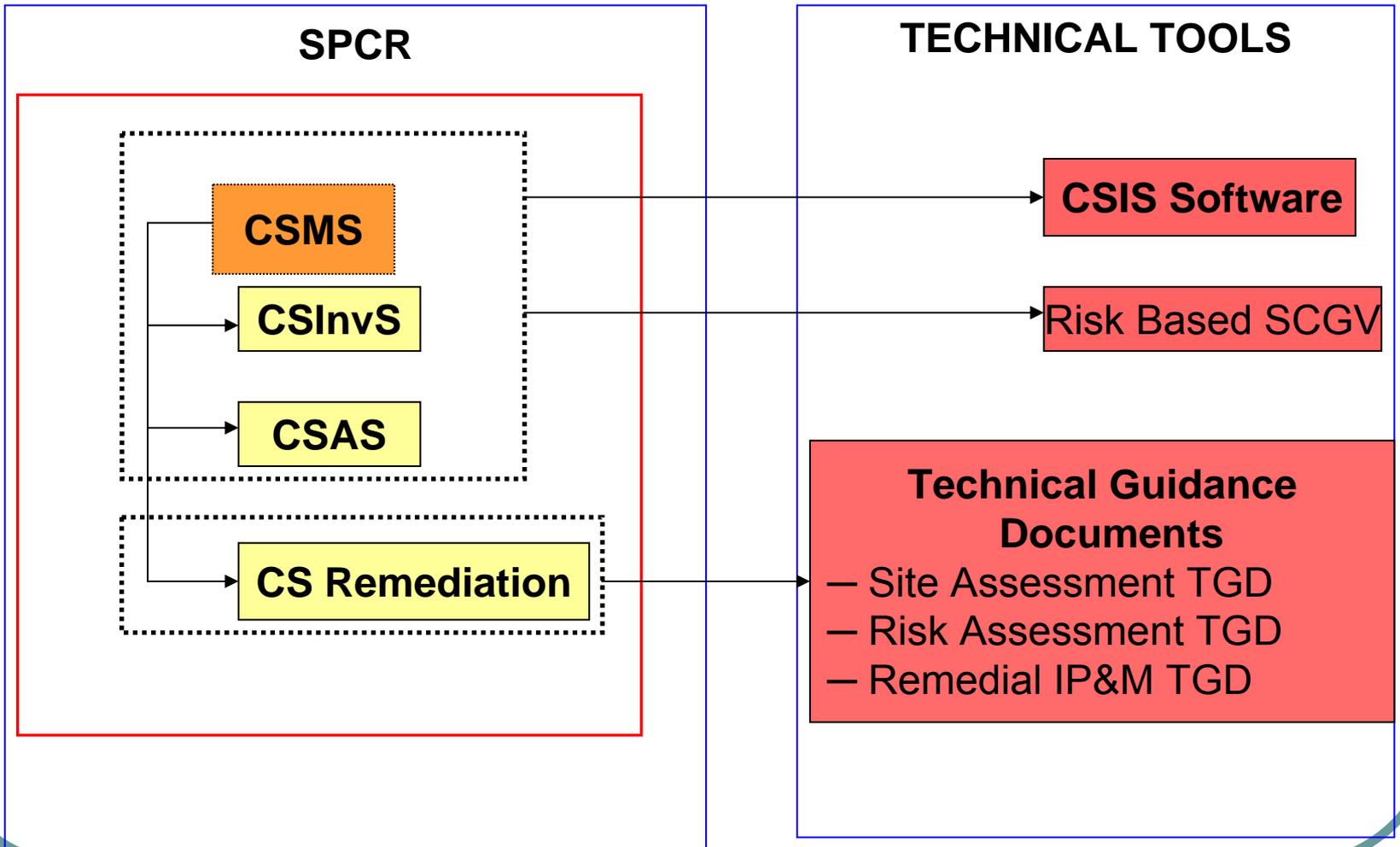
- Contaminated Sites Inventory (I & R) System
- Contaminated Site Assessment System
- Contaminated Site Information System Software

Project Workpackages and Output-2

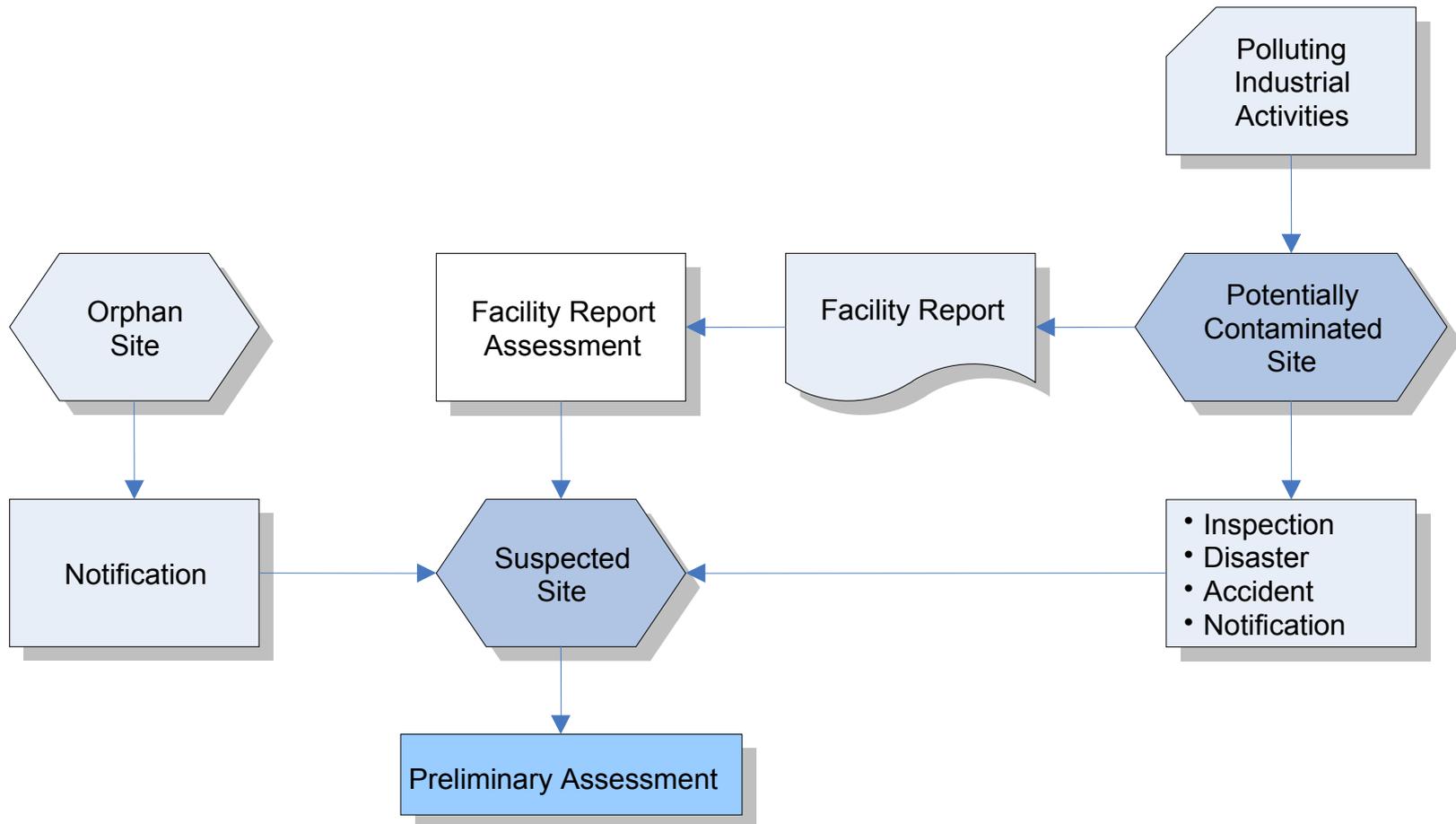
- Technical Guidance Documents Work Package
 - Site Assessment Technical Guidance Document
 - Risk Assessment Technical Guidance Document
 - Remedial Investigation, Planning & Monitoring TGD
- Workshops
 - Interim workshops (2)
 - Final workshop

to provide a common forum for discussion and cooperation amongst the involved parties

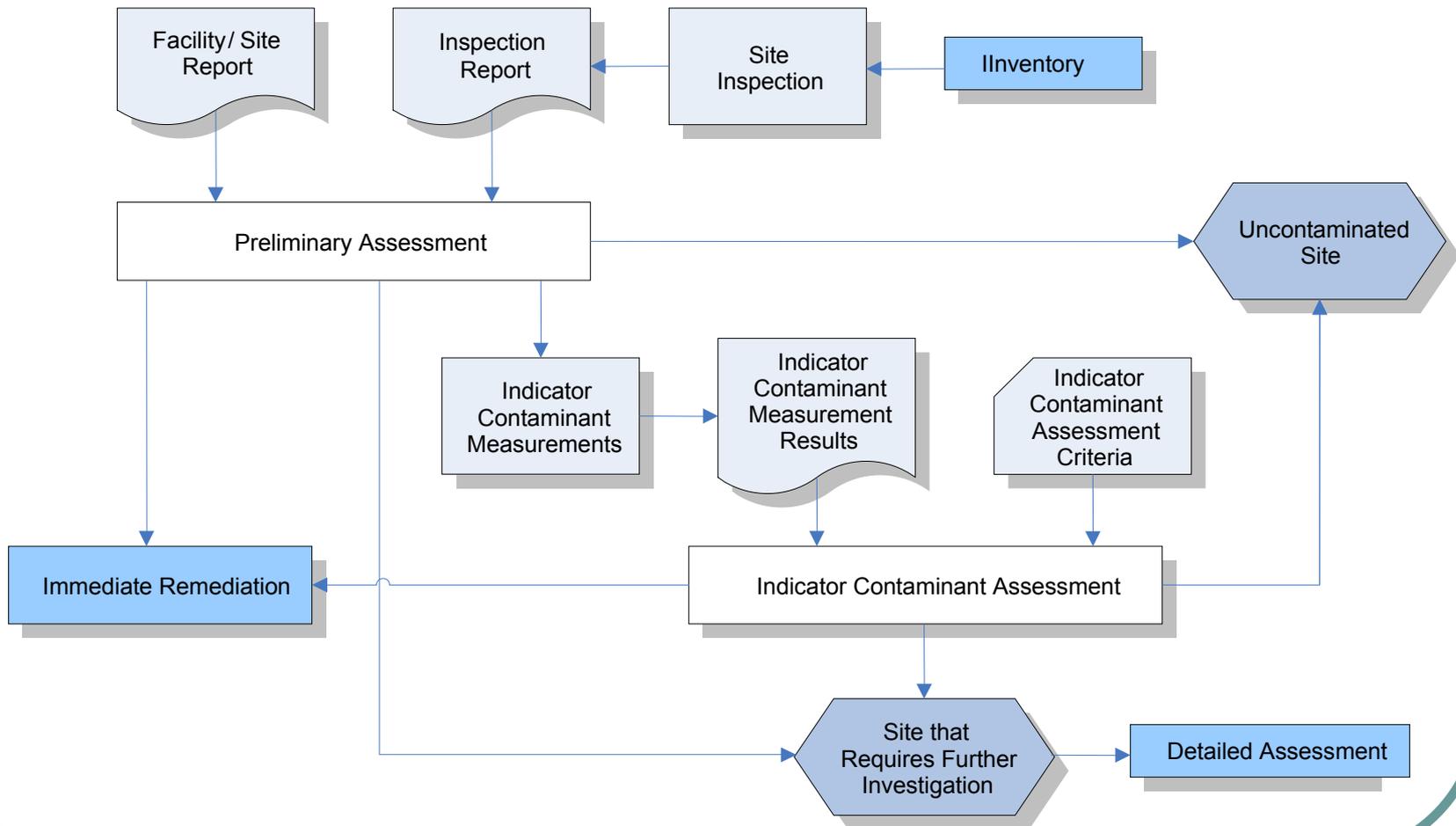
Project Workpackages and Output-3



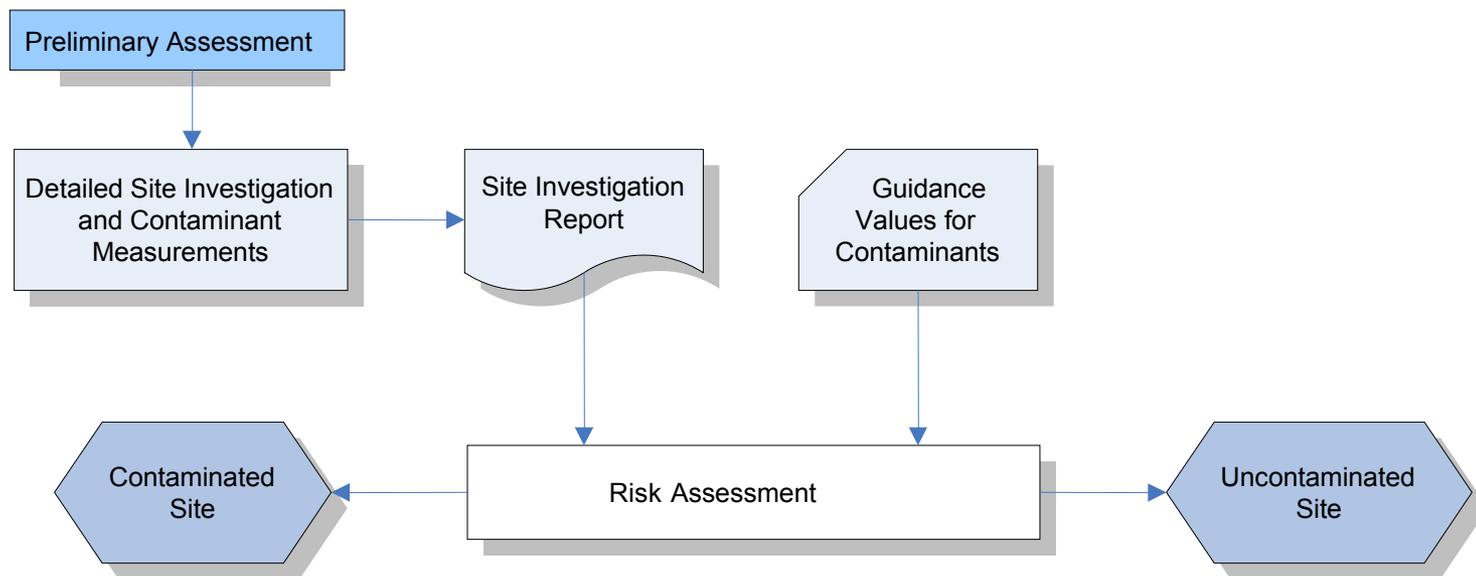
CSMS-Inventory (I & R) System



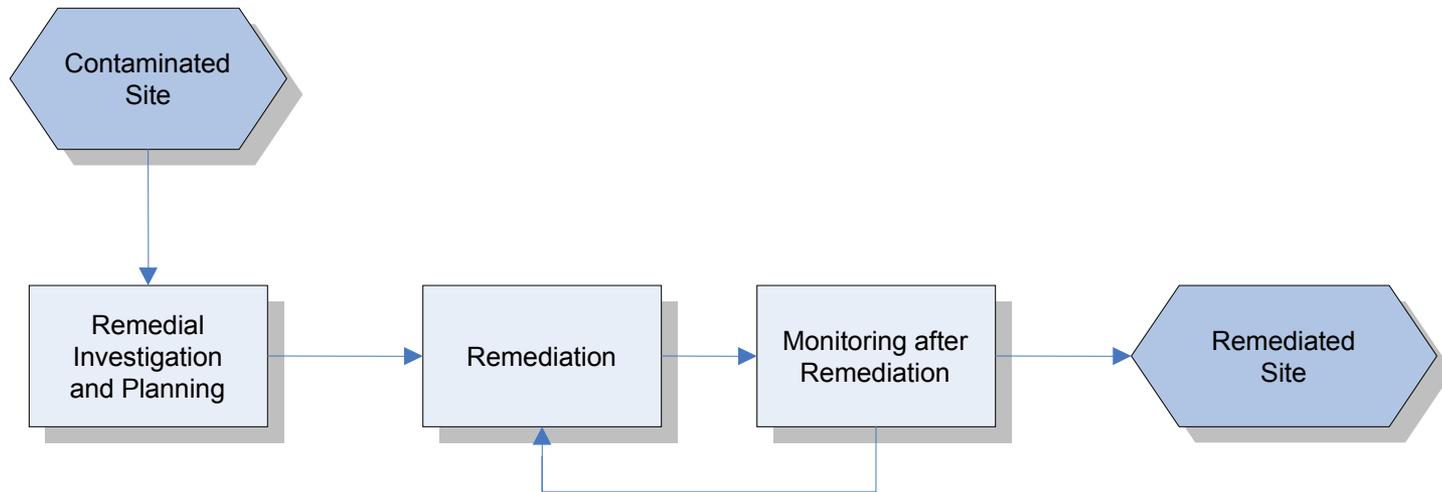
CSMS-Preliminary Site Assessment



CSMS-Detailed Site Assessment



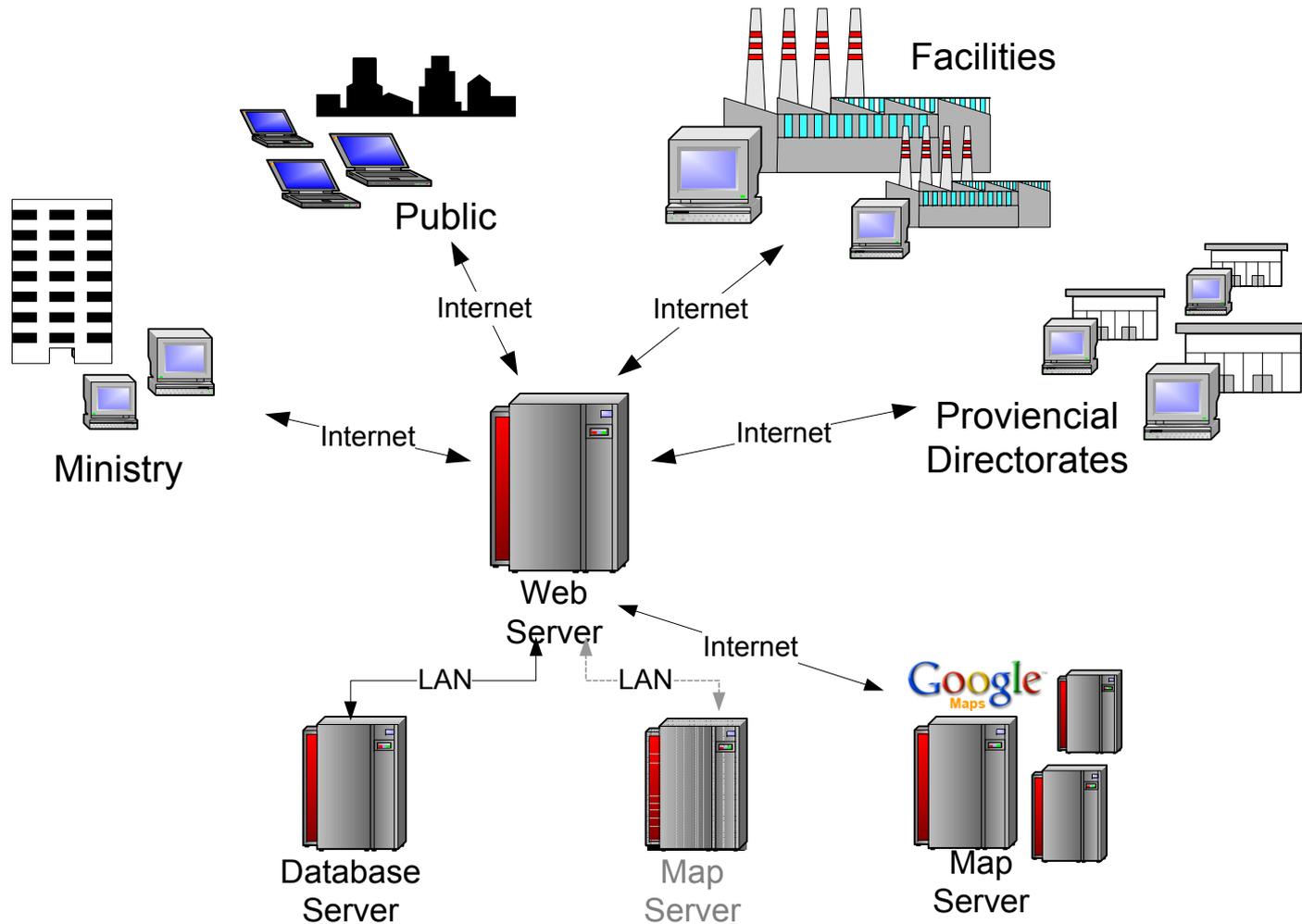
CSMS-Remedial Investigation



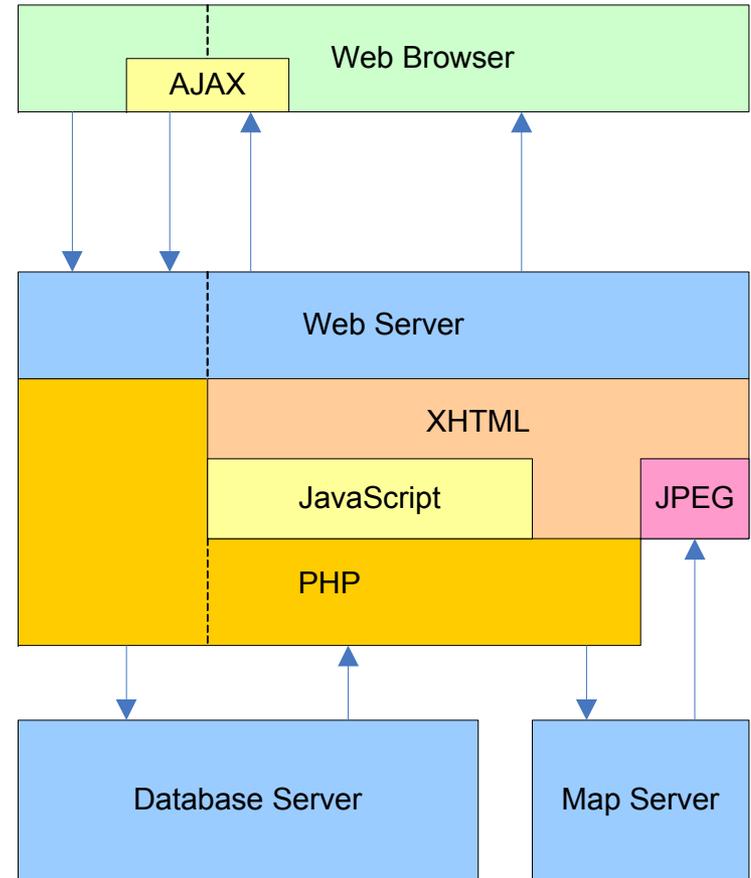
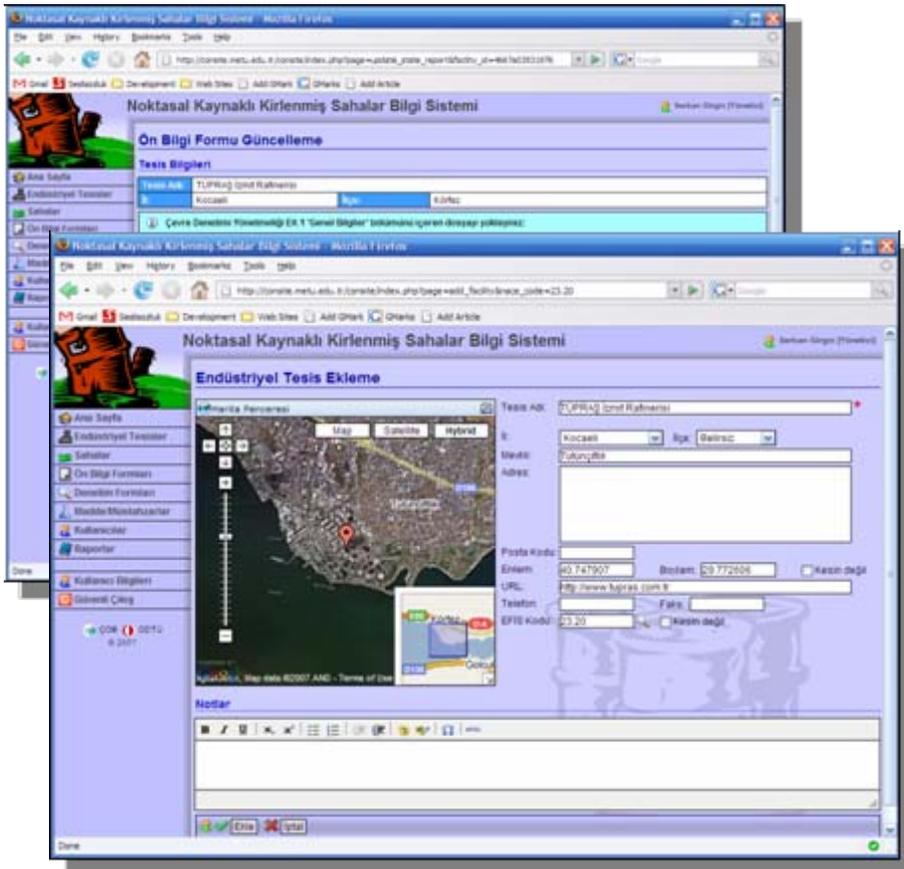
Information System

- Web-based multi-user (interactive) environment
- Works on web browsers, platform independent
- Inventory of industrial facilities and contaminated sites
- Submission and assessment of field and inspection reports
- Automated Preliminary site assessment scoring
- Mapping
- Hazardous substance and waste database

Information System



Information system-Architecture



Current Status and Progress

So far, we have completed

- developing flowcharts (conceptual model) of the CSMS, i.e., CSInvS and CSAS
- developing about 75-80 % of the CSMS software based on the flowcharts
- developing site information and site inspection questionnaires
- Testing of software has been started for reporting and scoring system using case studies at hand)
- Derivation of soil guidance values is underway



Questions??