

الجمهورية اللبنانية
جمهورية لبنان

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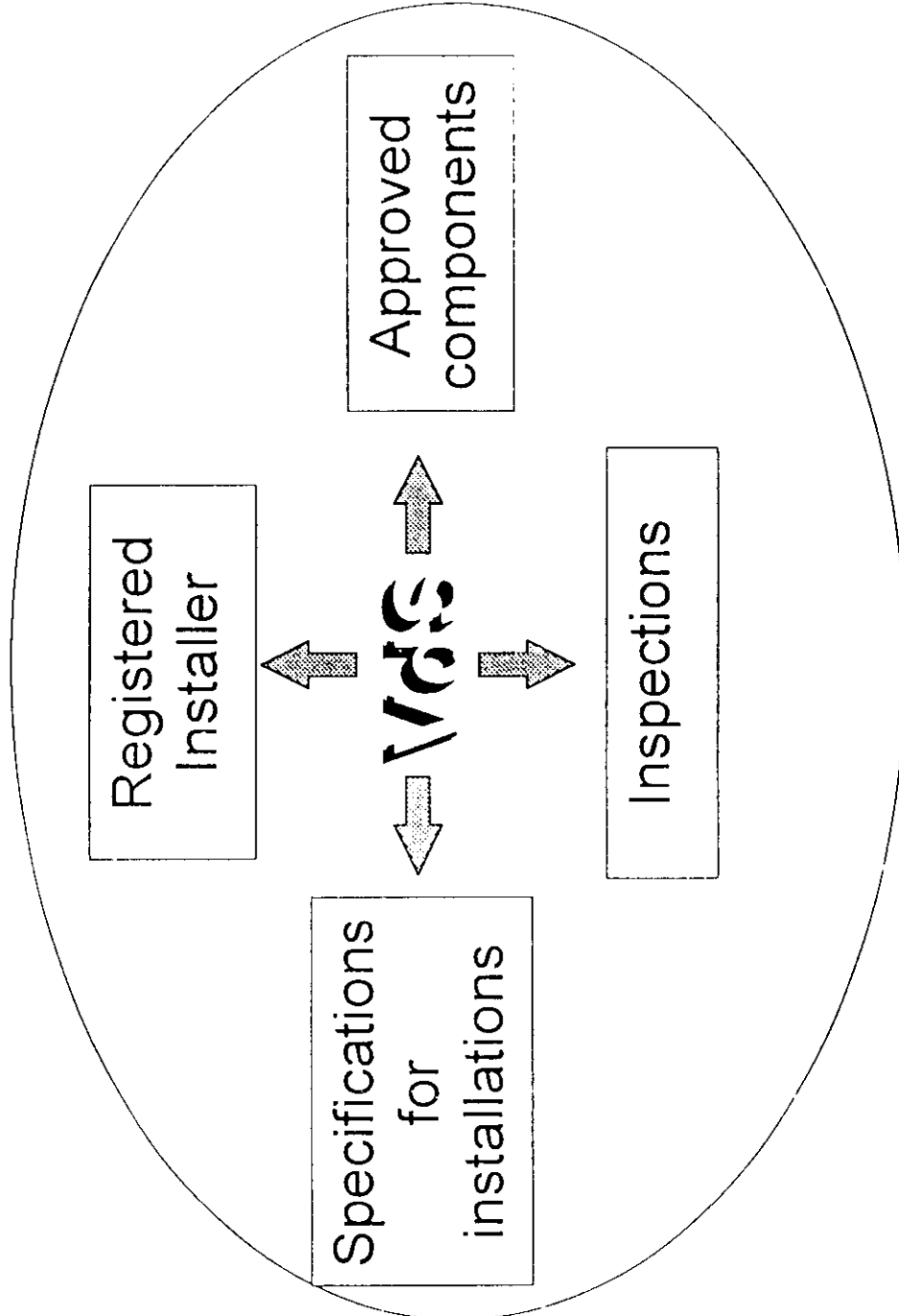
Office of the Minister of State for Administrative Reform
Center for Public Sector Projects and Studies
(C.P.S.S.)

Introduction

- Concept for the Quality of extinguishing installations
- Choice of extinguishing agent
- Approved gaseous extinguishing agents in Germany

الجمهورية اللبنانية
مكتب وزير الدولة لشؤون التنمية الإدارية
مركز مشاريع ودراسات القطاع العام

VdS Concept for the Quality of extinguishing installations



Standardisation

- VdS rules in accordance with users, installers etc.
- co-operation with European testing laboratories
- participation on standardisation work in:
 - * CEA European insurers
 - * CEN European Standardisation
 - * ISO

Registered Installers

- approved engineers
- availability for all components
- quality system

Approved components

- type testing of components
- system approval (combination of components)

Technical Inspection Department

- More than 21.000 inspections of fire extinguishing installations per year
- 90 inspectors
 - Consultation
 - First inspection
 - periodical inspection

The ideal extinguishing agent

- good extinguishing characteristic
- no danger for persons
- no environmental effects
- low costs

Choice of extinguishing agent

- **Gas systems**
 - **CO₂-/Inertgas-**
 - **chemical agents**

- **water**
 - **Sprinkler**
 - **fine water spray, fog, micro-drop**

- **powder**

- **foam**

Approved gaseous extinguishing agents in Germany

- **CO₂**
- **Argon**
- **Inergen (52 % Nitrogen, 40 % Argon, 8 % CO₂)**
- **Nitrogen**
- **FM-200**

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Safety for persons

- **Two independent alarm systems (electrical and pneumatically)**
- **Time delay device (only mechanical type)**
- **periodical training**
- **access control**