

# The Use of IT in Offsite Supervision

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## Agenda

- Objectives of offsite supervision
- IT's role in supervision, specifically monitoring
- Intervention in the context of IT oriented supervision
- The use of IT in offsite supervision: Turkish case

## Objectives of offsite supervision

Countries have similar objectives when conducting offsite supervision:

- financial reporting,
- generation of statistics,
- identifying problematic areas,
- providing guidance for on-site supervision,
- better and more efficient supervision,
- targeting resources where the risks are,
- establishing level of risk to Pension Protection Fund if applicable,
- financial stability of each pension fund,
- actuarial deficits,
- actual vs. expected claims for disability and survivor benefits.

## IT's role in offsite supervision (monitoring)

- Developments in IT has enabled the supervisory authorities to broaden the role and functioning of offsite supervision.
- Today all supervisory authorities irrespective of following proactive or reactive approach rely on offsite supervision more heavily than yesterday.
- This is one of the findings of the IOPS project “Utilization of IT in offsite supervision of private pension systems”.

## Supervisory functions attributed to offsite supervision

	Australia	Bulgaria	Czech Republic	Germany	Mexico	Netherlands	Portugal	Thailand	Turkey	UK	Korea	Israel	Ireland	Spain
<b>1. Statistical Collection</b>														
Reporting purposes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Generation of statistics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>2. Detection of Problems</b>														
Detection of problems for further inspection on-site	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓		✓
Monitoring of transactions		✓	✓	✓	✓	✓			✓		✓	✓	✓	✓
<b>3. Monitoring Operational Performance</b>														
Safekeeping of fund assets	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓			✓
Monitoring Financials	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓		✓
Controlling the calculation of technical provisions				✓		✓	✓					✓		✓
Monitoring the funding of technical provisions				✓		✓	✓			✓		✓		✓
Controlling the fit and properness of the pension fund staff			✓	✓	✓				✓	✓		✓		
Other			✓	✓	✓		✓			✓		✓		

Source: IOPS Project – Utilization of IT in offsite supervision of private pension systems

## Intervention in the context of IT oriented supervision

- Do supervisors use IT to intervene more or to supervise more effectively?
  - IT has enabled supervisory authorities to assign some of the supervisory functions from onsite to offsite supervision.
  - This changes the balance within the primary elements of supervision and leads to less intervention and more monitoring.
  - Allocating supervisory resources to more risky areas identified via offsite supervision enables more effective supervision.

## Intervention in the context of IT oriented supervision cont'd

- Do supervised entities burden IT costs to be less intervened?
  - Obligations relating to IT utilization set by supervisory authorities help the supervised entities handle data more effectively and lead to better internal control systems.
  - Most of them should choose less intervention at the expense of relatively higher IT costs.
  - Better service to pensioners and enhanced feeling of security that came with supervision relying heavily on IT attract more people to the system and helps pension companies survive.

## The use of IT in offsite supervision: Turkish case

- Daily electronic monitoring function conducted by Pension Monitoring Center which is a company established by the sector.
- Enhanced Monitoring Activity Data Set (GEVK) defined in regulations.
- Features of the daily electronic monitoring system
- Pension companies' work flow
- Pension Monitoring Center's work flow
- Benefits of the system to the participants and the pension companies

## Enhanced Monitoring Activity Data Set (GEVK)

With diversified IT infrastructures pension companies were obliged to upgrade or renew their IT systems.



For different IT infrastructures GEVK is the best solution.

## Features of the daily electronic monitoring system

- Based on changes in the daily transactions of pension companies' information systems
- Transfer of operational data to a data sub-set
- Single file containing all transactions
- Security of information
- Controls by comprehensive Verification Rules
- In XML File Format

## XML file format

XML is the Extensible Markup Language

Strong in:

Simplicity,

Adaptation,

Linking,

Intelligence,

Maintenance

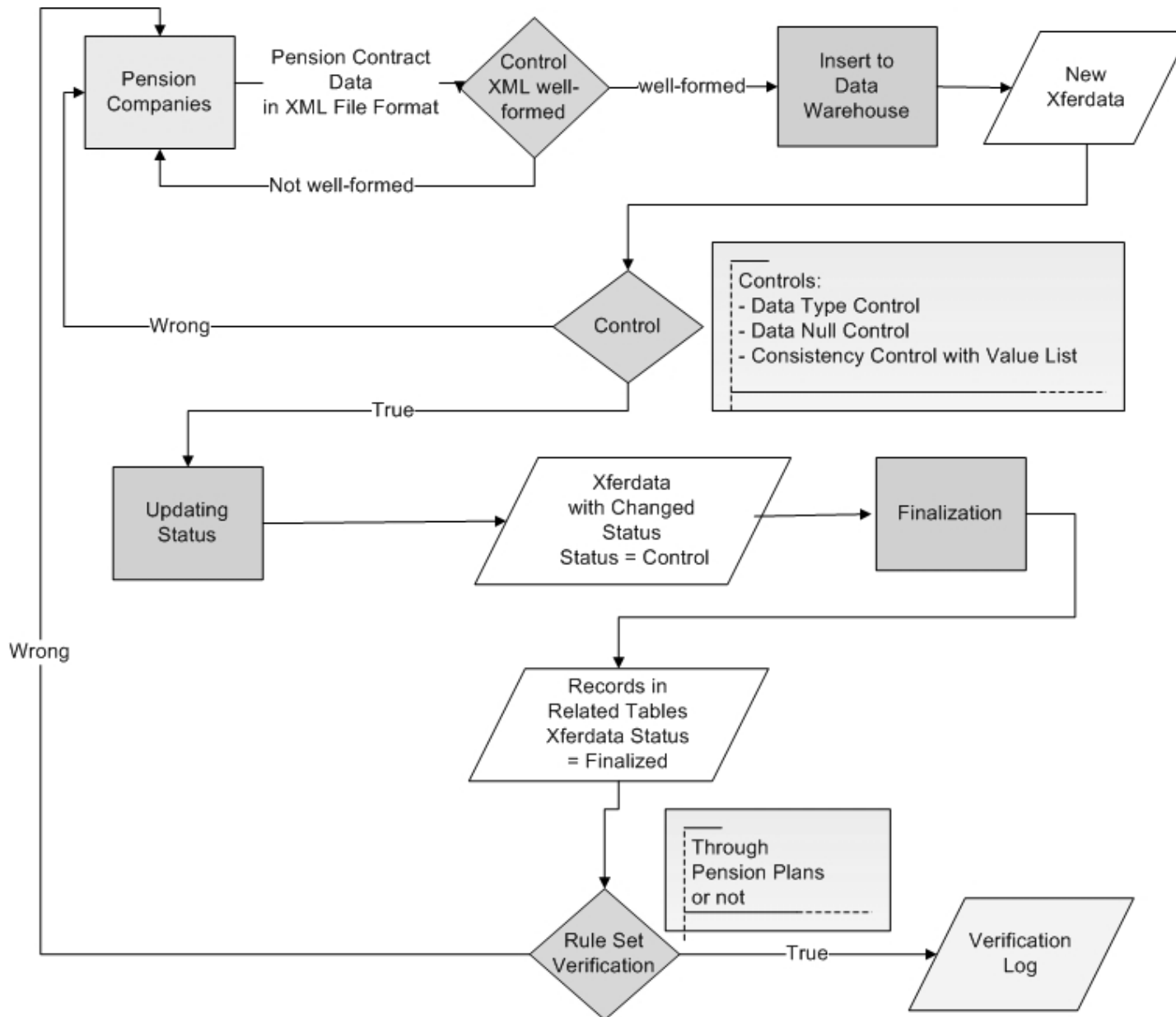
Designed to meet the challenges of large scale electronic data

## XML file transfer process in pension companies

1. Close the daily transactions
2. Control and verify data
3. Extract data from database in XML format
4. Transfer XML File to Pension Monitoring Center
5. Finalize closed transactions and inform Pension Monitoring Center

## XML file handling in Pension Monitoring Center

1. Pension company transfers XML data file.
2. File format control
  - ✗ Not well-formed, file sent back to pension company
  - ✓ Data inserted to Data Warehouse
3. Data Type Control / Data Null Control / Consistency Control with Value Lists
  - ✗ Data fails to pass controls, error report produced
  - ✓ Data passes controls
3. Verification over Rule Sets:
  - principles in the pension regulation
  - technical basis of the pension plans
  - general logical actuarial methods
  - ✗ Fails to pass verification controls, error report sent
  - ✓ Ready for logging & reporting



## Benefits of the system

### For participants:

- Enhanced security brought by improved supervision
- More conscious participants
- Investment strategies initially set and then reviewed with the help of the publicized statistics on pension funds

### For pension companies:

- Ability to follow participant and competitor behavior
- Obtain sector statistics and benchmarks
- Determine marketing/sales strategies

### For supervisory authority

- Monitoring tool to identify problems and guide supervision process
- Efficient allocation of resources
- Prompt action to remedy problems

For questions, comments and suggestions please write to:

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