

**15
MAY
26**

09:00-17:30

**SOFITEL
ATHENS
AIRPORT
HOTEL**

Organised by
 **MANAGEMENT
FORCE Group**
Risk Management & EHSS Services

18 SAFETY GALA

The Int'l ESG Conference

**Visionary Leadership & Governance for
Safety at
Workplaces and Beyond**

**Day 2 | Delphi
Interactive Workshops**

Use of Cutting-Edge Digital Technology to Improve Health & Safety Management

George Efthimiou
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I hold a degree in Mineral Resources Engineering from the Technical University of Crete.

Even since my early student years, I was attracted to the subject of Occupational Health & Safety; my dissertation thesis was entitled "Managing Health & Safety in Underground and Open-Pit Exploitations".

Since 2001 up to date, my career was absolutely focused on Occupational Health & Safety.

Enthusiastic and passionate about this challenging task, I'm always open to new scientific updates and I aim to incorporate new technologies in the service of H&S supporting human capital, prioritizing sustainability and enhancing global values.

About IPTO (ΑΔΜΗΕ)

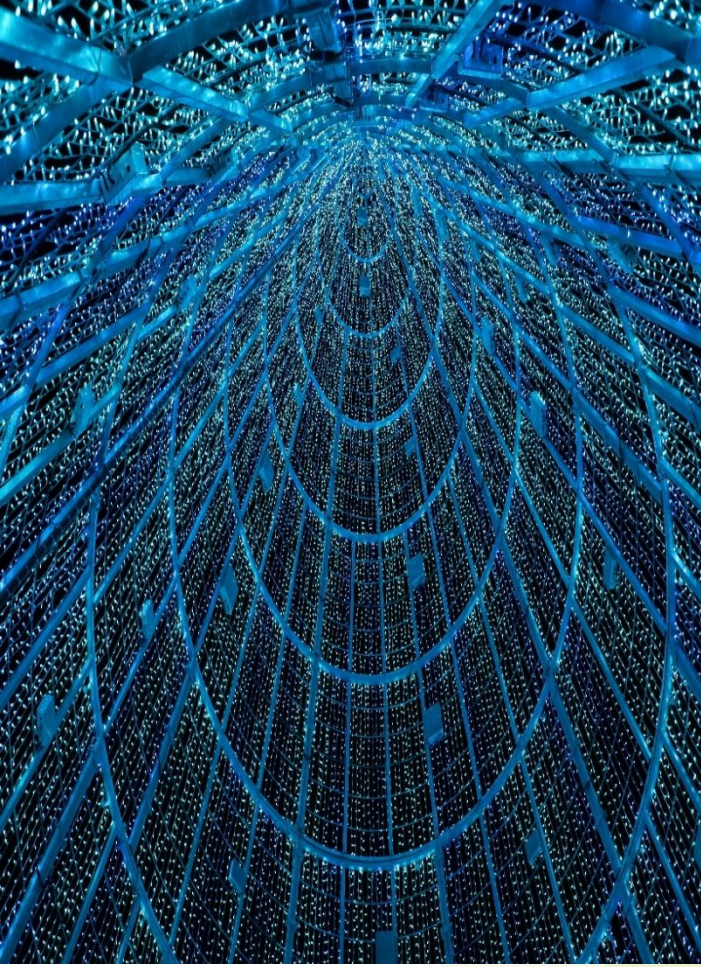


ΑΝΕΞΑΡΤΗΤΟΣ
ΔΙΑΧΕΙΡΙΣΤΗΣ ΜΕΤΑΦΟΡΑΣ
ΗΛΕΚΤΡΙΚΗΣ ΕΝΕΡΓΕΙΑΣ

The **Independent Power Transmission Operator S.A. (IPTO)** was established by the Law 4001/2011, organized and operating as the Independent Transmission Operator in line with the provisions of EU Directive 2009/72/EC.

The Company has responsibilities and performs duties as Owner and Operator of the Hellenic Electricity Transmission System.

The mission of IPTO is the operation, control, maintenance and development of the Hellenic Electricity Transmission System, ensuring country's electrical power supply in an adequate safe efficient and reliable manner, as well as operation of the electricity market for transactions outside the “day ahead scheduling” pursuant to the principles of transparency, equality and free competition.



Introduction

Health & Safety Management in the Data Era

- Effective H&S Management requires continuous information processing
- Large volumes of operational and safety data are generated daily
- Data originate from both internal and external sources

**H&S Managers must interpret and use this information for
decision-making and compliance confirmation**

The “Battle of Marathon”... a *hilarious(?)* approach

Me: good evening

AI: Good evening! What would you like to do today?

*Me: I want you to give me **a brief description** of the important elements of the Battle of Marathon. It should not be more than three lines.*

AI: The Battle of Marathon took place in 490 BC between the Athenians and the Persians at Marathon in Attica. The Greeks, led by Miltiades, defeated the much larger Persian army. This victory is considered important because it stopped the first Persian invasion of Greece.

*Me: perfect! now I want you to give me, **in a same manner, a realistic version** of the battle as if it has taken place in 1942, during WW II.*

AI: The Battle of Marathon took place in 1942 between Greek resistance groups and German occupation forces in the Marathon area. The Greeks, led by Nikos Makris, managed to surprise the enemy and destroy military supplies. This victory was considered important because it strengthened the morale of the Greek resistance during World War II.

What you ask *is* what you get!

Me: excellent! I want a third version. **in the same way**, describe the event to me as if it was a "battle" between two rival football teams from the Marathon area, in a football match aiming to the promotion at the first local division!

AI: The Battle of Marathon took place in 1987 between two historic teams from the Marathon area, in front of hundreds of fans. The home team, led by Giorgos Lagos, achieved victory in the last minute of the match with an impressive goal. This victory was considered important because it gave the team promotion to the first local division.

Me: and **why** did this match go down in history as "the Battle of Marathon"? **which** teams played the match? please mention the names of these **local teams**.

AI: The Battle of Marathon went down in history with this name because the match was very tough, with intensity, passion and constant twists and turns until the last minute. The two teams were Thyella Rafinas and AO Marathon, who were fighting for promotion to the first local division. The fans of the area remembered that match for years as "the Battle of Marathon", because no one wanted to lose.

Me: thank you very much!

AI: Thank you, I had a great time! 😊

The Data Overload Problem

“More Data” Does Not Mean “Better Data”

- Thousands *-if not-* millions of safety related data are produced daily
- Not all generated data are useful *or* actionable *and sometimes* even trustworthy

Excessive low value information leads to:

- Data “garbage”
- Information “noise”
- Loss of productive time
- Reduced focus on real risks

The Need for Relevant Information

Right Information *to the* Right Persons *for the* Right Decision

- Decision-makers need to receive relevant and necessary information only
- Not all stakeholders require the same data

Differences depend on:

- Organizational structure
- Operational complexity
- Industry specific risks
- Roles and responsibilities

Data Reliability Challenges

Are Safety Data Always Reliable?

- Many H&S data sources rely on human input

Risks of:

- Incomplete reporting
- Human error
- Inconsistent data collection
- Incorrect data evaluation

Reliability and accuracy must be systematically strengthened and constantly confirmed

what keeps you awake at night?



The Role of H&S Manager

Complex Responsibilities

H&S Managers are in charge for:

- Supervising multiple facilities or worksites
- Coordinating with employers and employees
- Managing H&S of contractors and suppliers
- Communicating with Regulatory Authorities
- Ensuring legal and organizational compliance
- Developing, implementing and monitoring of H&S Action Plans

The Importance of High-Quality Data

Data as a Critical Decision-Making Tool

Effective Health & Safety Management decisions require data that are:

- Timely
- Accurate
- Reliable
- Transparent
- Verifiable



Key Organizational Question

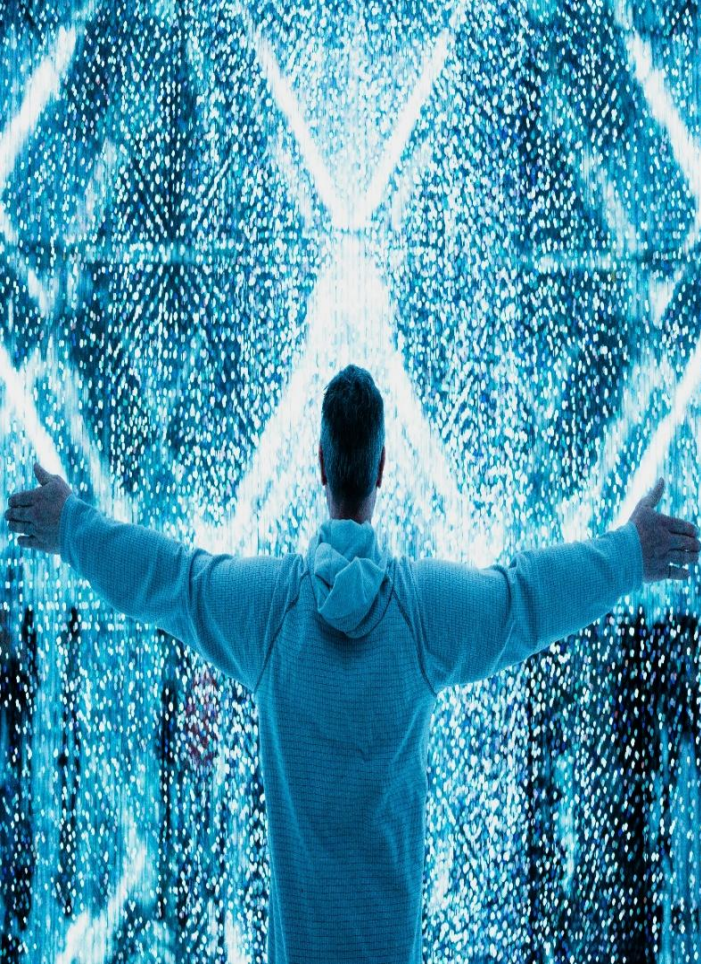
Can Organizations Trust Their Safety Data?

The Critical questions:

- Are safety responsibilities performed effectively by all involved?
- Is the delivered information trustworthy *and* important?

Are we exposed to decisions that are possibly based on:

- incomplete data?
- inaccurate information?
- misleading reports?



The Role of Digital Technologies

Leveraging Digital Innovation

Modern digital technologies can support H&S Management through:

- Automated data collection
- Real-time monitoring
- Improved transparency and traceability
- Reliable and effective data evaluation process
- Data analytics and visualization
- Enhanced communication within *and* across organizations

Safety Culture and Digital Transformation

Building Trust and Accountability

A strong **Safety Culture** remains **essential**

Digital technologies can reinforce:

- Accountability
- Transparency
- Data integrity

The integration of **Technology** and **Safety Culture** supports sustainable H&S Management

Blockchain Technology

Immutability

Decentralization

Transparency

Controlled Transactions

Reliability

Enhanced Security

Data Privacy

Conclusions

Some Key Takeaways

- **H&S Management** increasingly **depends** on effective **data** use
- **Excessive** and **low value** data create operational **challenges**
- Reliable and relevant **information is essential** for decision-making
- **Digital Technologies** provide significant opportunities to **enhance H&S Management Systems**
- Combining **Digital Technology** with a robust and positive **Safety Culture** leads to better performance and valuable outcomes

Before thanking attendances

Internet for information exchange

Internet for data transmission

Internet of Things (IoT)

Internet of Value (IoV)

Internet of Human Rights & Decency (IoHRD)

Technology along won't save us, but Culture will

Thank you for your attention!

