

The role of AI standards

Leading international best practice on AI

11

Standards published

27

Standards under development

50

countries involved

6

working groups

>150

Experts involved



Liaisons with all major international initiatives (OECD, ITU, PAI, EC)

1

pathway to certification: AI management system standard



How Standards are helping organisations
adopt AI

Helping organisations getting started with AI

DATA

What kind of data do I need to get started with AI?

ISO/IEC AWI 5259 series - Data quality for analytics and ML

- 5259 -1 - Overview , terminology and examples

ISO/IEC PWI 8183 - AI system – Data life cycle framework

MODEL

What do I need to know and what processes should I follow to develop and implement an AI model?

ISO/IEC DIS 23053 – Framework for AI Systems using ML

ISO/IEC DTR 24372 - Overview of computational approaches

ISO/IEC WD 5392 - Reference architecture for Knowledge engineering

ORGANISATION

Where do I start for my organisation to better understand AI and consider AI initiatives?

ISO/IEC DIS 22989 – Concepts and Terminology

ISO/IEC AWI 5339 - Guidelines for AI applications

CAN'T WE JUST USE ARTIFICIAL INTELLIGENCE TO MANAGE OUR SALES FUNNEL FOR US?

I FOUND FOUR PLACES THAT SELL FUNNEL CAKES FAIRLY CLOSE TO YOU.



Helping with quality requirements and assessment of AI systems

DATA

How do I know if my data is good enough to be processed by an AI system?

ISO/IEC AWI 5259 series - Data quality for analytics and ML

- 5259 -2 - Data quality measures
- 5259-3 – Data quality requirements and guidelines

MODEL

How do I know if my AI system is good enough?

ISO/IEC DTS 4213 - Assessment of machine learning classification performance

ISO/IEC AWI 5059 series - Systems and software quality requirements and evaluation (SQuaRE) for AI

ISO/IEC AWI TS 5471 - Quality evaluation guidelines for AI systems

ORGANISATION

What are the repeatable processes I should consider when developing and/or using AI?

ISO/IEC AWI 42001 – Management system

The Risks

Keeping AI systems on a tight leash using dynamic risk management:

- Identifying the acceptable range of variation for performance of AI systems
- monitoring
- Adapting controls as required



Managing Risk and ensuring appropriate oversight

DATA

How do I know if my data is good enough to be processed by an AI system?

ISO/IEC AWI 5259 series - Data quality for analytics and ML

- 5259-4 – Data quality process framework

MODEL

How do I build safety functions?

ISO/IEC AWI TR 5469 - Functional safety of AI based systems

ISO/IEC TS 8200 - Controllability of automated AI systems

ISO/IEC AWI 24029- Assessment of the robustness of neural networks

ORGANISATION

What are the AI risks I should consider? How do I manage them?

How can an organization have appropriate oversight of its AI systems?

ISO/IEC CD 23894 - Risk Management

ISO/IEC CD 38507 - Governance implications of the use of artificial intelligence by organisations

Addressing Ethics

DATA

How do I identify and manage algorithmic bias?

ISO/IEC AWI TR 24027 - Bias in AI systems and AI aided decision making

MODEL

How do I ensure AI systems are trustworthy?

ISO/IEC AWI TS 6254 - Objectives and methods for explainability of ML models and AI systems
ISO/IEC TR 24028 - Overview of Trustworthiness in AI

ORGANISATION

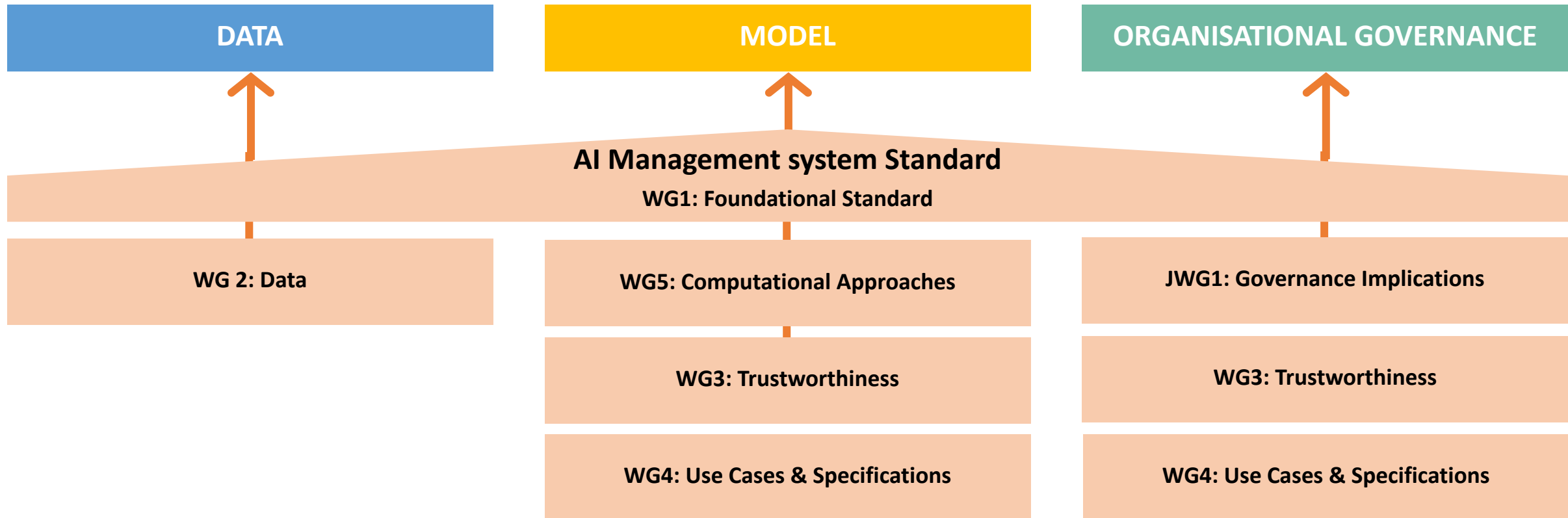
What are the key ethical and societal concerns I need to consider? How can I address them?

ISO/IEC AWI TR24368 - Overview of ethical and societal concerns

ISO/IEC CD 38507 - Governance implications of the use of AI by organisations

Providing an AI Assurance Framework

AI Assurance Framework



Implementing AI Principles

