Eurocodes – Opportunities for the Construction Industry

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What are your expectation of other market sectors?
What are your expectation of other market sectors?

- Improving Products
- Improving Services
- Better Value
Our Opportunity

- Eurocodes published
- Unprecedented collaborative effort
- Exciting time of change
Opportunities for the Construction Industry

Personal Perspective

- European engineer, working for a global company
- Consultant, with strong academic links
- Active in developing Eurocodes implementation strategies
- Specialist in Bridges; Broad Eurocode knowledge
Opportunities for the Construction Industry

Agenda

- Recognising the Opportunities
- Realising the Benefits
- Conclusions
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Recognising the Opportunities

- Best Value
- Best Practices
- Innovation
- Global Context
Best Value

- Removal of barriers to trade of products and services; harmonisation of products
- Single suite of Standards
- Common understanding and vocabulary
- Common design criteria
- Shared investment in software and design-aid development
- Latest materials technologies
- Combined effort to resolve issues, and embrace improvement opportunities
Best Practices

- Eurocodes based on most up to date research; at the forefront of technology
- Rational and consistent framework
- Demand understanding from designers
- Provide flexibility and opportunity to apply advanced methods
- Challenge past thinking; revisit assumptions
- Alignment of structural and geotechnical design
Opportunities for the Construction Industry

Innovation

- Promote understanding and knowledge development
- Enhance scope for innovation; choices offered to designers
- Greater effectiveness of R&D investment
- Diversity of technical solutions available; use of testing, performance evidence and probabilistic methods
“I feel about globalisation a lot like I feel about the dawn. Generally speaking, I think it is a good thing that the sun comes up each morning…but even if I didn’t much care for the dawn there isn’t much I could do about it”

Thomas Friedman
Global Context

- Which design standards will be used around the world in the future?
- An opportunity and a risk
Agenda

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Realising the Benefits

- Designers
- Construction clients
Strategic Implementation

1. Establish urgency
2. Define objectives
3. Establish team
4. Gather data
5. Plan for implementation
6. Implementation
7. Review
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Opportunities for the Construction Industry
“The implementation of the structural eurocodes … is the biggest change to codified structural design ever experienced in the UK”

IStructE report to UK Government
“If you don’t like change,
“If you don’t like change, you’re going to like irrelevance even less”

Gen Eric Shinseki
Strategic Implementation

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“Begin with the end in mind”

Steven Covey
Strategic Implementation

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Challenges for Designers

- Large number of unfamiliar documents
- Significant learning curve
- New terminology and notation
- Cultural change; close to first principles
- Software, tools and processes will have to change
Client Context

- Public or private clients
- Client versus regulatory drivers
- Contractors
- Change and risk management
Strategic Implementation

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Conclusions

- Exceptional achievement
- Exciting time of change
- Embrace opportunities positively
- Implement strategically to realise the benefits
Acknowledgements

- Numerous leading engineers from UK kindly shared thoughts and views to assist in the development of this presentation

- Highways Agency
- Railway Safety and Standards Board
- Arup
- Atkins
- BRE
- Steel Construction Institute
- Concrete Centre
- Flint and Neil
- Geocentrix
- Parsons Brinckerhoff