PANEL DISCUSSION

› Participants

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GENERAL QUESTIONS

Does fatigue exist in concrete?

Should more high strength concrete be used and why?

What do you expect, today and for tomorrow, from the researchers working on fatigue in concrete?

How do engineers from e.g. structrual engineering and structural monitoring departments collaborate in a big company like COWI, DNV, Total, Deutsche Bahn?

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SHM QUESTIONS

Is SHM necessary?

Is long-term SHM necessary?

In practice, how will engineers decide whether to prescribe long-term or short-term SHM?

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SHM QUESTIONS

When designing the SHM system, how to decide where to place the sensor? E.g. how many sensors to install, when to do the monitoring?

What kind of SHM (duration, frequency, information) is of interest to your profession?

Do you use SHM to manage the O&M of your structures?

Do you have a good example of a SHM system which improved the O&M costs?

SHM QUESTIONS

For wind turbines or bridges what kind of SHM system is now being used?

For wind turbines or bridges what kind of SHM system will be used in the near future?

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SHM QUESTIONS

What should we do if the SHM really detect some "damage"?

How do we quantify the "damage" level? Any good examples?

How easy is it to implement the SHM results from point of view of law regulations (structural codes and national annexes)?

How do you see the potential of quantifying the value of SHM?

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PROBABILISTIC DESIGN QUESTIONS

Can you briefly describe probabilistic methods for bridges and wind turbines?

How do you see the potentials for application of probabilistic methods for bridges and wind turbines, especially those parts which are / could be made of concrete?

How do you see the potentials for application of probabilistic methods for bridges and wind turbines for assessment of existing structures?

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PROBABILISTIC DESIGN QUESTIONS

How do you see the potentials for application of probabilistic methods for bridges and wind turbines for design of new structures?

How do we link SHM with application of probabilistic methods?

For large bridges or large wind farms can we minimize SHM costs with application of probabilistic methods?

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PROBABILISTIC DESIGN QUESTIONS

What are the challenges when applying probabilistic methods instead of code based partial safety factor methods?

Will certification companies accept the use probabilistic methods instead of code based partial safety factor methods?

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