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ReliaWind

RELIAWIND – EWEC 2011

Optimising design, operation and maintenance for
new generation wind energy systems

Brussels, March 15th 2009

Optimization

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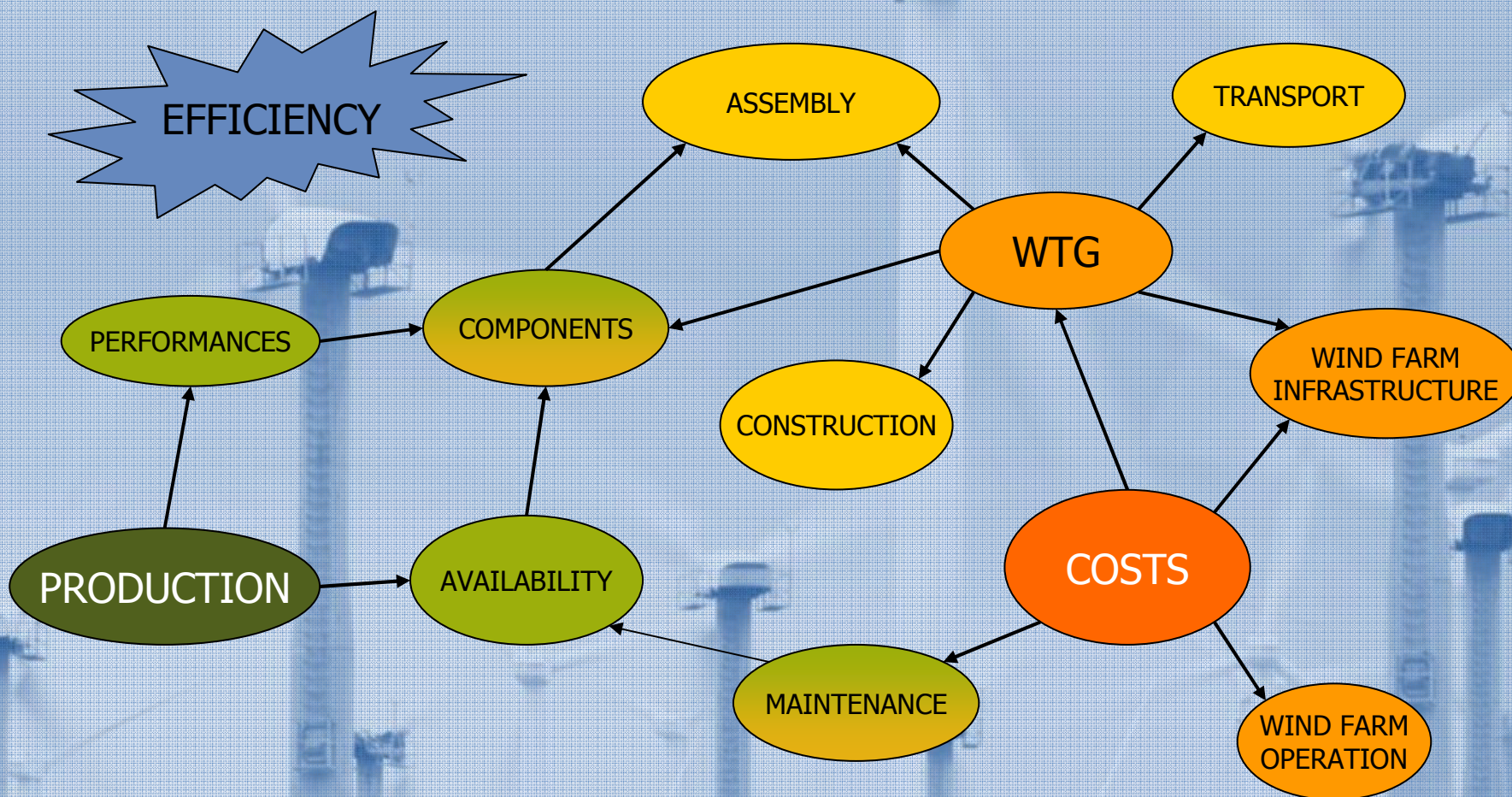
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COE ↓

$$\text{COE} = \text{WTG} + \text{BoP} + \text{O\&M(NPV)} / \text{AEP}$$



COE function analysis

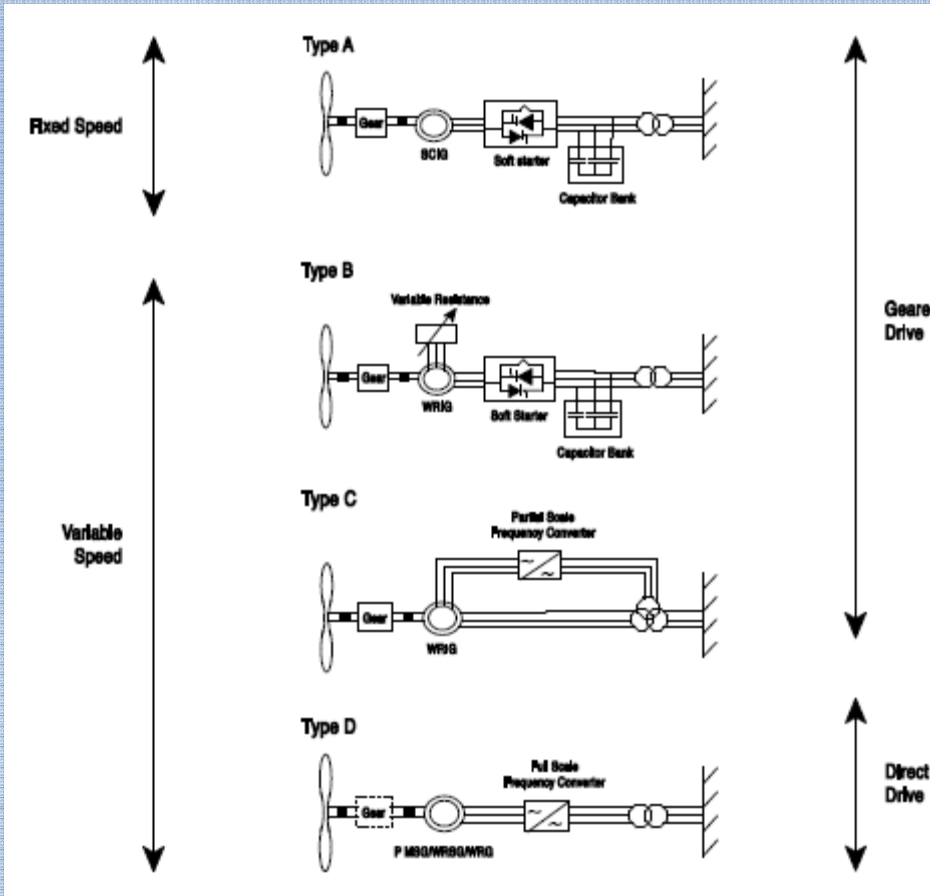


Design for performance

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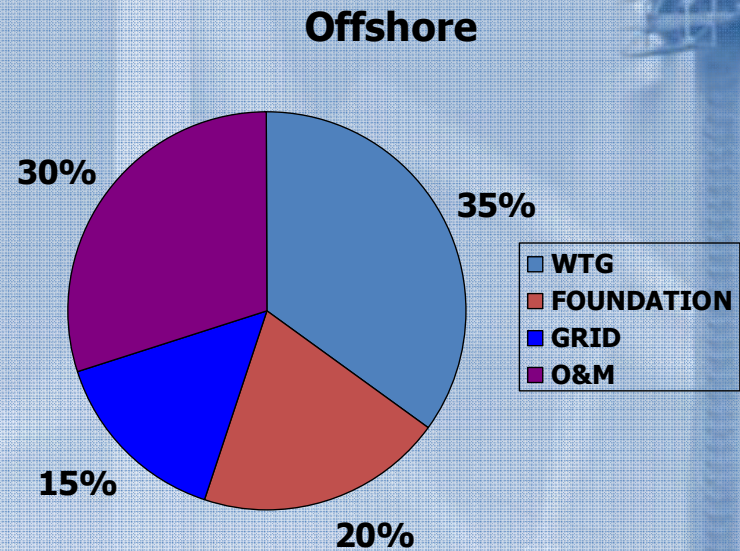
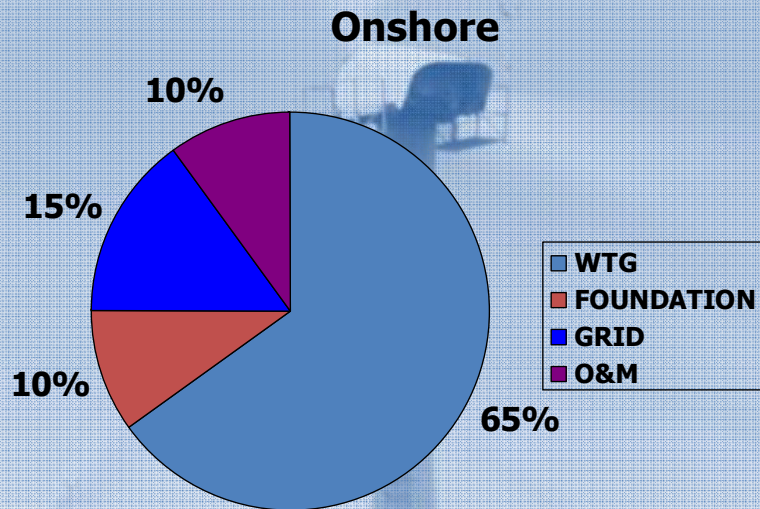
MAIN FOCUS:
WTG
DESIGN
OPTIMIZATION

Cost breakdown structure

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Design for ...

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Design for performance
+
Design for availability
||
Design for performance
+
Design for reliability
+
Design for maintainability

Reliawind objectives

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- Identify critical failures and components
- Understand failures and their mechanisms
- Define architectural alternatives for health monitoring
- Demonstrate project findings
- Train internal and external partners
- Disseminate the new knowledge

Reliawind objectives

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Thank you

Juan Bueno Gayo
Reliawind Coordinator

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