

## Constitution of the Working Groups

- q Rules
- q Proposal

# Rules

## q From the “Terms of reference” document:

- § members are selected from a call from expression of interest launched by the Secretariat
- § Working Group numbers and themes are defined by the Steering Committee
- § For each Group: 1 Chair, 2 Vice-Chairs (1 year)

## q Recommendations from the PV-Platform

- § No more than 20 members / group
- § Only persons that wishes to participate and work
- § Chairmen: from the SC itself
- § Group of Chairs = ExCo

# Thematic

## q From the EC contract & “Wind Energy: A Vision for Europe in 2030”

- § **Wind resource and site assessment**, micro-sitting, measurement and prediction, including offshore, complex and extreme conditions, and also resource assessment for design and operational conditions.
- § **Wind “Power Plants”** including turbine components, turbines, new wind farm concepts, and small wind energy technology. Advanced wind turbine and component concepts and design tools, including the use of new materials with higher strength to mass ratios.
- § **System Integration**: the input into the European electricity system of maximum quality, highly reliable power. This will necessitate the involvement, at an early stage, of transmission system operators, and interaction with the “Smart grids” technology platform.
- § **Innovation for dedicated offshore technology** and the development of a European **policy for offshore** wind energy, as called for by participants of the European Policy Seminar on Offshore Wind Power in Copenhagen, 2005.
- § **Environmental issues**, focusing in particular on potential cumulative environmental impacts on marine, avian and terrestrial ecosystems, and public support.
- § **Payment mechanisms** for wind energy, taking into account the possibility of a harmonised European payment mechanism for renewable energy.
- § The identification and surmounting of **administrative barriers** to wind energy, using the “one stop shop approach” to streamlining planning issues as stipulated in the RES-E Directive, Article 6.

# Thematic (Based on EWEA SRA 2005)

## q Barriers (medium / long term)

- § **Wind Resource mapping**
- § **Wind Turbines:** i) design tools for very large wind turbines in extreme climates ii) State of the art laboratories for accelerated testing of large components
- § **Wind Farms:** i) Understanding the flow in and around large wind farms; ii) Control systems to optimise power output and load factor at wind farm level; iii) Development of risk assessment methodologies.
- § **Grid Integration:** Control strategies and requirements for wind farms to make them fully grid compatible and able to support and maintain a stable grid.
- § **Environment and Public Support:** i) Effects on ecology adjacent to wind energy developments; ii) Development of automatic equipment to monitor in particular bird collisions, and sea mammals reaction to underwater sound emissions.
- § **Standards and Certification:** development of the following international standards: i) Energy yield calculation; ii) Grid connection protocols and procedures; iii) Risk assessment methodology; iv) Design Criteria for components and materials; v) Standardisation of O&M mechanisms

## q Bottlenecks (short term)

- § **Wind Resource:** Development of LIDAR, SODAR and satellite observation.
- § **Wind Turbines:** Development of component level design tools and multi-parameter control strategies.
- § **Grid Integration:** Development of electric and electronic components and technologies for grid connection.
- § **Environment and Public Support:** International exchange and communication of results of R&D into ecological impacts.