Revised IEA Task 39 Work Programme

No	WP	Sub-WP	Remark	Milestone
WP0	**Management and coordination**	Technical management Administrative management	Change of operating agent	
WP1	**Interdisciplinary Education and Guidance**	Table of contents for state of the art report on quiet wind turbine technology		
		Template for catalogue/database of national wind turbine noise regulations Associated explanatory graphic(s) Considerations when developing WTN guidance	To be provided as online resource	
		Fact sheets - Key topics explained in as simple as possible language for regulators • Amplitude Modulation • Low Frequency noise • Infrasound • Tonal Noise • Measurement technology • Noise indices and measurement		
		Public Engagement on Noise • Communicating noise concepts to the lay person • Auralisation	(Task 28 collaboration)	
WP2	**Physics of Noise**	Noise modelling • Benchmarking of noise models • Propagation studies • Farm level and wakes	(Collaboration with MEXNEXT) (Collaboration with WAKEBENCH?)	
		Quiet Wind Turbine Technologies • Categories and classification – sources and pathways addressed • Noise emission mitigation • ?Optimisation? compromises e.g. soundscape manipulation/ customization, aerodynamic v.s tonal noise		
		Quantification/Qualification • Consideration of physical effects & pathways - High Frequency Noise, Low Frequency Noise, Infrasound, Tonal Noise, vibration (& Vibration induced noise?) • Field experiments (TREMAC, WEA Akzeptanz etc. • Physical metrics • Field measurements • Data and findings from compliance monitoring • Field experiments by practicing acousticians • Results from field testing of Quiet Wind Turbine Technologies		
WP3	**Psychology of Noise** – Psychoacoustics *(To be developed upon recruitment of*	Field-based psychoacoustic surveys • Quantifying annoyance – survey instrument design	(Collaboration with Task 28)	
		Laboratory based psychoacoustics	(subject to	

		participant)	
participants)			

WP1 Interdisciplinary Education and Guidance

- Table of contents for state of the art report on quiet wind turbine technology
- Template for catalogue/database of national wind turbine noise regulations
  - Explanatory Graphics
  - Issues that need to be considered in developing WTN guidance
- Fact sheets- Key topics such as explained in as simple as possible language for regulators
  - AM
  - Low Frequency noise
  - Infrasound
  - Tonal Noise
  - Measurement technology
  - Noise indices and measurement
- Public Engagement on Noise
  - Communicating noise concepts to the lay person (Task 28 cooperation)
  - Auralisation

WP2 Wind Turbine Noise and modelling

- Physics of Noise
  - Noise modelling
    - Benchmarking of noise models (Collaboration with MEXNEXT)
    - Propagation studies
    - Farm level and wakes (Collaboration with WAKEBENCH?)
  - Quiet Wind Turbine Technologies
    - Categories and classification – sources and pathways addressed
    - Noise emission mitigation
    - ?Optimisation? – compromises e.g. soundscape customizing aerodynamic v.s tonal noise

  - Quantification/Qualification
    - Consideration of physical effects & pathways - High Frequency Noise, Low Frequency Noise, Infrasound, Tonal Noise, vibration (& Vibration induced noise?)
    - Field experiments (TREMAC, WEA Akzeptanz etc.
      - Physical metrics
    - Field measurements
      - Data and findings from compliance monitoring
      - Field experiments by practicing acousticians
      - Results from field application of QWTT

WP3 Psychology of Noise – Psychoacoustics (To be developed upon recruitment of participants)

- Field-based psychoacoustic surveys (Collaboration with Task 28)
  - Quantifying annoyance – survey instrument design
- Laboratory based psychoacoustics (subject to participant)