TEMA 4

NMP

WP 2011

Referência	*Área*	1. Saúde	2. KBBE	3. ICT	4. NMP	5. Energia	6. Ambiente	7. Transportes	8. SSH	9. Espaço	10. Segurança	Data Limite
Nanosciences and Nanotechnologies												
1.1	**Maximising the contribution of Nanotechnology on sustainable development**											
1.1-1	*Smart and multifunctional packaging concepts utilizing nanotechnology*						X					04Nov10
1.2	**Nanotechnology for benefiting environment, energy and health**											
1.2-1	Development and up-scaling of innovative photovoltaic cell processes and architectures to pilot-line scale for industrial application (Call Coordenada com ENERGIA)					X						25Nov10
1.2-2	New therapeutics using nanotechnology to transport macro-molecules across biological barriers	X										04Nov10
1.2-3	Active nanomembranes/-filters/-adsorbents for efficient water purification with stable or regenerable low-fouling surfaces						X					04Nov10
1.3	**Ensuring the safety of Nanotechnology**											
1.3-1	New methods for measuring, detection and identification of nanoparticles in products and/or in the environment											
1.3-2	Worker protection and exposure risk management strategies for nanomaterial production, use and disposal											
1.3-3	Intelligent testing strategies for nanomaterials impact and exposure – towards regulation -and clustering of materials	X										01Fev11
1.3-4	European Platform on Nano Outreach and Dialogue (NODE)											
1.4	**Cross-cutting and enabling R&D**											
1.4-1	Large-scale green and economical synthesis of nanoparticles and nanostructures						X					04Nov10
1.4-2	Development of nano-scale detection and control techniques for large area substrates					X						04Nov10
1.4-3	Tools and methodologies for imaging structures and composition at the nanometre scale			X								04Nov10
1.4-4	Nanotechnology based implantable and interfaceable devices	X										04Nov10
1.4-5	Multiscale Modelling as a Tool for Virtual Nanotechnology Experimentation, (Call coordenada com a Russia)			X		X						31Mar11
Materials												
2.1	**Enabling Research and Development**											
2.1-1	Research and innovation for advanced multifunctional ceramic materials											
2.1-2	Modelling of ultrafast dynamics in materials			X								04Nov10
2.2	**Innovative materials for advanced applications**											
2.2-1	Novel superconducting materials, architectures and processes for electrotechnical applications											
2.2-2	Biomaterials for tissue engineering for age-related cancer and sensory organ diseases	X										04Nov10

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2.2.3	Materials for solid state lightning					X						04Nov10
2.2-4	Novel materials for replacement of strategic or scarce raw materials (platinum group metals and rare earths)											
2.2-5	Development of advanced compatible materials and techniques -and their application for the protection, conservation and/or restoration of cultural heritage assets.											
2.2-6	Fundamental properties of novel superconducting materials (coordinated call with Japan)											
2.3	**Structuring actions**											
2.3-1	Advanced packaging materials from renewable biogenic resources						X					04Nov10
2.3-2	ERA-NET on international actions on materials research											
2.3-3	ERA-NET on the development and application of new technologies for the detection of illicit drugs											
2.3-4	Networking of materials laboratories and innovation actors in various industrial sectors for product or process innovation											
New Production												
3.1	**Development and validation of new industrial models and strategies**											
3.1-1	Eco-design for new products					X	X					04Nov10
3.2	**Adaptive Production Systems**											
3.2-1	Modelling and control of intensified process systems			X								04Nov10
3.3	**Networked Production (implemented through the PPP initiative "Factories of the Future")**											
3.4	**Rapid transfer and integration of new technologies into the design and operation of manufacturing processes**											
3.4-1	Eco-efficient -management of industrial water						X					04Nov10
3.5	**Exploitation of the convergence of technologies (implemented through the PPP initiative "Factories of the Future")**											
Integration												
4.0-1	New technologies based on physical processing of materials for mechanical or electro-technical applications											
4.0-2	Advanced underground technologies for intelligent mining and for inspection, maintenance -and excavation											
4.0-3	Advanced textiles for the energy and environmental protection markets					X	X					04Nov10
4.0-4	Organisation of events related to the Presidencies of the European Union Supporting actions											
4.0-5	Support to Networks of Excellence with durable integrated structures											
4-0-6	ERA-Net on the Industrial Handling of Raw Materials for European industries											
4-0-7	ERANET on Industrial Safety											