



More Efficient Transnational Technology Transfer  
in the Environmental Sector

## **Foresight on technology needs arising from legislation – the METTTES approach**

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# Participants

The project consortium comprised:

- Partner 1: ZENIT GmbH (Co-ordinator) (then host of IRC NRW/Malta)
- Partner 2: Consiglio Nazionale delle Ricerche (CNR) (then host of IRC CIRCE)
- Partner 3: Budapest University of Technology and Economics (then host of IRC Hungary)
- Partner 4: Malta Enterprise (then host of IRC Malta)



Two partners from the "old" EU and two from the "new" EU.





# Why METTTES ?

- Low effectiveness of TTT (cost per TTT)
- Imbalance between technology requests (TR) and technology offers (TO): Ratio generally 1:5, i.e. for every TR an average of 5 TOs
- Technology divide between “old” and “new” EU





# Why environment ?

A number of factors can drive the demand for environmental technologies:

- EU legislation
- Climate change
- Security of supply (energy and water):
  - Quality of resources
  - Sustainability of resources
- Increasing environmental awareness
- Client demands (e.g. image)
- Profitable business opportunities



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METTTES examines the impact of LEGISLATION.



# Importance of environmental technologies

*Eco-friendly technologies are*

- ***good for business***
- ***reduce pressure on the environment and***
- ***can create new jobs.***

*The European Commission invites all stakeholders and the public to discover and share promising opportunities . . . to make eco-innovation an everyday reality throughout Europe.”*



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**<http://ec.europa.eu/environment/etap>**



# Wide spectrum of applications

- Industry
- Waste
- Energy
- Transport
- Construction
- Agriculture
- Tourism
- Cultural heritage
- Households...



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# Objective

The objective of METTTES was to increase efficiency in the mediation of TTT agreements, using the example of the environmental sector, by starting from **demand** (rather than TOs) and not at enterprise level, but instead bundled at **regional** level.



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# Methodology

- Analysis of current and forthcoming EU/national legislation which stimulates demand for innovative solutions
- This demand is identified not at *enterprise* (IRC practice) but at *regional* level (bundling)
- It is expressed in a detailed Regional Demand Profile (RDP)
- For each RDP, technology solutions are identified, assessed and collated in a TO portfolio, e.g. via BATs, TGE
- Potential donors and recipients are brought together at Matching Events
- TTT agreements are reached



# Process overview

**Regional Demand Profile**



**At least 5 high-quality TRs (also in BBS)**



**High-profile Matching Event**



**TTT agreements**



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## Key feature: Regional Demand Profile

An **example** for an RDP could be the closure of an old waste disposal site in a new Member State agreed in the framework of the country's accession to the EU. This step, which was necessary as a result of the adoption of EU environmental standards in accordance with the *acquis communautaire*, triggers demand in the following areas, for example:

- Making safe the old waste disposal site, e.g. covering it with film or foil
- Extraction of the toxic landfill emissions their management
- Extraction of landfill gas and its reuse
- Protecting the ground water
- Treatment of collected fluid effluents from site
- Recycling of certain materials such as glass and plastics
- Generation of energy from waste
- Upstream methods of streaming and sorting waste
- Upstream methods of reducing waste generation
- Management and treatment of hazardous waste
- Management of inert waste

Some of these tasks offer excellent opportunities for international technology co-operation.



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# RDPs

IRC Hungary*	Water quality/waste water treatment
IRC Malta*	Waste management / Energy**
IRC CIRCE	Renewable energies**
IRC Central Poland	Waste management
IRC Hellenic	Waste management/clean energy
IRC Help-Forward	Waste management/treatment
IRC Ireland	Waste management
IRC IRIDE	Surface water pollution (textiles)
IRC Latvia	Waste management
IRC Lithuania	Waste treatment/prevention
IRC North-east Poland	Materials recycling
IRC Slovakia	Renewable energy

\* Pilot; \*\* Voluntary; All others sub-contracted to IRCs



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# Key feature: Matching Events

- The Matching Events take place in the demand regions
- Potential donors and recipients meet following intensive preparation, exchange of information and pre-qualification
- The Matching Event comprises comprehensive presentations of the demand, e.g. by regional decision-makers, and of convincing technological solutions by high-potential technology providers from throughout Europe



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# Elements of a Matching Event

- A Matching Event is **not** a conventional IRC brokerage event.
- Starting point is high-quality Requests, not Offers
- Requests include precise technical details for better identification of Offers
- “Handholding” of client and “ownership” of TR on his behalf
- Intensive meetings at event (at least 30 minutes), site visits and seminars
- Inclusion of local, national, EU programmes, experts and initiatives, e.g. EUKEKA, ETAP, BICs, EICs, other business support organisations, public entities





# Main project results (1)

- Compilation of 2 pilot Regional Demand Profiles (Hungary and Malta)
- Compilation of 9 further Regional Demand Profiles by sub-contractors (Poland (2), Greece (2), Latvia, Lithuania, Slovakia, Ireland, Italy)
- Compilation of two further voluntary RDPs by partners IRC CIRCE and IRC Malta
- Expansion of Hungarian RDP to cover whole country
- Generation of over 80 TRs against 50 planned

A total of 13 RDPs against the planned 10.



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## Main project results (2)

- Implementation of 2 pilot Matching Events (Hungary, 22 February 2007; Malta, 4 June 2007)
- Implementation of 9 further Matching Events by CNR and the sub-contractors
- Some 700 participants in the Matching Events

10 Matching Events in 15 months!

- Follow-up Workshop by IRC Hungary and Follow-up Delegation Visit by IRC NRW
- Achievement of 21 TTTs (planned were 25-30; end of IRC network and BBS as well as too many Matching Events to follow up in a short space of time torpedoed the results!)



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# “Soft” results

**METTES** has...

- ...generated over 80 TRs and thus contributed to compensating for the imbalance between TRs and TOs in IRC work
- ...led to a more targeted focus on sub-topics, i.e. not just on the general topic of environment but on individual thematic sub-areas such as solar energy and on specific EU regions
- ... led to recognition of new sources of TOs, e.g. use of BREFs as a filter for BBS



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in the Environmental Sector



# Impact (1)

- At *consortium* level, the partners benefited from the opportunity to test an innovative approach and learned a lot about environmental technology demand in Europe's regions, the significance of legislation and the different options for matching supply and demand
- At *IRC network* level, the METTTES concept improved IRCs' understanding of technology demand as a regional concept (bundling) rather than as an issue for individual enterprises
- At *enterprise* level, the project has contributed to a greater awareness of technology demand amongst IRC clientele



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in the Environmental Sector



## Impact (2)

- At *transnational* level, the project has motivated new Member States towards new activities
- At *public body* level, an influence has been exerted, in some cases, on state bodies' attitude towards environment (more allocation of funding for environment, designing of schemes for the environment)



## Other “new awareness”

- Quality requests and availability of funding are the quickest way to achieving TTTs
- Adopting a flexible approach in order to take all the opportunities available for achieving TTTs is highly important
- In new Member States, the demand for know-how is more immediate than the demand for technologies



**Thank you for your attention!**

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**[www.mettes.eu](http://www.mettes.eu)**