Expertise and networks for innovations

Tekes – Finnish Funding Agency for Technology and Innovation
The main public funding and expert organisation for research and innovation in Finland

-Tekes services
  - Funding for innovative R&D and business
  - Networking Finnish and global companies and researchers
  - Tekes is non-profit and takes no equity or ownership on intellectual property.

- Customers
  - Finnish and international companies located in Finland
  - Universities, research institutes, hospitals etc.

- Resources
  - Budget: 600 million euros annually
  - Personnel: 360 in Finland and abroad
  - Public agency under the Ministry of Employment and the Economy
Our strategic priorities for 2012 and onwards

Smart cities & Intelligent Environments

Planning has started concerning future actions in the smart city context:

- Smart energy systems and sustainable material economy
- Safety and security of the living environment which makes good use of digital systems
- User-oriented products, services and processes
Witty City
Why a Smart City programme is needed?

- Urbanisation continues globally
  - Cities grow, shrink and transform
  - Growing demand for smart city solutions
- The full potential of new innovations and knowledge is not taken into account in investments
  - Improve cooperation between users, public and private sector
- User needs are not taken into consideration well enough
- Finnish companies are small actors in global markets
  - Enabling technologies have been developed and tested, but there is growing need for integrated solutions
Witty City

Finland is a forerunner in smooth, ecological everyday services and technologies.

Tekes promotes the cooperation of users, enterprises and public actors in the interface of innovation and investment.

Finland is a desired test environment and Finnish companies are able to compete in growing global markets.
- The new Tekes approach puts the Cities in the centre.
- The Cities are leaders and owners of an urban system, and thus integrators of research and innovation.
- R&D&I projects are funded and demonstrations are an essential part of each project – urban living labs.
- The network of (European) cities is promoted – how?
What is a Witty City?

- For citizens a Witty City offers safe and clean living environment
  - Smooth transportation, comfortable work and leisure
  - Well-being and health-related services readily available
- For municipalities a Witty City is based on local conditions and strengths
  - A vibrant business community
  - Modern, integrated services and solutions
  - Implemented in accordance with sustainable development and energy efficiency together with users
- For companies a Witty City acts as a development platform
  - A Witty City enables development of new solutions directed at the international markets
Goals of the programme

- To encourage cities to open their investments and urban development projects to test beds for companies
  - To help innovative SMEs to get first commercial references for new solutions and modes of operations
- To integrate innovatively knowhow from different disciplines and industries
  - New business and cooperation networks to create integrated solutions
  - Renewal of industrial branches, new business and earnings models
- To focus on demand side innovation
  - Especially to bring supply and demand together
- To create ability and readiness for international business
  - Networks and references for new solutions
- Witty city offers smooth, seamless everyday services

[Tekes logo]
<table>
<thead>
<tr>
<th>Client</th>
<th>Role</th>
<th>Offering</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public steering</td>
<td>Regulation and its interpretation</td>
<td>Testing of regulation and the limits of application</td>
<td>Smart steering, prevention of conflicting regulation</td>
</tr>
<tr>
<td>Cities</td>
<td>Enabler, development of business</td>
<td>Networks (Fi, global), Living Lab, funding, research</td>
<td>Fast experiments, renewing industries, opening market</td>
</tr>
<tr>
<td>Owner, Investor</td>
<td>Smart investments, measuring of value</td>
<td>Procurement, research, follow-up (+/-)</td>
<td>Smart and functional investments, user data, learning from follow-up data</td>
</tr>
<tr>
<td>User</td>
<td>Customer need, ideas, feedback</td>
<td>Influence</td>
<td>User-driven solutions</td>
</tr>
<tr>
<td>Integrator</td>
<td>Change agent</td>
<td>Funding, networks and business environment</td>
<td>New business, renewal of business</td>
</tr>
<tr>
<td>Enterprises</td>
<td>Development of solutions and business</td>
<td>Funding, development environments and networks, support for internationalisation</td>
<td>Faster market entry, integrated solutions (products, services, ict), feedback from users and customers, international growth</td>
</tr>
<tr>
<td>Energy ICT Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finland is a forerunner in everyday services and technologies

Integrated smart technologies and services
Development in genuine environments
Competence for new international business

ICT
Energy
Construction
Services
Companies
Public actors
Users
Investors
References
Networks
Integrated solutions
Focus in demonstration and pilot projects

1. Experience the need for change
2. Diagnose the system
3. Create pioneering practices
4. Enable the tipping
5. Sustain the transition
6. Set the rules of the new mainstream

Cities now

Cities in the future

Goal for Finland

Source: Forum for the Future
Objective driven development

New Business

Top
Know-how

Need

Know-how and knowledge

Continuos learning

Practices

Users

Testing and piloting
How shall we go on?

Now tell me how people want to live in 2050!

Look at it from a different point of view.

Comprehensiveness

Everyday test beds

Foresight