

European Software Strategy

WG5: SMEs – Reduction of Fragmentation

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Issues

- **International business conducted by European ICT SMEs is at a very low level:** Very few European ICT SMEs trade internationally. Recent studies show that a very limited share of European ICT SMEs sold products outside their national market. Finnish, German, Italian and Dutch firms are more likely than firms in France, Hungary, and Poland to sell their products internationally. While not all of the firms that do not, at present, trade internationally will want to sell their products abroad, there is clearly huge untapped potential for them to do so.

- **Research and innovation is well under potential:** Software is a major focus for research and innovation, and is recognised as being a source of systemic innovation in other sectors. However the innovation level at European scale is undermined by the current high fragmentation of the European ICT industry.

- **Inefficient and fragmented labour market:** despite recent improvements, the growth in demand for appropriately skilled labour continues to outstrip the growth in supply. Given

the lack of suitable graduates and experienced personnel, many companies have to recruit staff from abroad. But while many SMEs could easily contribute to the EU economic growth by hiring more employees - and especially by hiring local workforce in other Member States - employing other Member States' workforce has proven to be extremely difficult.

- Partnering with a Firm In another Members State is very difficult:

SMEs often encounter difficulties creating partnerships with other companies based in another Member State for a number of reasons, in particular:

- difficulty to get access to information on potential SME partners in other countries;
- a fragmented work permit system;
- difficulties linked to the legal system of another country;
- difficulties faced in litigation/arbitration cases, due to different national provisions and procedures.

- Scarce SMEs' participation in European processes. Processes on the European level, including standardisation, are too heavy and cumbersome for SMEs to participate, and are especially unattractive for the people driving the innovation. In SMEs, the main innovators come out of a technical background and might also steer the business side; these persons usually have little time and interest for working on European networks and events.

Trends

- Cooperation of SMEs increasingly happen on the ground of non-discriminatory technology. Increasingly SMEs are cooperating via a loosely coupled process using free software components. Through this process, groups of SMEs are able to share development costs of a number of core software modules and can still compete on the service level with each other or search for different target markets separated by region. This trend works against the fragmentation of technologies and it works in favour of flexible companies which usually are small or mid sized. It may enhance cross-border cooperation of SMEs and development of functional business networks across Europe, increasing research and innovation potential.

- SMEs as software services providers. Software will become more a service and clients will increasingly demand customization. ITC service providers will get closer to the customer. This means speaking the language of the customer and knowing their business processes. This is something that cannot be outsourced easily, is based on trust and corresponding culture. The required personal relationship between a software company and its customers tilts in favour of local companies. This trend may act as a factor of vertical aggregation for companies.

- Factors affecting SMEs' business model: Economic Crisis, Globalization and Cloud Computing are factors or trends that may have a significant impact on SMEs' business model and may create opportunities for companies that are able to quickly adapt to the new scenarios.

Barriers

- **Integrated systems requirement in public procurement:** Public buyers tend to unnecessarily demand integrated systems and do not follow a modular approach. This approach increases the size of tenders and lowers the chances of SMEs to participate. Competition and thus innovation is slowed down, because only large vendors can produce all-in-one systems and are capable to invest the pre-sale costs for demonstrating the ability to do so. Therefore it can be argued that some aspects of public procurement policies on ICT currently represent an indirect barrier for European ICT SMEs ability to cooperate and compete for government contracts.

- **Massive regulatory differences inducing regional/local fragmentation of the ICT SME business landscape throughout Europe:** partnering with a firm from another Member State proves too difficult in the face of legal/administrative/market uncertainty. SMEs do not have the capacity in time and means to look for partners and can scarcely afford network services offering this type of information. ICT SMEs lack affordable cross-European ICT SME-specific support. The lack of harmonized rules in finance and financial infrastructures also represent a barrier to cross-border cooperation of SMEs. Laws are very different across Europe; finally employing other Member States' workforce has proven to be difficult due to lack of harmonized employment rules, social schemes and tax provisions.

- **Lack of harmonized liability provisions:** when selling a product or a service in another Member State, it is difficult for an SME to assess what the risks are, or to know what the company is responsible for, in order to take the appropriate insurance. This situation can lead to very heavy consequences for a small business.

- **Language and cultural barriers:** Cultural differences often make difficult for small businesses to operate in another country. Language remains a barrier, even 50 years after the Treaty of Rome. Business between France and Spain should be easier than between France and Japan, but in practice, it is not.

- **Different educational requirements:** difficult recognition of curricula is a problem for conducting the same business in different Member States. This represents an obstacle to the flexibility SMEs require to develop their businesses across Europe.

- **Insufficient ICT-SME specific networks and associations:** even though in other sectors associations and networks have proven to be useful in fostering companies' cooperation at national and international level, ICT SMEs are not yet sufficiently aggregated at associative level or they are too dependent on large vendors.

Benefits

- **Increased competition/innovation:** the generalised, supported use of modular IT systems with open standards make it possible to exchange parts of the system and thus increase competition among the software producers, strengthening the uptake of these innovations within SMEs in Europe. Public tenders considering modular IT system would foster competition, innovation and ICT SMEs cooperation across Europe.

Actions

- **Support software interoperability:** Promote practical interoperability of software including support for open standards may enhance horizontal cooperation among software companies and facilitate the opportunities for localization and vertical aggregation.

- **Promote the role of national and international associations:** support the establishment of ICT-SME oriented associations both at national and international level

- **Creation of a pan-European web portal on liability laws in the EU countries:** This could be used by SMEs as a tool to check for the implications of establishing a business in another Member State, thus helping to predict risky scenarios.

- **Development of an EU certification system:** this system would include the minimum requirements for a company when doing cross-border business, together with a tax clearance certificate.

- **A minimum level of insurance recognized by all Member States:** this should be developed along a flexible system that enables SMEs to add other insurance options if desired.

- **Create Clustering Opportunities for Innovative SMEs:** business clusters can help SMEs achieve critical mass, pool their resources, and have access to specialized technology, knowledge, and business support services. At a European level, the creation and development of specialist ICT clusters for SMEs has been facilitated by various enterprise and regional innovation policies.

- **Promote EU level projects specific to ICT-SMEs:** in order to boost cross-border cooperation and Europe-wide innovation streaks, some European research and innovation programs should be specific to ICT SMEs and their associations. More strict rules for the selection of participants should exist in order to exclude companies and associations that do not fully meet the criteria.

- **Encourage modular interoperable solutions in public procurement:** promote procurement rules that reasonably pay for prototypes and technical feasibility studies. Support should be provided to public buyers acting upon expertise on how to neutrally select a modular solution. The modular solutions in public tenders should not become mandatory options, but should be made possible and easy.

- **Educate European Students in Business and Foreign Language Skills:** In order to remove the language and skills barriers to cross border trade and international cooperation education should focus more on teaching both business and foreign language skills.

Promoting cross border internships in SMEs would also decrease not only the language gap, but also the cultural gap between countries.

- Creation and dissemination of a European guide for setting up international partnerships: A European template with standard terms and conditions to use as basic guidelines for setting up international partnerships should be created at EU level and disseminated notably to ICT SMEs Europe-wide.

- Creation of a European SME database/repository: A European SME database/repository should be developed and include names, statutes, sectors of expertise, company revenue, as well as some kind of trust rating. This could be additional to the creation of an EU directory which gathers all the company bi-annual and annual reports.