



**European Office of Craft/Trades and Small
and Medium-sized Enterprises**



Same function for standardization issues

31 countries

12 Million SMEs

77 Member Associations

50 Million employees in the EEA

93% = Micro-Companies (< 10 persons)

NORM APME

eBusiness in Construction SMEs European perspective

Freek Posthumus

10-06-05



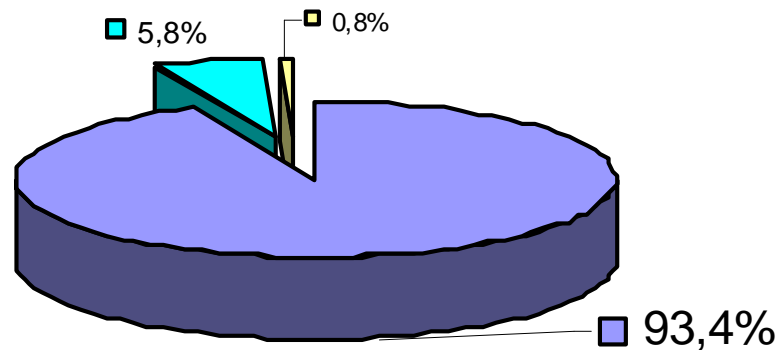
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SMEs in Europa

Jacques Chirac: The biggest chance for growth is in small enterprises!

Eur. Commission: 20 Mio SMEs in Europe



■ Below 10 persons ■ 11-50 persons ■ 51-250 persons

UEAPME

*Building:
2,3 Million companies*

NORM APME

NORMAPME & UEAPME activities in Europa:

- *Cover main European Committees dealing with directives & standards,*
- *Social Partner,*
- *Main activities in EEA:*
 - *SME in construction,*
 - *Food regulation and standardisation*
 - *Qualification- and work methods in the new Europe:
Service directive – impact on the SME*
 - *Try to get profitable eBusiness deployed in the small
construction company and on-site.*



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NORMAPME & the European construction:

The main standardisation activities and trends:

- *EC Standing committee membership and Construction directive revision*
- *Focus on key issues for the SME in CEN like:*
 - *Small series and piecework – how to respond to CE marking with adapted testing methods,*
 - *Fire behaviour for wooden buildings,*
 - *Wood preservation,*
 - *Doors and window solutions, automatic gates,*
 - *Electrical installation methods,*
 - *Smarthouse initiative of CENELEC.*
- *Qualifications and work methods: services directive*



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The European construction industry and eBusiness development: *characteristics*

- *Very fragmented, also in ICT usage & with multiple solutions.*
- *A multitude of standards, technical specifications, labels, and certification marks*
- *Great diversity in local, regional and national regulations.*
- *Communication and knowledge - sharing often based on personal contact or telephone.*
- *High sensitivity to changes of economical conditions in market and society.*
- *Typically organized around projects, or suppliers to project-managed companies, that take over one year.*
- *A low adoption and integration of ICT in most business processes especially for SMEs that are 96% below 20 persons.*



Courtesy: *e-Business W@tch*
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The European SME timber construction industry: *The underused potential for further uptake of ICT*

Key economic figures in timber:

- *Employment - 15% of total construction,*
- *Productivity - 65% of medium/large enterprises,*
- *New countries = 40-60%, !*

2003 Internet use:

- *Internet use/website timber* 57 %
- *Internet use/website Germany* 85 %
- *On-line purchases timber* 24 %
- *B2B purchases timber* 6 %



Source: *e-Business W@tch 2003*
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The European SME construction industry: *The underused potential for further uptake of ICT*

Productivity gain is key and can be achieved in:

- *Project planning, job sharing,*
- *ERP-systems with financials,*
- *Inventory management systems (especially with suppliers)*
- *CRM-systems,*
- *SCM-systems,*
- *Mobile solutions !*

A low degree of integration of both internal and external business processes is typical to the SME.

Collaboration exists, but is done on-site and without ICT and back-office integration.



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Building process and outsourcing

All done by phone & voice contact



Contractor	Prepare site	Concrete foundation	Walls/internals/roof	Fixtures	Finishing
Project leader	Architect, Inspection	Prepares piping	Own workers	Buys & orders fixtures	Surveys result; coordinates
Big supplier		Concrete	Bricks/Structural members	Wholesale	
Type 1 subcontractor	Bulldozer		Plastering	Plumber, electrician,	Painter,
Type 2 subcontractor				Customer choice appliances	Installation
Showroom chains				Customer choice appliances	Paint, etc.

The European construction industry: Top ten barriers for further uptake of ICT eBusiness

1. *Lack of money, specialist people and time*
2. *Lack of simple programs fit for the job*
3. *Not adapted to the mobility and lack of on-site facilities*
4. *eProcurement, eCatalogues require eSkills which mostly lack*
5. *eTendering and eAuction are unfair today and only in favour of big buyers*
6. *Too much variation in solutions –too little uniformity in standards*
7. *Part solutions rather than all-in ones*
8. *Industrialisation with new concepts designed to the large companies*
9. *Outsourcing and specialization grows and require new approach*
10. *Internationalisation gives new market opportunities and increased competition from abroad*



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The European construction industry: *The trends for further uptake of ICT eBusiness*

- *Increasing pressure for consolidation and cost reduction*
- *Industrialisation with new concepts, e.g. pre-fabricated houses, pre-fab staircases*
- *Outsourcing and specialization grows*
- *Internationalisation gives new market opportunities and increased competition from abroad*
- *ICT-drive of large suppliers and buyers (eProcurement, eCatalogues)*

BUT:

- *SMEs trail at the end as they lack internal competences to implement the needed changes; support is lacking.*



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The way forward in the construction industry:

Case history Bygge og Industriservices A/S, Norway

- *Small company in construction and consultancy.*
- *21 employees ; turnover 2 Mio. Euro.*
- *Multiple sites at great distances.*
- *To keep competitive and satisfy large clients eBusiness was needed, e.g. :*
 - *ERP-system with financials, planning, controlling cost structure.*
 - *CadCam and project management, pricing.*
 - *Daily business management and internal communications.*
 - *Mobile solutions for online access to:*
 - *Online access to offers, client history, etc.*
 - *Time registration system,*
 - *Construction plans,*
 - *Stock levels, etc.*



Courtesy: Rambøll Management A/S.



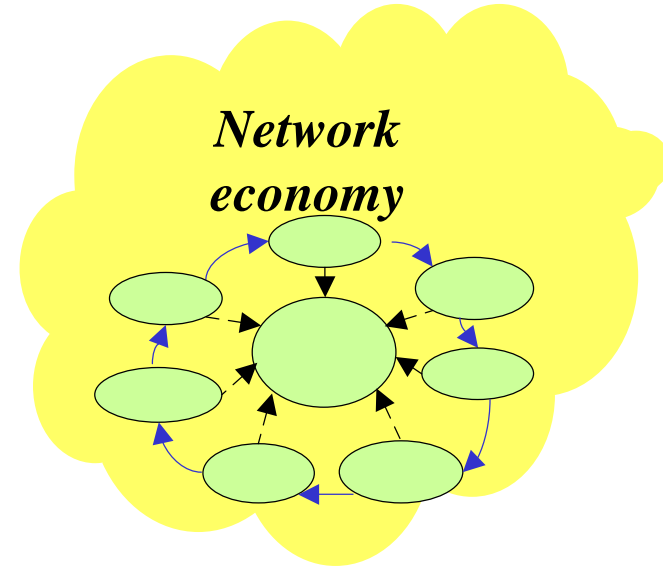
The way forward in the construction industry: Conclusion

1. *Advantages are real, but need to be implemented widely to be effective in the sector,*
2. *Main technical elements are available,*
3. *Only when matching all systems together the efficiency is reached,*
4. *Matching systems together to function “as one” needs commitment of large industry players, IT vendors and authorities,*
5. *Outside help is the only way to achieve this at SME level.*

If done right payback is within a year (Case history B&I).



The future for Small Construction Enterprises in eBusiness



Construction SMEs need good support if we want the integrated software solutions embedded in their daily work methods!

Who gives that?