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# Trends in ICT Standards in European Standardisation Bodies and Standards Consortia

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# Background

Trend towards shorter product life cycles in ICT

Reaction by SDOs via fastening processes and new types of products (e.g. PAS (= public available specifications) and CWA (CEN workshop agreement))

Higher cost of standardisation due to shortening of processes and tendency towards multi-component products in ICT

Strong growth of standardisation consortia in ICT

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# Objective and Hypotheses

Is there a complementary or a substitutive relationship between these forms and consortia standardisation in ICT?

Argument for a substitutive relationship: decision for quality and legitimacy or for speed and flexibility (Belleflamme 2002, Hawkins 1999, Swann 2000),

Argument for a complementary relationship: parallel activities and close linkages between consortia and formal SDOs (Hawkins 1999) and division of work between SDOs by producing standards, whereas consortia try to coordinate markets and to create business communities.

Only anecdotal or survey evidence (Blum et al. 2000; Blind et al. 2002) aim to find quantitative empirical evidence in order to refute one of the two hypotheses for the ICT sector



# Methodology

Output of formal standardisation activities is reported in PERINORM

Focus on activities by European SDOs in ICT differentiated by subclasses of the International Standardisation Classification (ICS)

No complete database of consortia active in ICT standardisation, we rely on the CEN/ISSS survey of consortia active in ICT standardisation (<http://www.cenorm.be/cenorm/businessdomains/businessdomains/iss/consortia/index.asp>)

Categorisation of the consortia into the categories of ICS

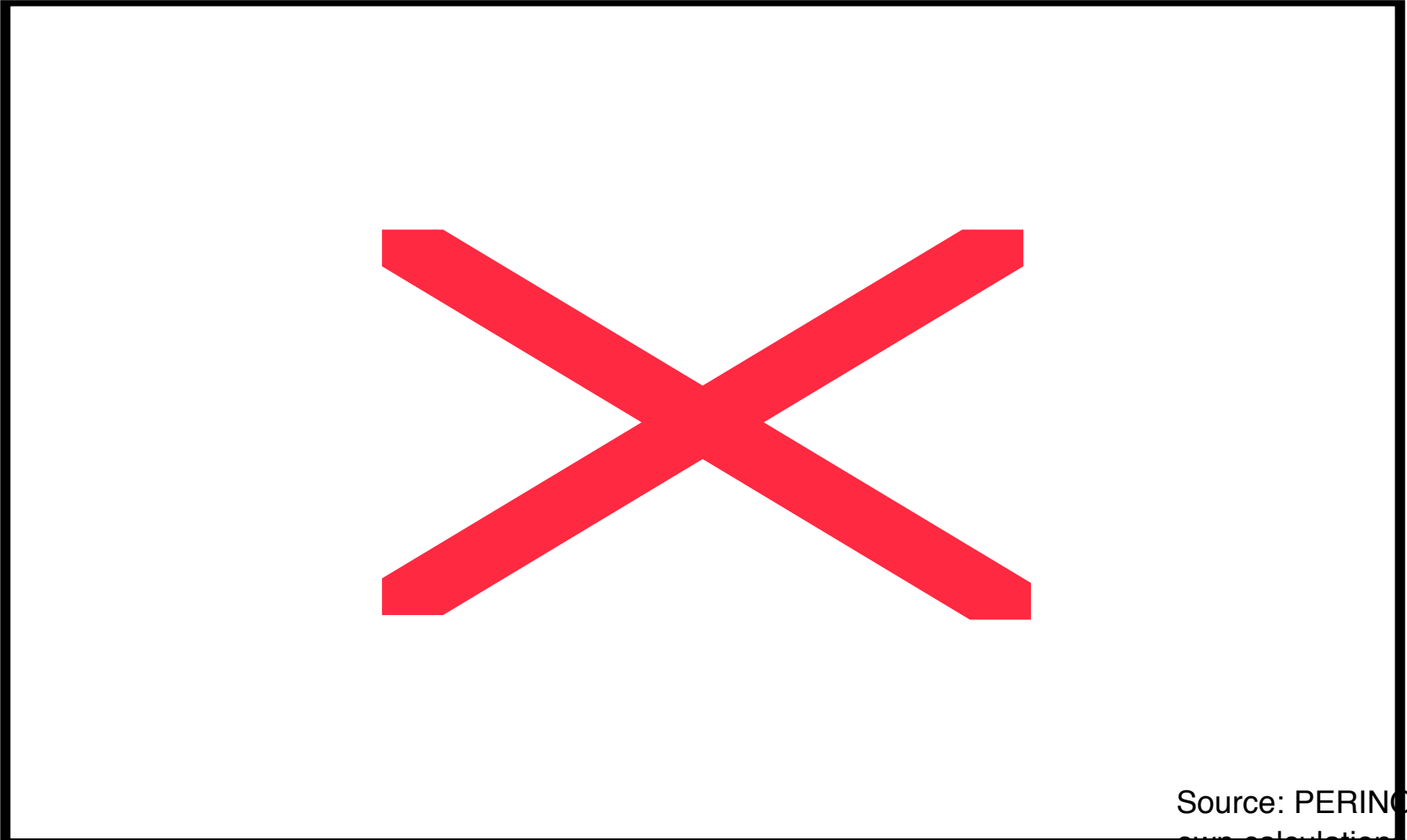
In the 9th edition classification 143 out of the 169 (Remaining consortia are active in issues outside the areas)

In order to give some information about trends, we also scrutinised the 4th edition issued in June 2000 with a total of 269 consortia, of which we were able to classify 227 into the ICS categories (Only 103 out of the 269 consortia listed in the 4th edition are still included in the overview of the 9th edition)

Comparable measure to the approach applied for consortia activities by the categorisation of 55 ICT related technical committees (TCs) of the European SDOs, i.e. ETSI, CEN and CENELEC, and the TCs of the international SDOs, i.e. ISO and IEC

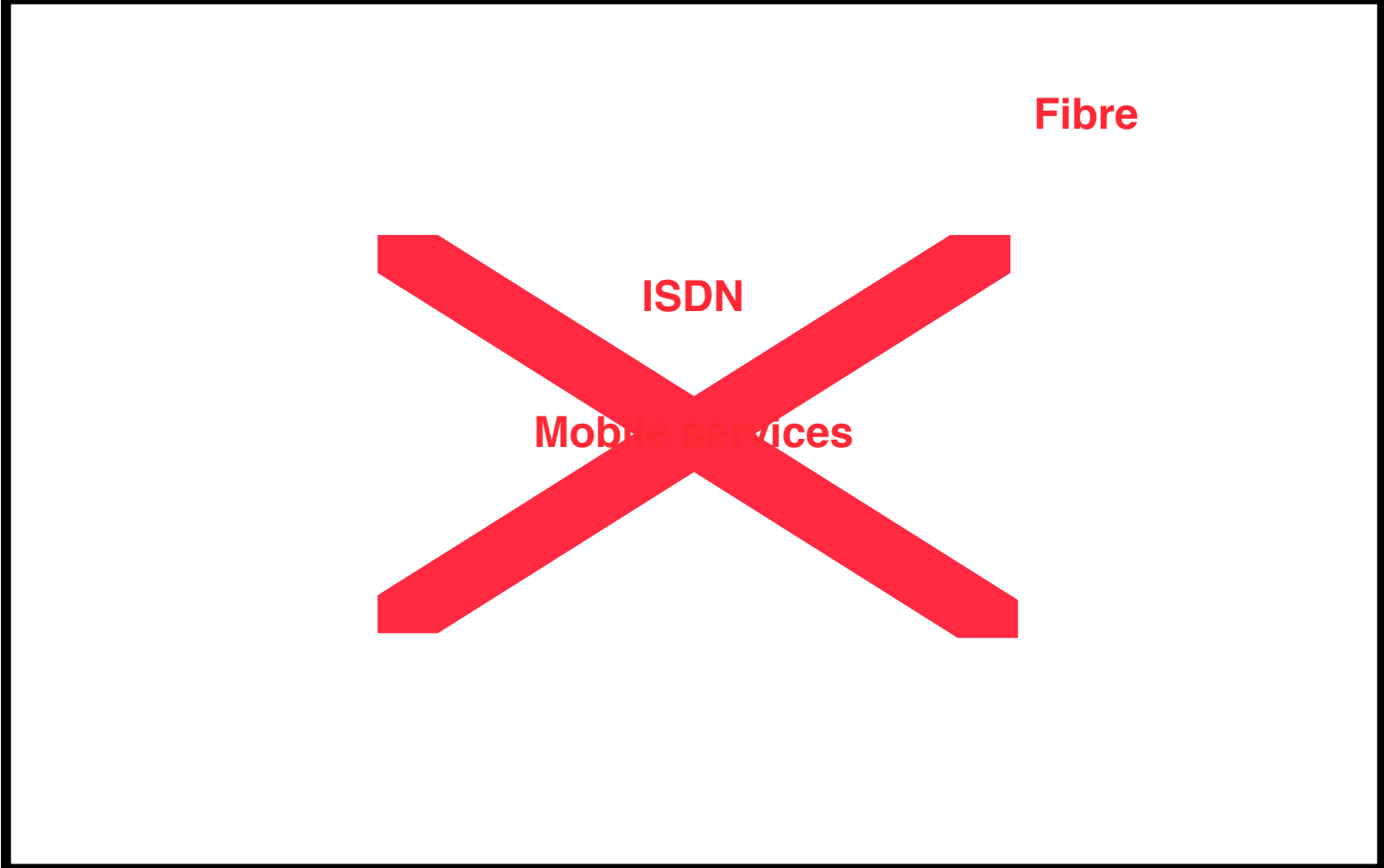


# Annual publication of information technology and telecommunication standards from European SDOs between 1990 and 2003



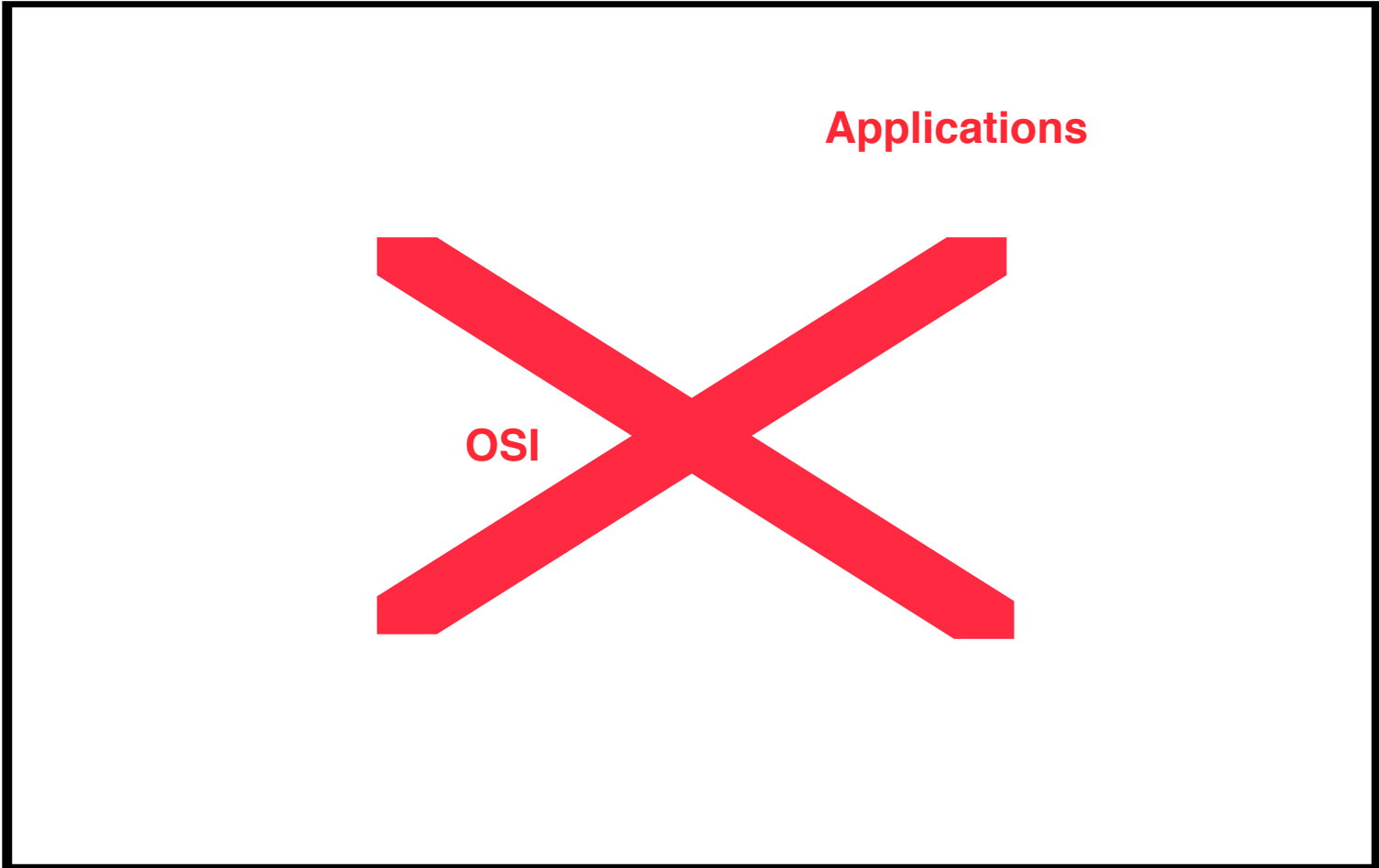
Source: PERINORM 2004, own calculations

# Structure of annual publication of telecommunication standards from European SDOs differentiated by ICS Classes between 1990 and 2003



Source: PERINORM 2004, own calculations

# Structure of annual publication of information technology standards from European SDOs differentiated by ICS Classes between 1990 and 2003

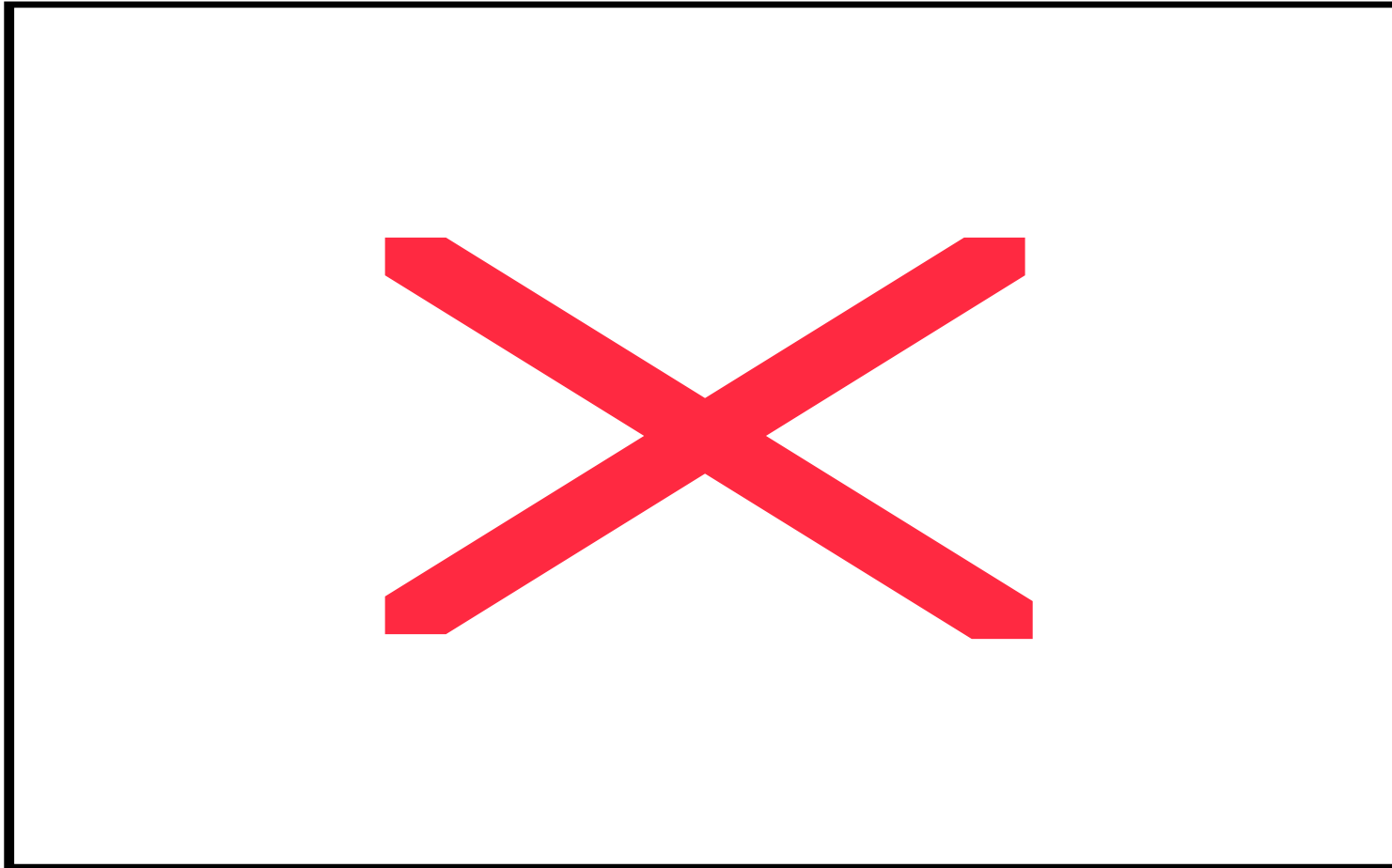


Source: PERINORM 2004,  
own calculations

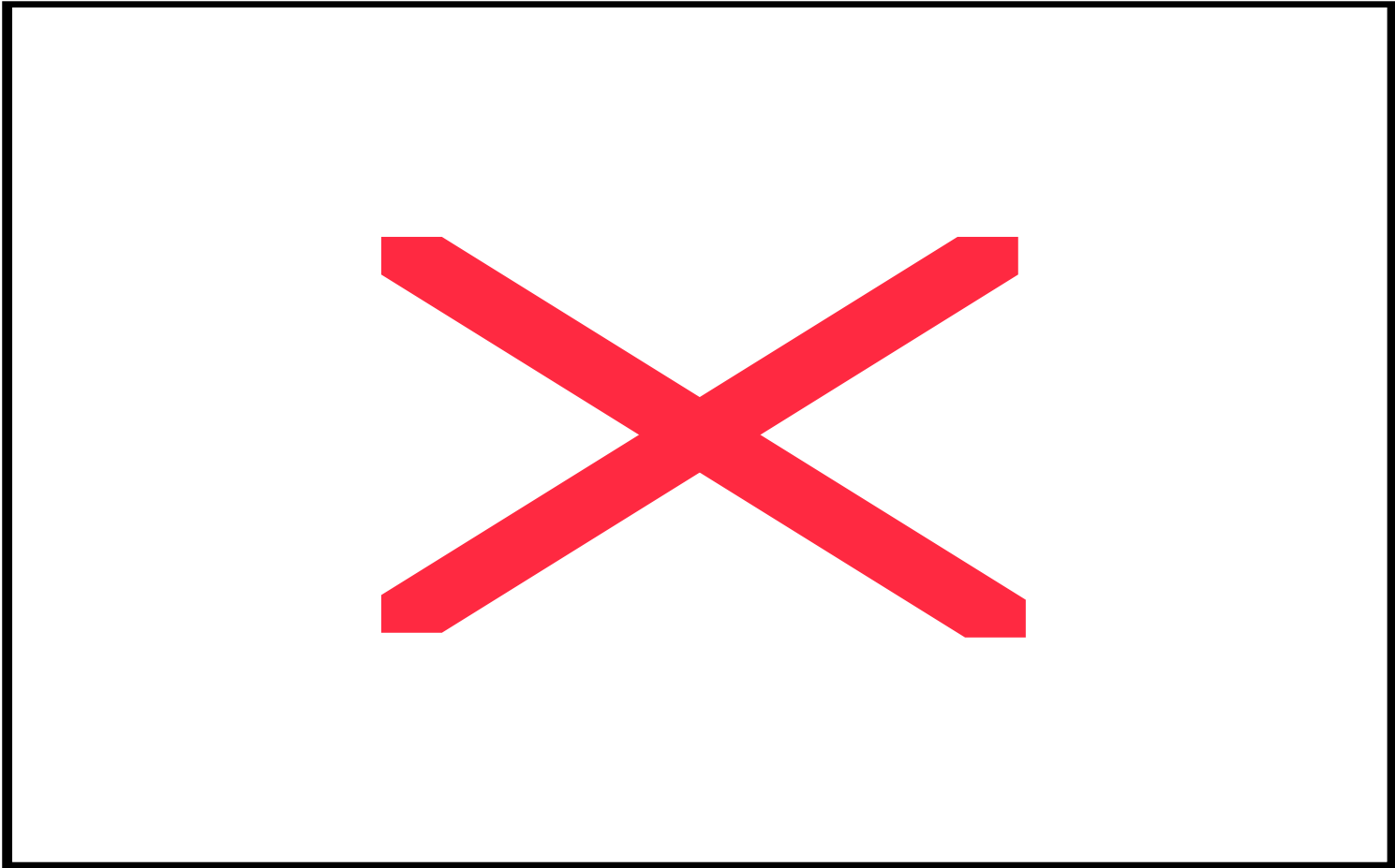




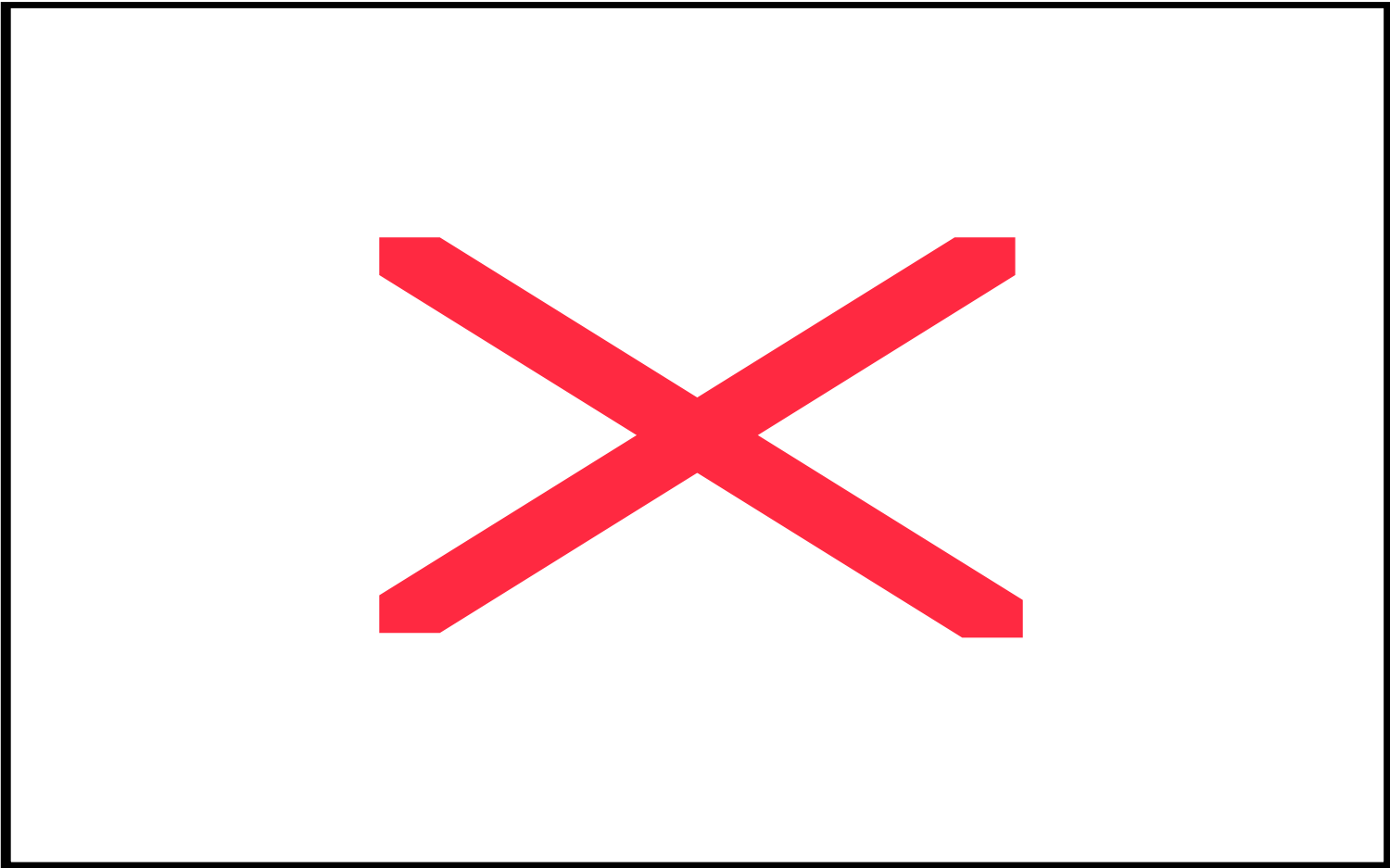
# Share of Technical Committees at European SDOs differentiated by technological area



# Share of telecommunication consortia in the 4th edition (June 2000) and 9th edition (October 2004) of the CEN/ISSS catalogue differentiated by technological area



# Share of information technology consortia in the 4th edition (June 2000) and 9th edition (October 2004) of the CEN/ISSS catalogue differentiated by technological area



# Some simple correlations

Significant positive correlation between the distribution of ICT standardisation consortia and of the ICT-related technical committees in formal European and international standardisation bodies based on 27 ICS subclasses

Differentiation into telecommunication and information technology leads to no significant correlation for the institutions in telecommunication, but a significant positive correlation between TCs in formal SDOs and consortia in information technology

Comparison of the output or the stock of standards produced by European SDOs with the number of consortia differentiated by ICS subclasses leads to significant positive correlations.

Differentiation into telecommunication and information technology leads to even higher correlation coefficients

Still in a few selected fields like audiovisual engineering and mobile services there seems to be a substitutive relationship between consortia and formal standardisation



# Conclusions

Complementary relationship confirmed

Policy implications

- consolidation and concentration process of consortia activities in ICT standardisation .
  - variety of options especially for small and medium sized enterprise to join consortia has decreased, relative influence in the reduced number, but probably larger consortia will probably also be lower.
  - monitoring consortia activities will be easier by the concentration on a smaller number of consortia,
  - small and medium-sized enterprises face increased challenges in actively participating in consortia, but less problems in passively observing their activities. Consequently, larger companies are more likely to gain by their active standardisation engagements.



# Conclusions

## Policy implications (continued)

- the complementary relation between consortia and formal standardisation activities in ICT is able to remedy some of the possible negative impacts of the concentration process among consortia based on the assumption that companies and other stakeholders have in most cases a fall-back option to participate in formal standardisation and to make use of formal standards without paying discriminatory licensing fees.
  - in some standardisation fields, where SDOs have reduced their activities -> no fall-back option to use timely open formal standards.
  - formal SDOs should take measures in order to stabilise the complementary relationship between their activities, both by intensifying institutional links to consortia and also by transferring contents of consortia standards into formal standards.
  - framework should be developed to generate incentives for consortia to coordinate their activities with the processes taking place in formal SDOs
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