

**SEAMLESS**  
**project overview**  
**+**  
**D1.2**

**Trusted operational scenarios**



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- ❑ Five + one pilots
  - ❑ Two pilots in the B&C sector (Poland and Slovenia)
  - ❑ Three pilots in the TEX sector (Romania, Slovakia, Spain)
  - ❑ One “generic” pilot (Hungary)
  - ❑ With partially overlapping ontologies and using 6+1 (English) languages
  - ❑ To constitute an embryo of the SEAMLESS network

*New operational scenarios development including trust and confidence, regulatory and contractual issues.*

- Development of operational strategies for increasing trust
  - Analysis of the current collaboration practices
  - Trust building mechanisms (TBM) identification
  - Analysis of the TBM for Seamless platform
    - Level of trust added by each TBM
    - Minimum set of TBM for joining the e-market
    - Identification of specifics – dependence on the size, e-skills, type, ...
  - Design of the implementation strategies for each TBM
  - Recommendations for the Seamless platform



## Source

- Interviews with companies, outputs from D1.1, other sources (i.e. e-Business W@tch statistics).

## Some conclusions:

- “Paper-based” communication is prevailing – non-standardized
- Tendency towards the use of electronic communication (mainly for medium companies).
- Strong relations with the current suppliers, searching for customers mainly
- Selection of the new partners – own contacts, public (e-)registries, internet (text search), other - workshops/exhibitions etc.
- Online international market for SMEs is rather rare - online purchasing: only about 8% for B&C industry, 18% for Tex



### Needs and requirements

- Initially, lack of trust in electronic tools and information on the internet.
- Simple services and functions - low investment cost.
- Multilingual support requested mainly by SMEs, to improve international cooperation.

## The purpose of the analysis was to:

- Identify the most suitable sets of trust mechanisms for SEAMLESS,
- Identify a minimum set of TBMs needed to implement in initial phase,
- Identify future shifts in trust perception, acceptance and requirements according to e-experiences,
- Identify the most frequented patterns regarding the trust model.

## List of investigated TBM:

- 9 mechanisms - information quality, certificates, references, feedback-based reputation, ranking, contract execution support, online dispute resolution, escrow services and standardization

- 103 companies, 6 countries, SMEs mainly (14% large companies), various e-business skills, Tex and C&B sectors with few exceptions (IT, banking, airline services..)

## The questions

1. How significant is the level of added trust according to a particular trust element or trust building mechanism ?
2. Which trust building mechanisms are necessary for joining an e-market?
3. Which types of mediators would be most acceptable?
4. What business model is most acceptable for SMEs regarding fees policy?
5. What differences are there between different sizes of companies and other relevant factors regarding trust perception and acceptance?



- Each TBM was evaluated according to the results of the questionnaire analysis
- Modular design of the various implementation scenarios for each TBM within the scope of the SEAMLESS platform - different levels of provided functionalities/complexity.
- Impact of the TBMs on the current communication habits, new communication habits, UML models for:
  - registration on the platform
  - search for partners
  - negotiation and contract proposal creation
  - contract execution phase.
- Recommendations for the SEAMLESS platform – WP2, WP3, WP4



- **Technology trust**
  - Identity management, access control, data encryption and security (more in D3.1).
- **Information quality**
  - Contact and general information – subset validated by trusted mediator
  - Information about the provided services and products – supported by the ontologies (allow to specify detailed description, references to el. documentation, etc.).
  - Other - Status of the company (i.e. valid, winding-up, bankrupt) - integrate if provided by on-line services.
- **Certificates**
  - Contact to responsible organization for validation.
  - List of common international and local certificates (i.e. ISO).

- **References**
  - To existing partners (registered on the platform or external, referenced company should have the possibility to approve reference).
  - To conducted business (i.e. realized buildings, collections etc.).
- **Reputation**
  - Based on the positive/negative feedbacks from other partners.
  - Divided into categories (i.e. product quality, on-time delivery, payment).
  - Discussion forums can be useful but not generally required.
  - Reputation based on the source credibility theory.
- **Ranking**
  - Aggregated real number value (graphical notation ★★★★★).
  - Primary based on the feedbacks.
  - Other sources - statistics about the business activities collected by the platform – time to response, number of transactions, etc.



- **Contract execution support**
  - Standard clauses and contract templates (possibly provided by the specialized company / basic vs comprehensive) with explaining – localized in the ontology.
  - Negotiation and contract condition tracking (required for ODR, escrow service integrated is necessary).
  - Integration of output from the negotiation into contract proposal.
    - requested by more experienced companies
- **Online dispute resolution**
  - Definition: *Broad range of out of court procedures for solving various conflicts between business partners.*
  - Negotiation moderated by the mediator - partners will try to find solution.
  - Mediator will investigate the problem and suggest solution.
  - ODR Advisory support, technical support, limited ODR, complex ODR.



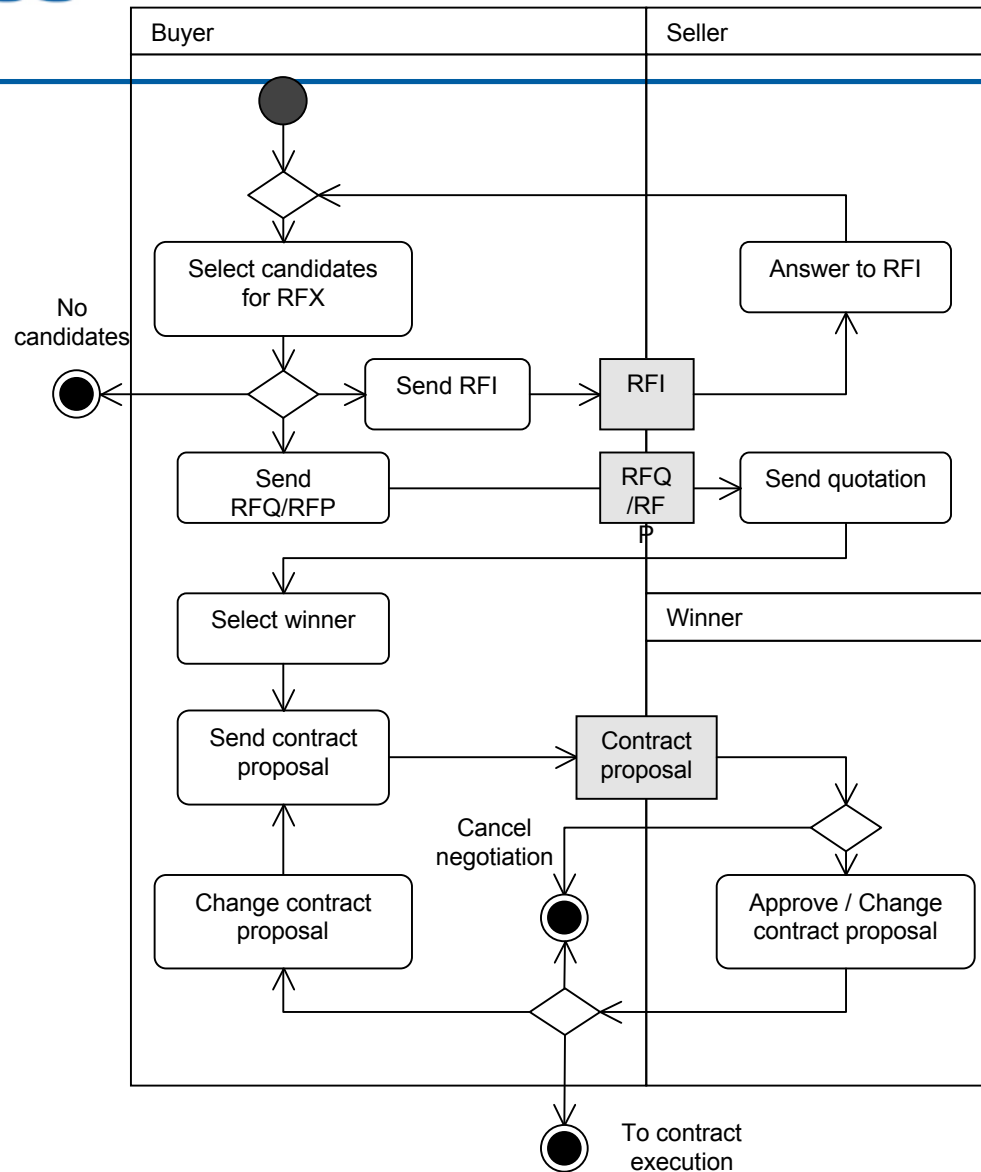
- **Escrow services**

- Definition: *Trusted third party deposits and distribute funds according to contract conditions agreed by the business partners.*
- Banks are considered to be trusted Escrow providers.
- Outsourced more complex solutions (with contract execution tracking to check contract conditions)
  - acceptance depends on the e-skills

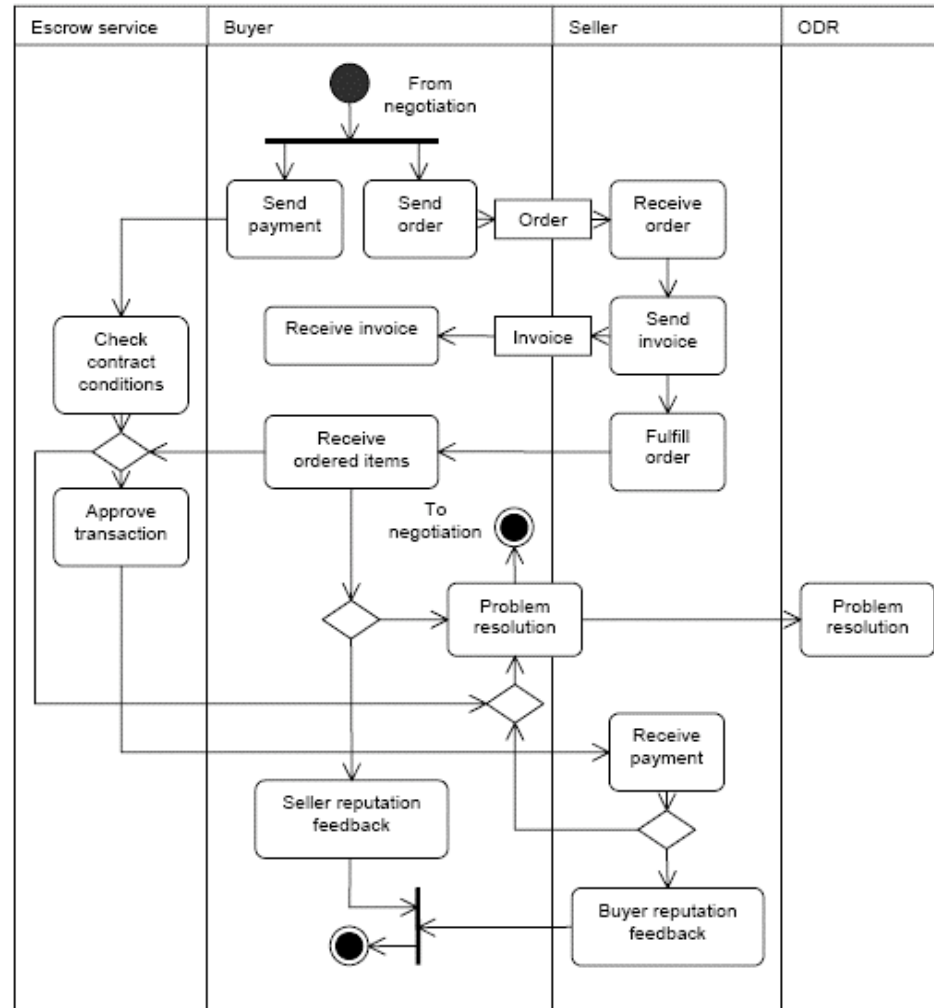
- **Standardization**

- Supported by the ontologies - standardized dictionaries, standardized structure of business documents, etc.
- Standard rules for users registered on the platform - in code of conduct, terms and conditions agreement, etc.

- Information about company size is not important and will not significantly increase trust.
- Generally, companies prefer simple trusted services for low fee or free of charge. Acceptance of sophisticated specialized solution for the fee increases by increased e-skills.
- Future trends – integrated solutions (for example Escrow services and ODR)
- SEAMLESS should be an integration platform for various TBMs.
- Start with the integration of “simple mechanisms”, extend provided functionalities according to the e-skills of SMEs companies.



# Contract execution and settlement phase model





*Thank you for you attention!*

