



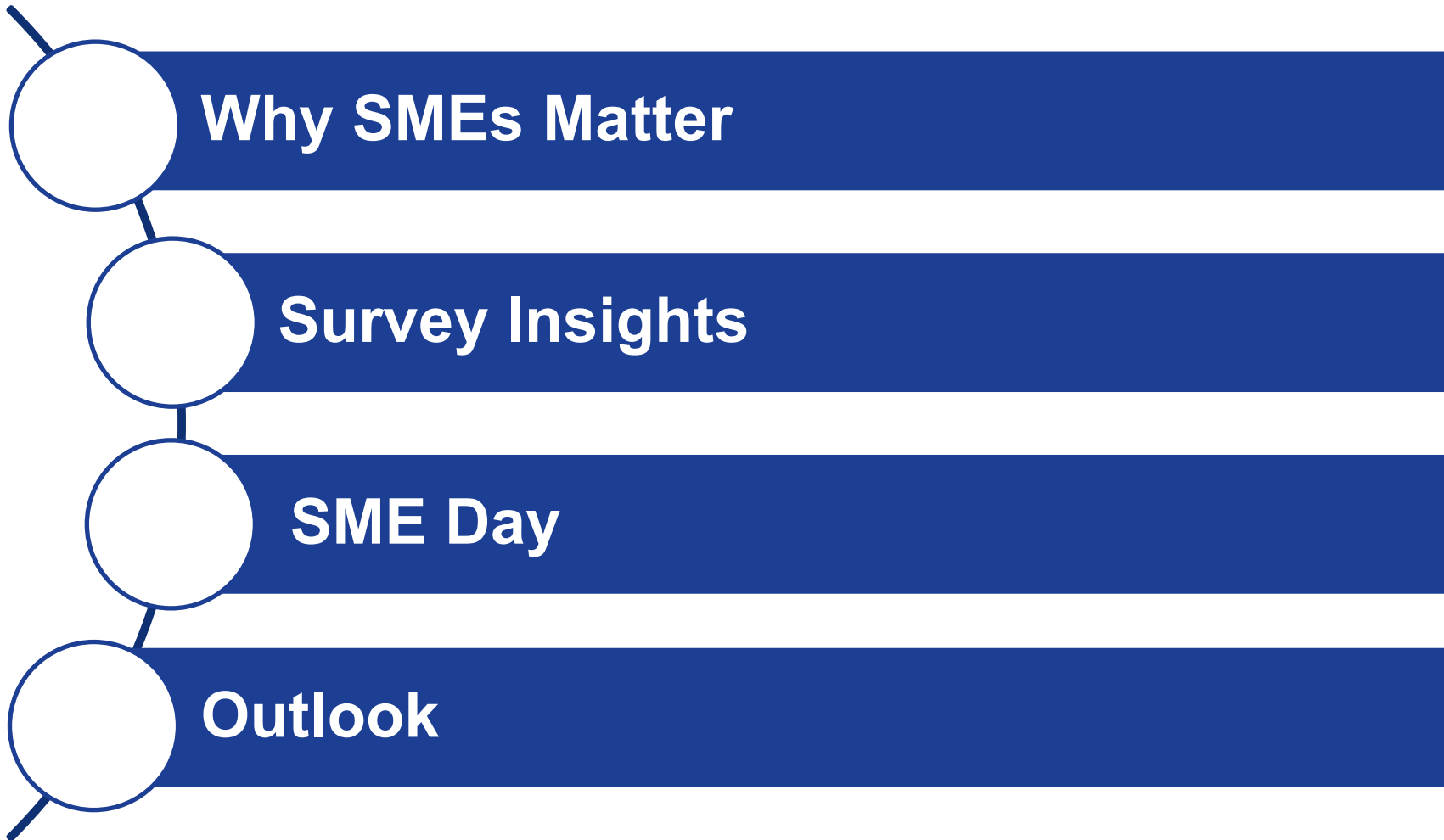
**FUSION
FOR
ENERGY**

**SMEs –
Important partners in
F4E Supply Chain**

6th Forum Fusion
Germany
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- 99% of European businesses are Small and Medium-sized enterprises (SMEs)*

Company category	Staff headcount	Turnover	o r	Balance sheet total
Medium-sized	< 250	≤ € 50 M		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Source EU Recommendation 2003/361

- SMEs are at the heart of innovation and provide jobs for more than 85 million European citizens*
- SMEs play a crucial role in ensuring European competitiveness

“55% of SMEs in Europe flag regulatory obstacles and the administrative burden as their greatest challenge.”



* Source - https://single-market-economy.ec.europa.eu/smes_en

Importance of SMEs in F4E's supply chain



Agility and
Innovation



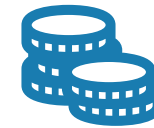
Tailored Solutions



Driving Local
Innovation and
Growth



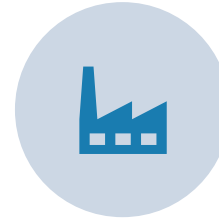
Specialised
Expertise



Cost-
Effectiveness



Working on Big Science Projects boosts R&D and business network



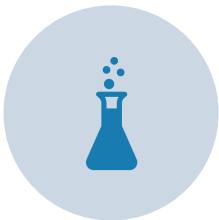
Work on very specific & demanding technical requirements. Prepare manufacturing dossiers



New partnerships with Private & Public Sector (Universities, Research Labs)



Transpose high documentation standards to other projects across the globe



Increase of R&D, engineering knowledge & experience, and exposure to new technologies



Management of financial and project schedules for mid-term projects

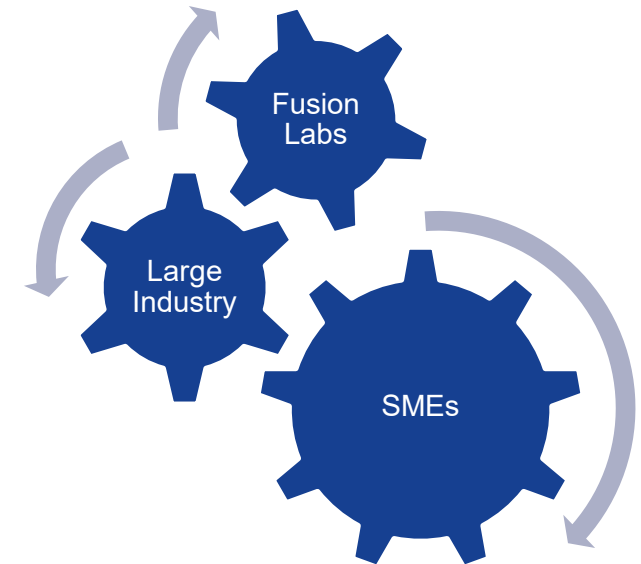


Strong collaboration between F4E, SMEs, Large Industry and Fusion labs to:

Objective 1 - Deliver Fusion Projects

Objective 2 - Broaden the industrial base for fusion in Europe

Objective 3 - Foster European innovation and competitiveness in key technologies



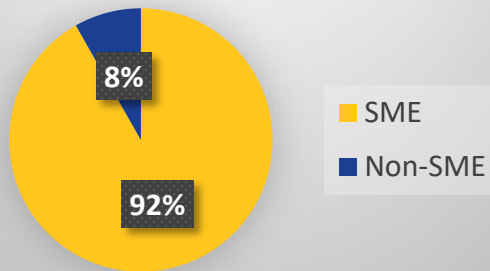
Recommended
actions by
**Industrial Policy
Working Group**

1. Reduce **financial entry barriers** for SMEs:
 - A. Ensure sufficient **liquidity** during contract execution (e.g. pre-financing)
 - B. Simplify **payment** procedures, reducing steps that cause delays and add complexity
2. Accept **financial guarantees** beyond those offered by commercial banks and consider direct engagement with EU financial institutions (with lower risk premium)
3. Improve **price revisions** clauses, assuming a higher fraction of the risk in case of high inflation
4. Set up structured **match-making** opportunities among SME and with large companies (i.e. integrators - small technology providers)

1. Minimize **administrative burden** for tender preparation & delivery acceptance
2. Provide templates, workshops and targeted training
3. Continue efforts on to improve **cashflow**: liquidity, guarantees, price revision
4. **Benchmark** versus best practices in other BSO's (e.g. ESA, CERN)
5. Broaden **dissemination of opportunities & promote SME contracts**

Feedback from
**Industrial Liaison
Officer Network**

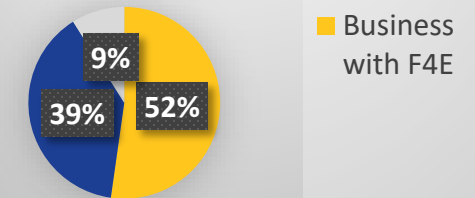
Participation Overview



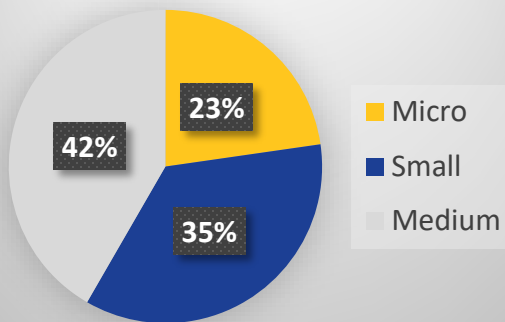
134 SME participated to the survey

70 SME have responded to have a business relationship with F4E (incl. unsuccessful Tenderers)

SME Business Relationship with F4E

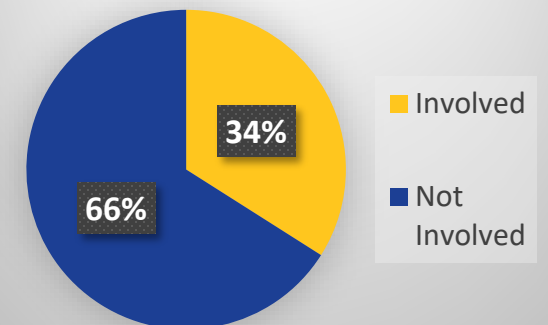


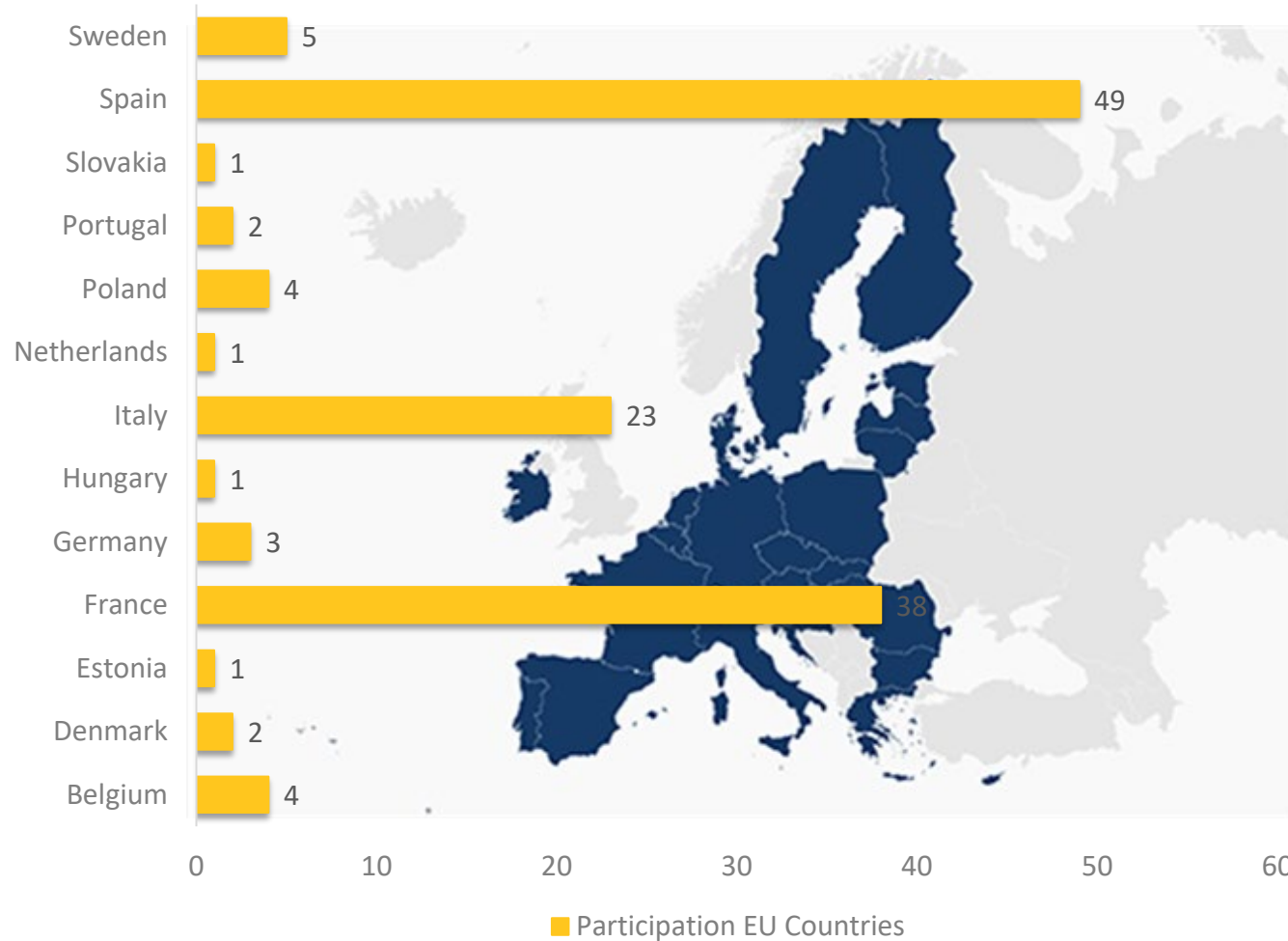
SME Type



46 SME have responded to be involved in F4E contract execution activities (Contractor, Group Members and Subcontractor)

SME Involvement

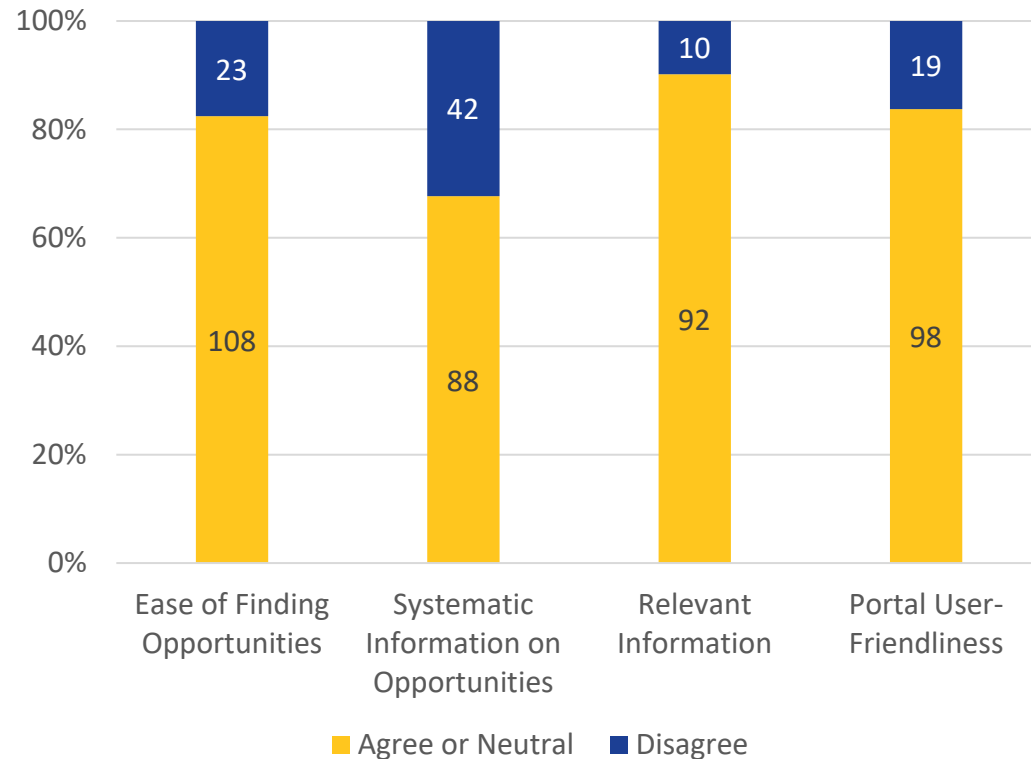




INSIGHT

Collaborate with ILO Network to increase outreach to SMEs in countries that did not participate to the survey or do not have high involvement in F4E activities, through **targeted SME info days**

Access to Opportunities



While some SMEs find it easy to locate opportunities and feel well-informed, there is a significant portion indicating inconsistent visibility of F4E's procurement opportunities

PROPOSED ACTION

Improve onboarding process for SMEs that lack established relationships with F4E to increase competitiveness and diversity of F4E supplier base

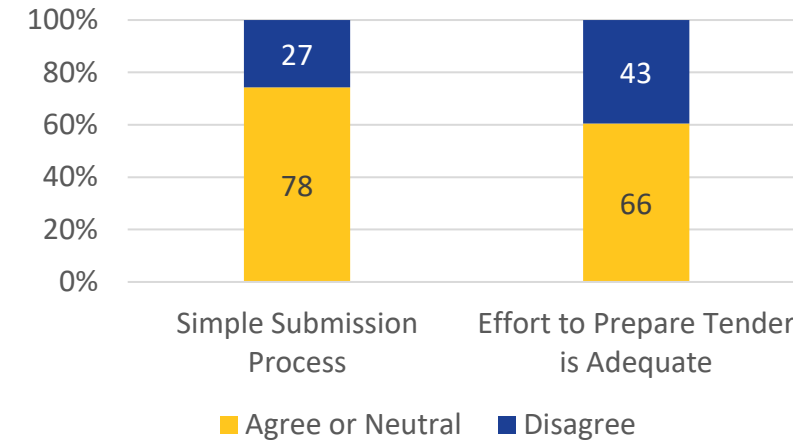
Preparing a tender poses significant challenges for many SMEs

PROPOSED ACTIONS

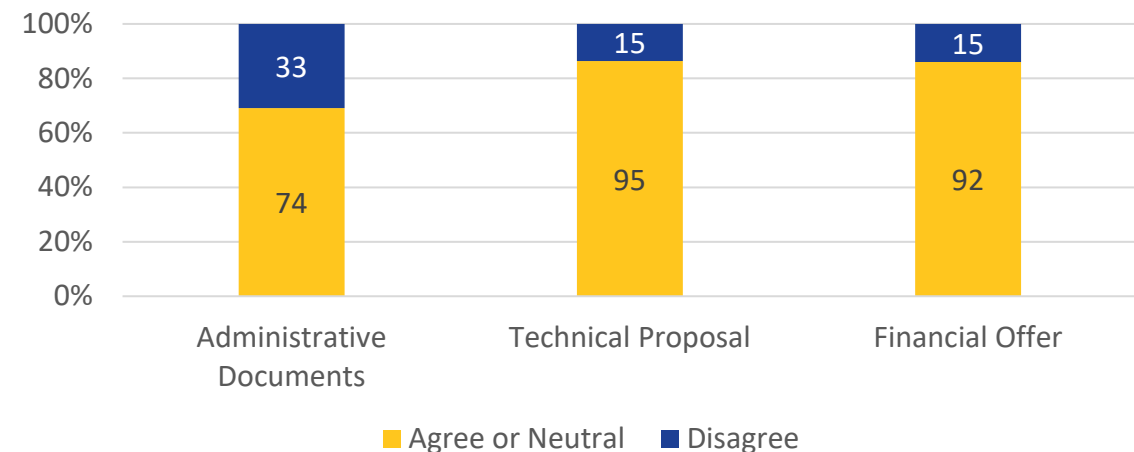
Reduce **administrative burden** (where possible), **simplify requirements**, and **enhance support**

Communicate **relevance** of the documents through **pre-tender workshops** or **resource toolkits** to reduce uncertainties and preparation time

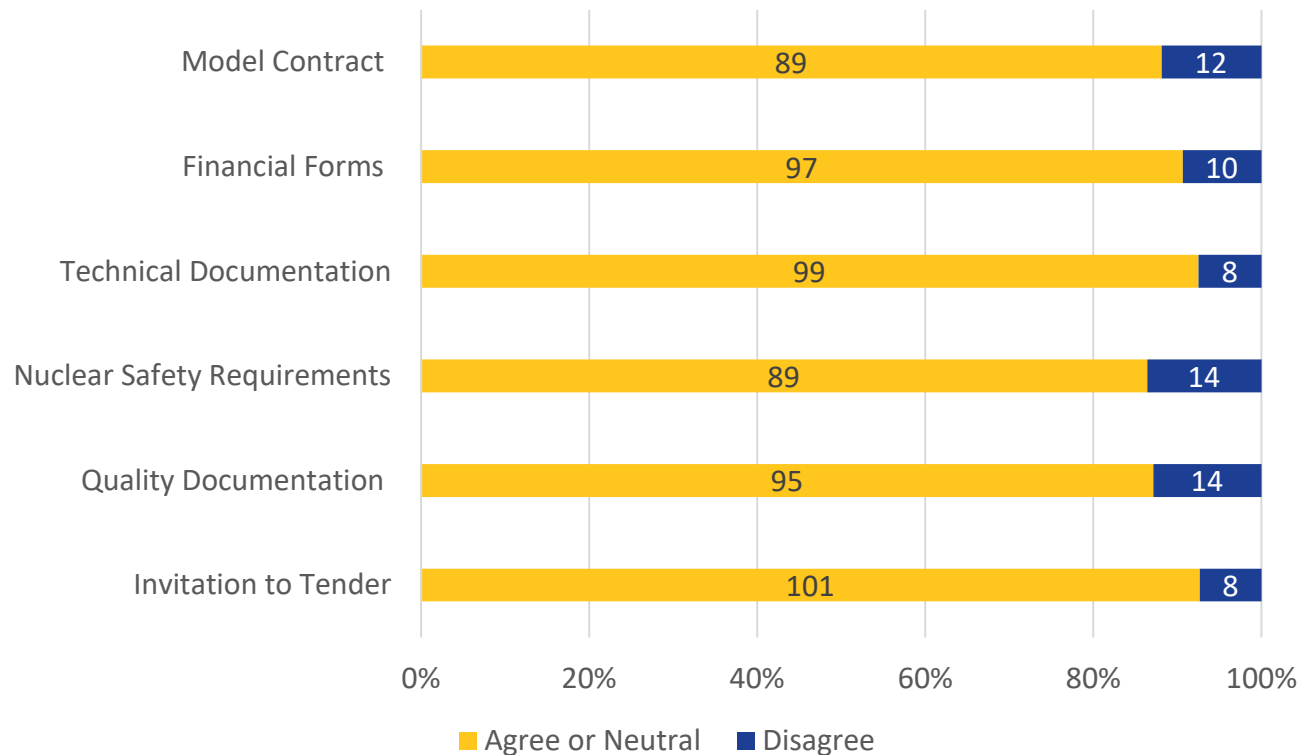
Ease of Tender Preparation



Effort of Tender Preparation is Adequate

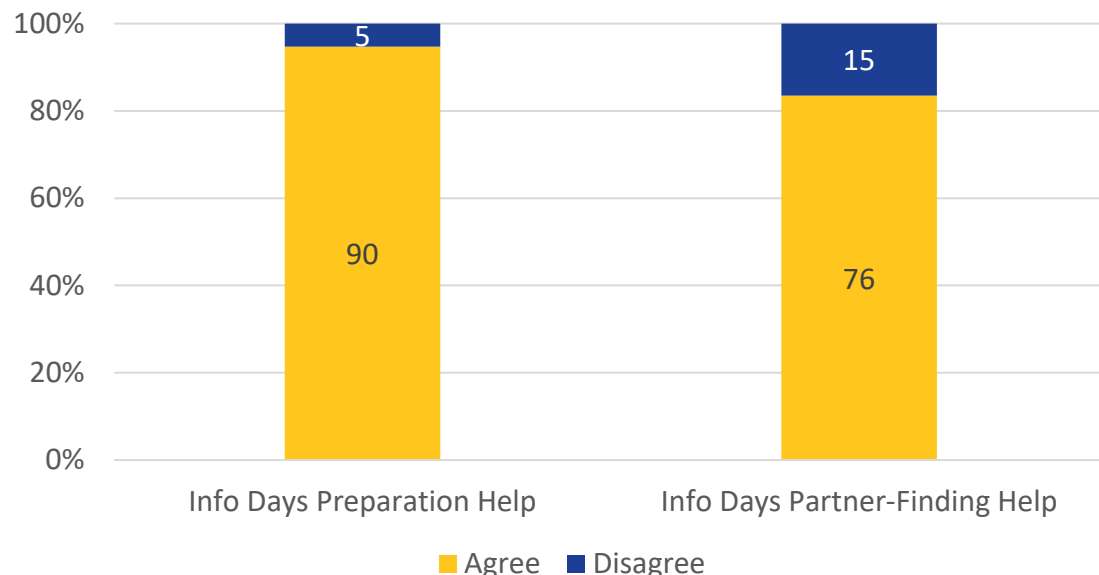


Key Document Instructions are Clear



Positive feedback, with areas for further improvement in Quality documents, Nuclear Safety Requirements & Model Contract

Pre-Submission Communication

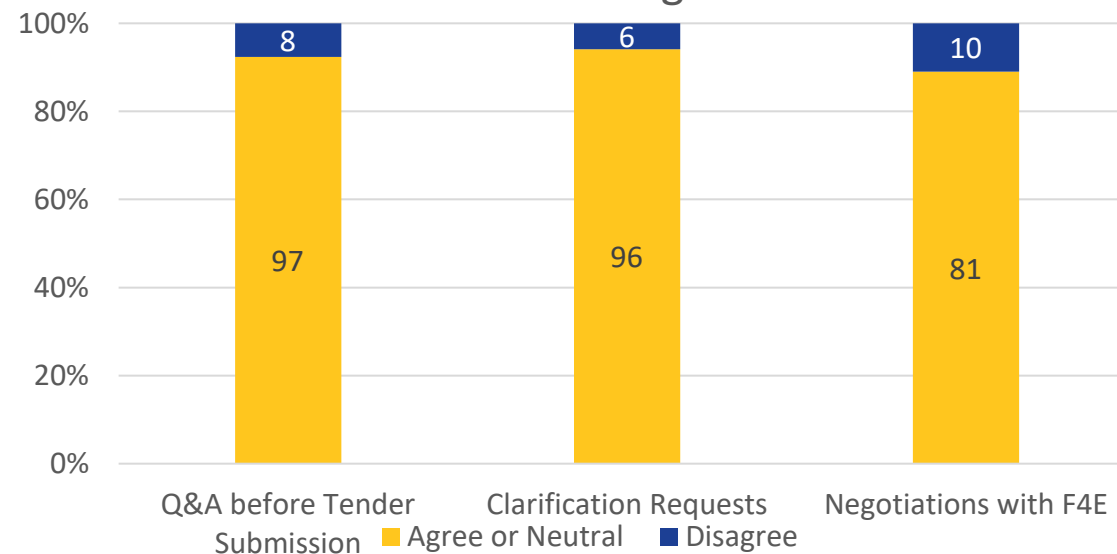


Information Days are effective, but could improve in helping SME find partners

PROPOSED ACTION

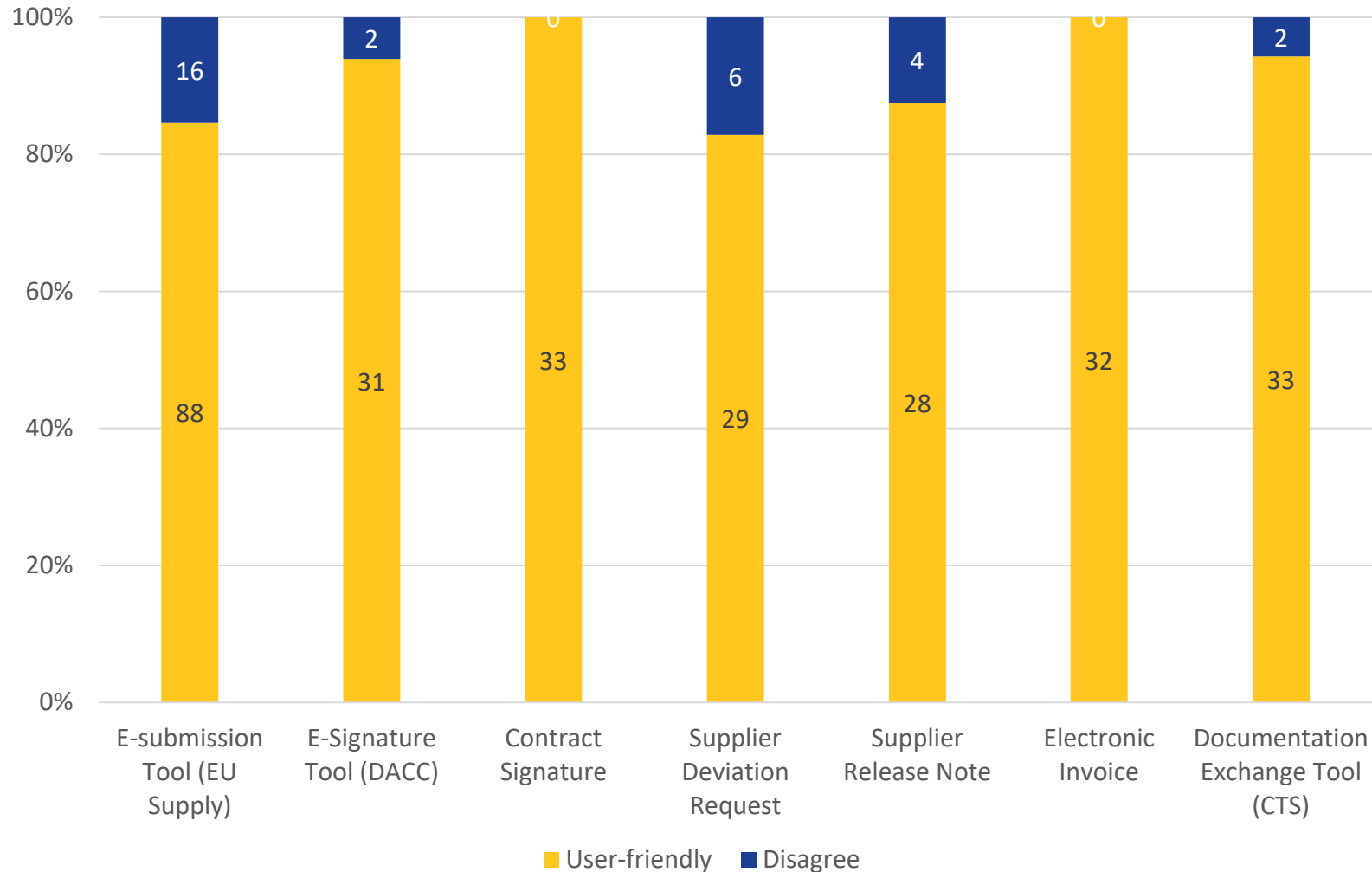
Establish more **networking opportunities** and promote **F4E partnership tool**

Evaluation & Negotiation



Effort spent on responding to clarifications & preparing/conducting negotiations is adequate and acceptable

Tools Usability

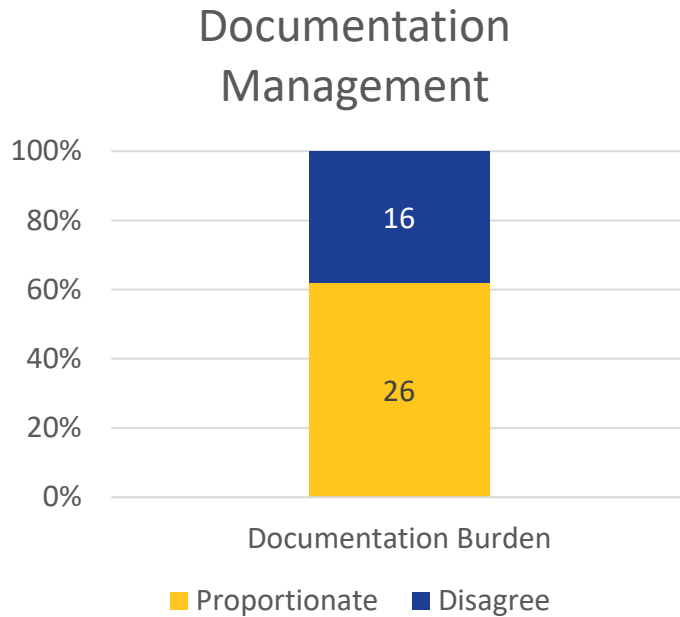


Positive feedback for Contract Signature & E-Invoicing

PROPOSED ACTION

Improve **clarity of instructions** during tender phase and availability of **Helpdesk**

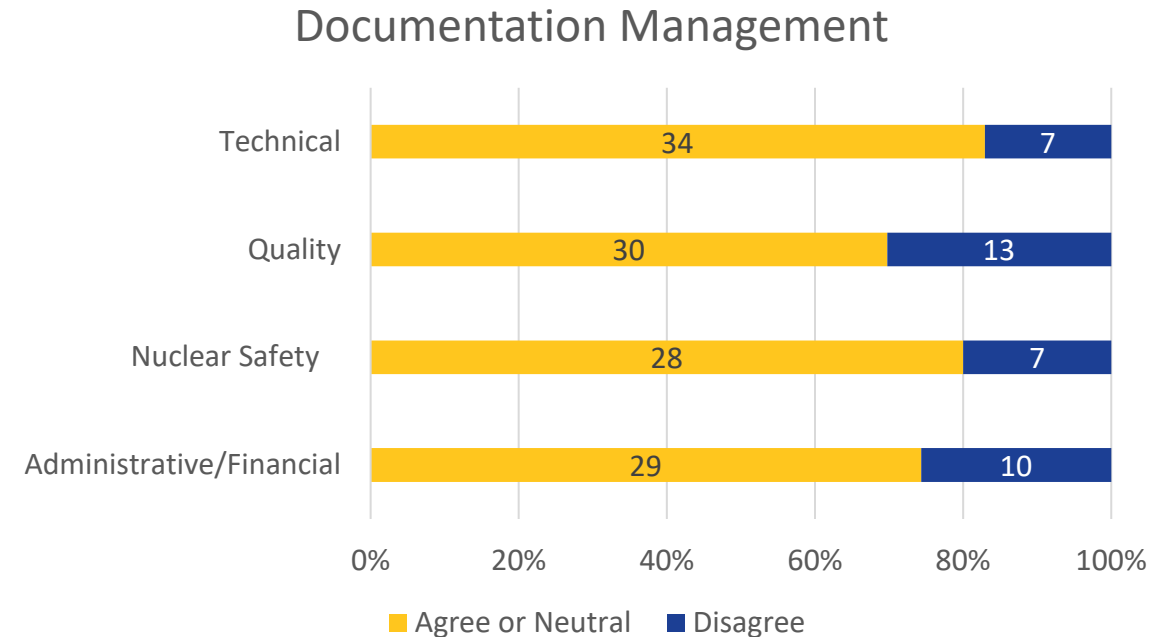
The **Deviation and Release Note** processes may benefit from usability improvements



SMEs raise concerns about documentation burden being disproportionate

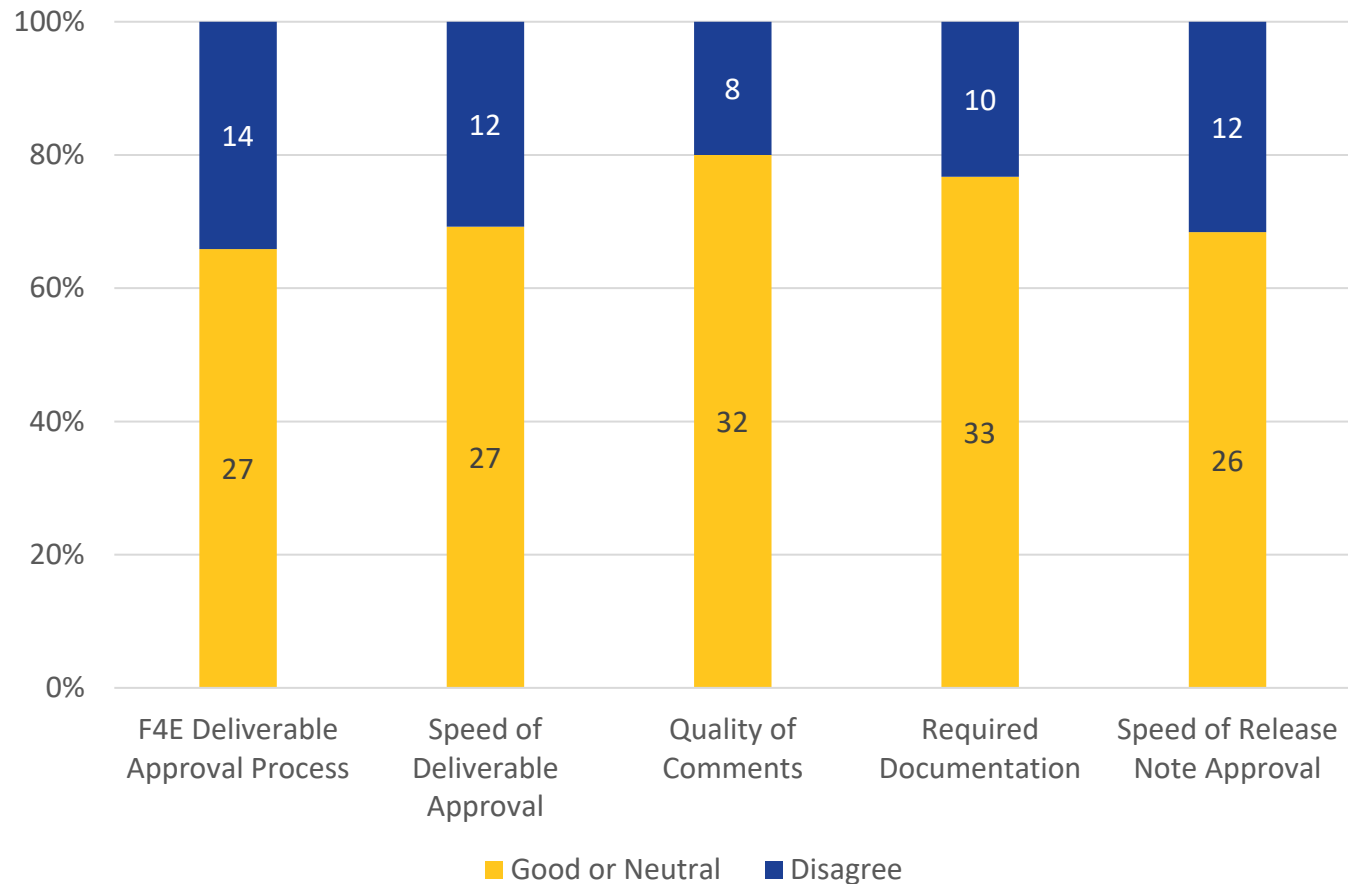
PROPOSED ACTION

Investigate possibilities to **streamline processes** and **provide support to reduce administrative load** on SME with focus on Quality & Admin/Financial documentation



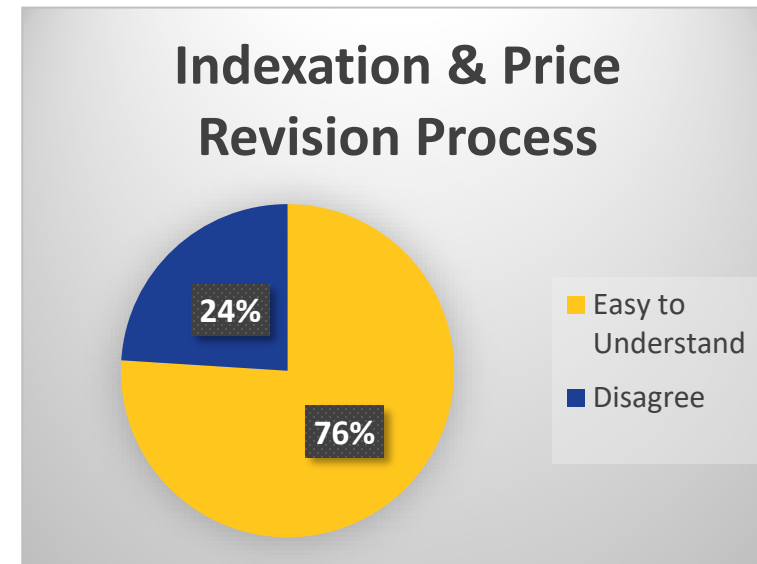
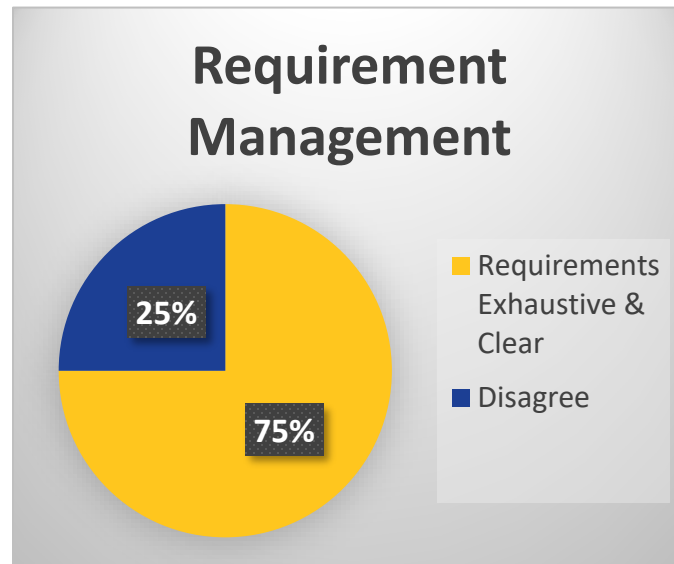


Deliverable Approval Process Fluidity



1/3 of SMEs raise concerns about F4E's deliverable acceptance process with focus on improving approval speed and reduction of required documentation

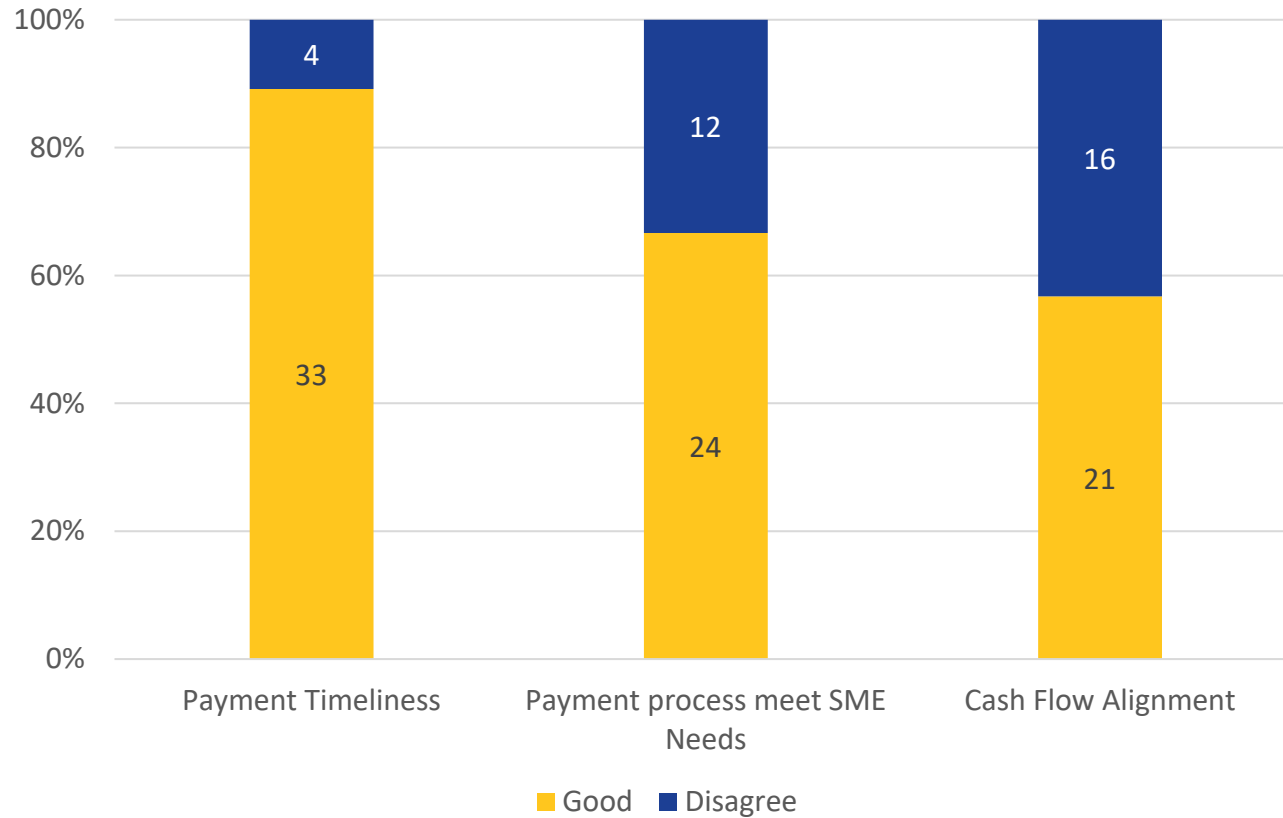
PROPOSED ACTION
Clarify expectations and identify ways to speed up the approval process



Improve requirement communication through **tiered documentation** (High-Level Summaries with visual aids and templates and appendices for in-depth information)

Improve guidance on price revision process; potentially through **simplified documentation** or **SME training**

Payment Process



Satisfaction with payment timing

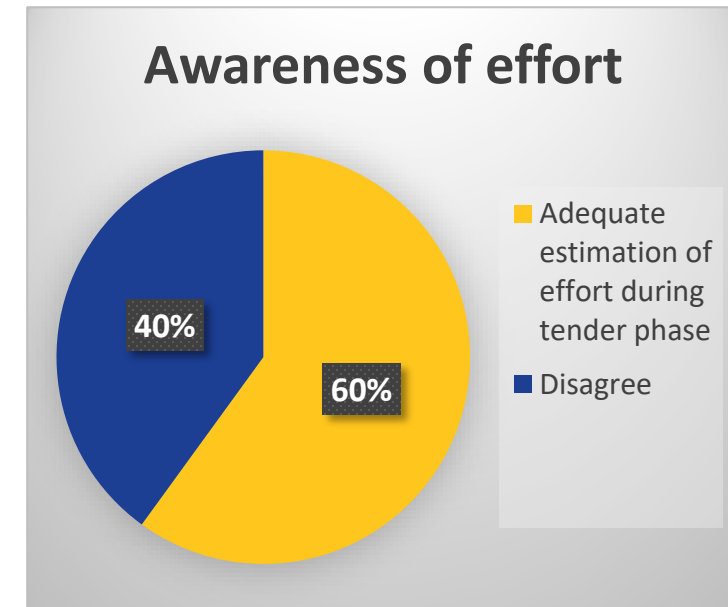
PROPOSED ACTION

Raise awareness within F4E to improve **payment process** and **alignment of SME cash flow**



Positive feedback from majority of SME's about their relationship with F4E

40% of SMEs underestimate the administrative effort in their tender and financial proposal



57% - Encourage collaboration between **large companies & SMEs**, e.g. create rules or incentives to encourage SMEs as subcontractors

37% - Make the **administrative burden** during **tendering proportionate to the complexity or value** of the resulting contract

33% - **Organize a regular SME day** to promote SME contracts, foster communication and share lessons learned, best practices on procurement between SMEs and organizations involved in fusion projects

32% - **Enlarge dissemination of F4E business opportunities** and linked organization's (e.g. ITER IO, DONES, Big Science Marketplace)

30% - Ensure the **right level of technical requirements** (NS, QA) in procurement documents in line with the scope of the contract

61% - **Simplify and improve deliverable process** with the aim to increase speed

52% - Make the **administrative burden** during contract execution proportionate to the complexity or value of the contract

39% - Organize regular **SME days** to **promote SME contracts, foster communication** and **share lessons learned, best practices** on contractual performance between SMEs and organizations involved in fusion projects

37% - Set a **guaranteed level of activity for SMEs** in the scope of framework contracts



- * Information Days
 - * Clarity of Invitation to Tender & technical documentation (Annex B)
 - * IT Tools – electronic contract signature, invoice e-submission, Documentation Exchange Tool (CTS)
 - * Relationship during contract execution
 - * Payment execution
- * Effort spent to prepare tender – administrative documents
 - * Administrative burden during contract execution – quality documentation
 - * Underestimation of contractual documentation effort by tenderer
 - * Deliverable approval during contract execution
 - * Contractual documentation effort

01

Strong SME engagement and a general positive perception toward F4E's communication and opportunities

02

Identified Areas where improvement is needed to reach those who feel disconnected

03

F4E organized its first SME Day to share lessons learned and listen to their ideas for improvement



Action cluster 1 - Encourage collaboration between large companies & SMEs - e.g. create rules/incentives to encourage SMEs as subcontractor



Action cluster 2 - Make administrative burden during tendering proportionate to complexity or value of resulting contract



Action cluster 3: Organize a regular SME day to promote SME contracts, foster communication and share lessons learned, best practices on procurement between SMEs and organizations involved in fusion projects



Action cluster 4: Develop simplification of deliverable approval process



First SME Day:

- good participation, i.e. ~50+ SME representatives in person in BCN and ~80+ SME representatives remotely
- Positive feedback received from many participants

Objectives reached:

- SME shared experiences and lessons learned
- F4E transferred knowledge to SMEs
- F4E shared information on upcoming business opportunities
- F4E gave networking opportunities during coffee breaks and lunch
- Fruitful discussions during *Participatory Leadership Workshop* and valuable insights on possible actions harvested



General F4E Measures in place



- ✓ **Pre-financing** payment at **20-30%** of contract price (with guarantee >300k EUR)
- ✓ Cash simulation before launch & **negotiable payment plan**
- ✓ **Relaxed financial thresholds** implemented (since July 2021)

2021	Noteworthy Values		Viability Standards		
	Turnover	Cash Flow	Liquidity	Solvency	Gross Profit
< 10 M€	YES	NO	NO	NO	NO
10 M€ ≤ x < 20 M€ Service	YES	YES	NO	NO	NO
10 M€ ≤ x < 20 M€ Supply/Work	YES	YES	NO	NO	NO
≥ 20 M€	YES	YES	Ad hoc	Ad hoc	Ad hoc

- ✓ **Suspension of clearing** of pre-financing (with x months, until final payment) – COVID measure
- ✓ **Adaptation of contractual payment schedule** through introduction of additional and/or intermediate milestones/interim payments



Short Term Actions

Review F4E pre-financing practices

Make Competitive Procedure with Negotiation default procedure for procedures attractive for SMEs

Organize default debriefing meetings for unsuccessful SMEs

Make Info Days default prior to procurement launch

Promote Partnership Tool through ILOs

Investigate financial guarantee options for SMEs (EISMEA & EEN)

Medium Term Actions

Draft SME Policy

Prepare SME Channel

Mark work packages/contracts in Work programme for SMEs

Perform root-cause analysis and simplify deliverable approval process

Organize annual SME Day

Long Term Actions

Establish and maintain SME Database

Explore reimbursement of tender preparation effort to unsuccessful SMEs

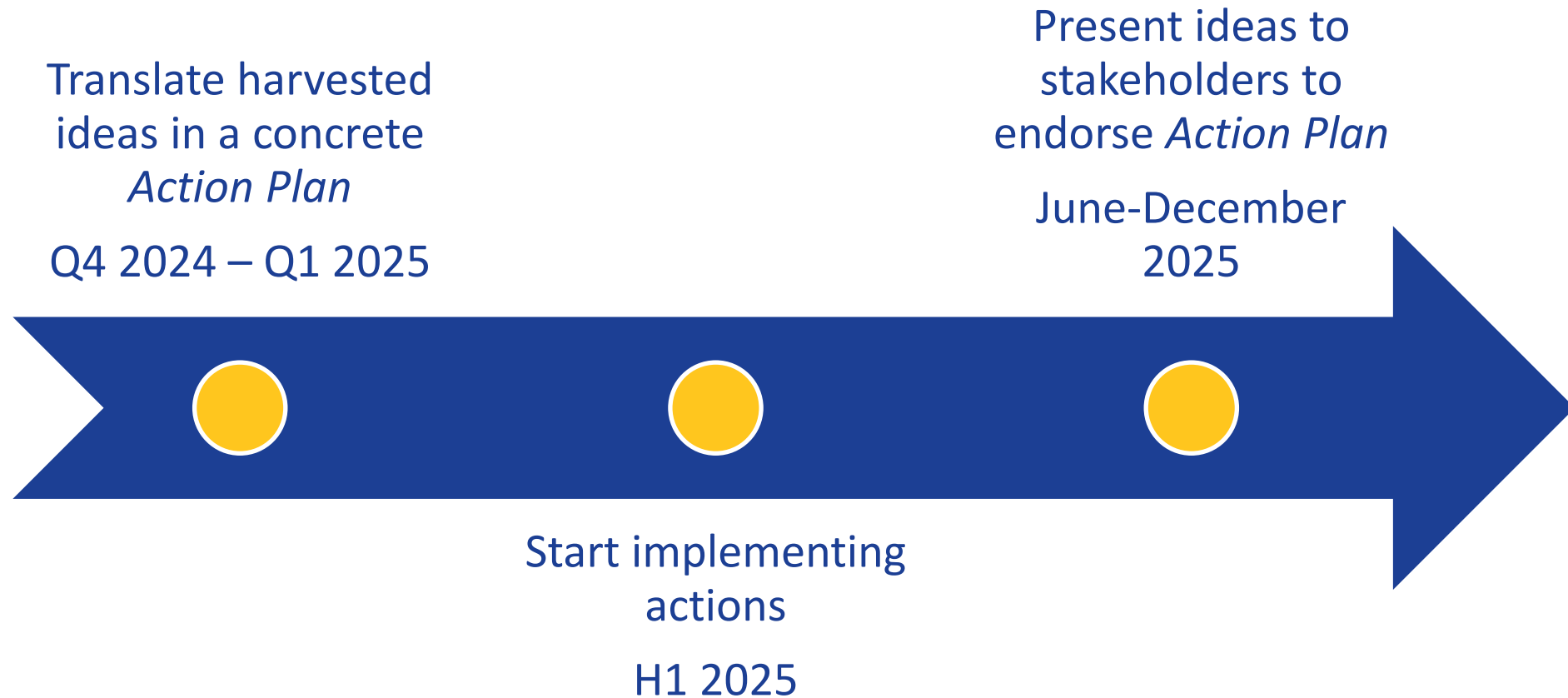
Explore possibility to reward prime contractors for engaging SMEs

Simplify technical documentation by reducing cross-references to applicable documents

Investigate possibility to directly pay SME subcontractor

Investigate possibility to establish SME office

Next Steps Action Plan Implementation





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