

To enable all ITEA stakeholders to get the most out of the ITEA programme and to promote the ITEA programme in the best way, several operational actions are carried out by ITEA. In this section, the details about the main operations achieved in 2022 are reported.

4.1 ITEA customer orientation

Alongside its customer-oriented events, ITEA has set up two Advisory Boards: the Smart City Advisory Board (SCAB), set up in 2019 and extended to 10 members in 2022, and the Cyber Security Advisory Board (CySAB), set up in 2021 and consisting of 11 members. Two meetings per Advisory Board took place in 2022; the first meeting focused on sharing challenges and the second on connecting with the related RD&I projects of ITEA. A SCAB challenge report and a CySAB challenge report have been issued as a result of the first meetings and presented as input for the ITEA Project Outline (PO) Preparation Days 2022. In addition, we have created the Smart City Advisory Board and Cyber Security Advisory Board online portals to create a continuous dialogue between customers, challenges and the ITEA Community.

4.2 ITFA events

One of the other main operations was the organisation of events and attendance at them. In 2022, we (co)organised the following events.

On 7 April 2022, ITEA - in collaboration with NXP - organised the online ITEA Smart Systems Engineering workshop to assess the research challenges and opportunities of the latest developments and innovations in Smart Systems Engineering. Over 120 researchers, (future) project leaders and developers from several disciplines registered for the workshop. The objectives of the workshop were to increase the understanding of smart systems engineering problems, to benefit from the experience of ITEA project partners and to identify important challenges that could lead to new research projects.

This one-day workshop was structured in three interactive sessions on 1) the complexity of applications, 2) standardisation and 3) Al application development – DataOps versus DevOps. Experts from Almende, Arlerion Technologies, Bosch, Daimler, Fraunhofer, Nokia, NXP, Philips, Siemens, Software AG, the University of Helsinki and Virtual Vehicle Research shared their insights and the online attendees had the opportunity to join the discussion.

The summaries and outcomes of the discussions of each session are presented in an ITEA Smart Systems Engineering workshop report intended to signal the areas of smart systems engineering where breakthroughs are needed and research efforts could be focused.

4.2.2 Al Call 2021 - Project leader briefing webinar (2 March 2022)

In order to support project leaders and technical contacts of the labelled Al Call 2021 projects in the smooth start of their projects, the ITEA Office organised a Project leader briefing webinar on 30 March. During this webinar, participants got an introduction to ITEA and its processes, including tips and tricks for a smooth project start. Next, they learned how to prepare a Change Request and how to prepare a project progress report or project review. At the end of the session, there was also time for a Q&A.

4.2.3 ITEA Call 2021 - Project leader briefing webinar (30 March 2022)

A similar briefing session was organised for the project leaders and technical contacts of the labelled ITEA Call 2021. This webinar was well-attended by 80 of our (new) Community members.

4.2.4 ITEA Smart Health customer workshop (15-16 June 2022)



After two online editions, ITEA organised its eighth international customer workshop in Eindhoven on 15 and 16 June 2022 and focused this year on Smart Health, an important challenge in ITEA. The workshop was co-organised with Atos, Barco, Esri Canada, NXP

and Philips and, luckily, it was again possible to organise it as a physical workshop with some of the customers joining remotely. The event gathered 16 end-users of Smart Health solutions representing the points of view of the customers and around 20 solutions providers – large companies, SMEs and research organisations – of the Smart Health sector.

The workshop focused on:

- > Telehealth, remote interaction with patients/healthcare staff, patient monitoring at home, virtual care:

 How to benefit from new means of communication, sensors and virtual reality to interact with patients remotely?

 What are the challenges of delivering good care without the patient having to come to the hospital?
- > Hospital optimisation capacity monitoring, resource management, more patient-centric:
 What are the needs in hospitals and how can IT contribute to increasing the quality and productivity of caregivers at the hospital?
- > Systems for digital pathology:
 - How can pathology be improved thanks to new IT systems? In which areas could these technologies (data processing, robotics, advanced reality) better support current human activities? How to introduce these technologies to the benefit of patients and medical staff?
- > Moving from care to prevention and more personalised healthcare:
 How can personal data (genomics, sensor data) help to prevent potential diseases and how to adapt care to each individual? What are the current barriers and challenges when moving in this direction?
- > Data exploitation (with a good balance of ethical and privacy concerns):

 How to exploit the new data sources related to healthcare? What are the opportunities (for care, for research and for economical optimisation) and the challenges? How to limit the security and privacy risks?

After all of these sessions, the workshop produced 15 interesting ideas that may lead to future ITEA RD&I projects. 12 Smart Health projects were submitted in the Project idea tool for the ITEA Project Outline Preparation Days 2022. In the end, seven Smart Health proposals were submitted as Project Outlines for ITEA Call 2022, of which six have been invited to submit a Full Project Proposal.

In addition to the emergence of these solid ideas and some collaborations, the workshop has helped to progress towards a shared vision of the research priorities to address the important transformation underway in the Smart Health sector. The participants have developed new connections that will be important as no single player can tackle the current challenges alone. In conclusion, this workshop was very valuable in fostering ITEA activity in the healthcare sector.



ITEA Smart Health customer workshop participants

4.2.5 ITEA PO Preparation Days 2022 - ITEA Call 2022 (13-14 September 2022)

ITEA Call 2022 for project proposals was launched on 13 September in conjunction with the ITEA Project Outline (PO) Preparation Days, which were held on 13 and 14 September in Helsinki. We were happy to finally get back together

again with the ITEA Community after two years of meeting online. To celebrate this occasion, the PO Days were followed by an ITEA Family reunion on 14 and 15 September.

Building new projects and partnerships can best be done in a physical environment. This is what we have learned over the past two years. Nevertheless, the online events that were organised instead brought us some new insights as well. The ITEA PO Days 2022 event therefore combined the best practices of both online and physical events of the past in order for participants to get the most out of their event participation.



The ITEA PO Days are always fully-packed days. To prepare participants well in advance and to optimise the time for networking and consortium building during the PO Days, an online preparation session, 11 online country information sessions and an online project idea pitch session were organised prior to the physical event in Helsinki. The online Project idea tool and Partner search enabled the participants to explore the submitted project ideas and get in touch with potential partners in advance.

Alongside the plenary sessions in Helsinki, there was plenty of time for interaction during the project idea poster session and the many lively brainstorming and workgroup sessions. The group discussions resulted in 17 plenary project idea presentations. This year, a record number of Public Authorities attended the event and combined their online Country information session with a poster in a dedicated poster area at the event, informing participants about national priorities, eligibility criteria and funding outlooks.

This year, around 310 participants from 21 different countries participated in the online PO Days sessions and 229 joined the PO Days event in Helsinki. The Netherlands, Türkiye and Finland were the top three countries in terms of participation, closely followed by Germany. Canada was also again present with a large delegation in Helsinki.

With 52% returning participants and 48% newcomers, the ITEA PO Days confirm that the ITEA Community keeps growing and attracting new members while retaining the experienced project partners that can guide them.

ITEA PO Days 2022 in numbers

- > 310 total participants (online and/or physically present)
- > 229 participants from 18 countries physically present in Helsinki
- > 48 project ideas uploaded in the Project idea tool before the event
- > 34 project ideas presented during the online project pitch session
- > 32 project ideas presented in the poster session
- > 17 final plenary project idea presentations

The project ideas were clustered by eight societal challenges, i.e. Smart cities, Smart communities, Smart energy, Smart industry, Smart health, Smart mobility, Smart engineering and Safety and Security. Although most challenges were well-covered, the number of Smart health project ideas was very high (12), showing the impact again of this year's ITEA Customer workshop on this topic. Like previous years, Smart engineering (7) and Smart industry (7) remain important topics for the ITEA Community, equalled by the number of Safety and Security (7) and Smart cities (6) project ideas.

ITEA Family reunion

In the afternoon of 14 September and the morning of 15 September, we celebrated the ITEA Community getting back together again during the ITEA Family reunion. The programme consisted of inspiring sessions with SME Stars and well-respected ITEA Family members, a keynote speech ('Should innovation become maintenance?') by radiologist M.D. Sietske Rozie and the ITEA Awards of Excellence ceremony, combined with the opportunity to reunite for drinks, a dinner and a long-awaited chance to socialise.

ITEA Awards of Excellence

On 15 September, during the 2022 ITEA Awards of Excellence ceremony in Helsinki, four projects were awarded for their impressive results with great benefits for industry and society: CyberFactory#1 (Award for Business Impact), IMPACT (Award for Innovation), PANORAMA (Award for Standardisation) and OPTIMUM (Award for Exceptional Excellence for outstanding results in all three categories).

Hosted by ITEA Vice-chairman Jean-François Lavignon, this ITEA Awards of Excellence ceremony not only presented the results of these projects but also provided a great opportunity to learn from the best as the project leaders and mentors shared what it takes to create an award-winning project and what it brings.

We are very proud that such impressive results were achieved within the ITEA programme, making the world a better, safer and healthier place.

PO submission

After the ITEA PO Days, project consortia had two months to find the right partners and submit a Project Outline. By the deadline of 15 November, 32 Project Outlines had been submitted with a total effort of 3180 Person Years. After evaluation by our technical expert and the Public Authorities of the involved countries, 24 consortia were invited to submit their Full Project Proposal (FPP). The submission deadline for the FPPs is 13 February 2023.

3500 3000 -9% 2500 -25% 2000 3180 32 1500 2904 24 1000 500 0 PO submitted Invited for FPP Number of projects Person Years

ITEA Call 2022 evolution (so far)

Figure 5: ITEA Call 2022 evolution (so far).

A detailed description of the ITEA Call progress and figures can be found in section **3.2 ITEA Calls progress** of this report.

4.2.6 Smart City Business Forum and Smart City Advisory Board meeting (14 November 2022)

On 14 November, ITEA again took part in the Smart City Business Forum organised by Cleantech Scandinavia and the Netherlands Enterprise Agency (RVO) in Barcelona. The Smart City Business Forum brought together around 400 decision-makers to discuss key challenges for the smart and climate-neutral city and focused on the private sector's role in achieving cities' smart and climate-neutrality targets and creating opportunities for public and private actors to connect, build partnerships and take steps in accelerating urban transformation. Zeynep Sarılar and Jan Jonker both took part as experts in two workshops.

Following the forum, the ITEA Smart City Advisory Board meeting took place in a hybrid manner with several participants gathering in Barcelona and several connecting online. In total, 12 city representatives and nine ITEA Community members were present. After an introduction round, four ITEA project partners shared their Smart City-related ITEA project outcomes and the city of the Hague presented their Living Lab Scheveningen. At the end, the ITEA Customer workshop concept was introduced.

It was good to meet again and connect the city representatives and the ITEA Community, and the first exchanges to further explore collaboration are being organised.

4.2.7 Cyber Security Advisory Board meeting (21 November 2022)

On 21 November, the Cyber Security Advisory Board gathered for the fourth time. The CySAB members were invited to discover the (expected) outcomes of five ongoing ITEA projects and to be informed of four new Cyber Security-related project proposals in the making for ITEA Call 2022. Finally, the first draft of the Cyber Security Advisory Board portal was introduced and some first feedback was discussed.

4.2.8 Eureka Clusters Sustainability Call 2022 - project leader briefing webinar (1 December 2022)

On 1 December, 25 project leaders and technical contacts from the labelled Eureka Clusters Sustainability Call 2022 projects with ITEA as the main Cluster joined a 1.5-hour informative webinar that was organised for them in order to support them with a smooth project start. For those who still had open questions after the webinar, one-on-one online meetings were set up with the ITEA Programme Coordinators to address project-specific issues.

4.2.9 External events and activities to promote ITEA

In addition to the ITEA and ECP events, the ITEA Presidium and the ITEA Office representatives also attended various additional external events and meetings to promote ITEA. Highlights included:

- > Applied AI Conference AAIC (24-25 May 2022)
 On 24 & 25 May, the Applied AI Conference took place online, focusing on the real-world impact of AI in this year's topics of sales and marketing. FFG, ITEA and Xecs were part of this conference and organised an online workshop to share more information about the opportunities to launch applied artificial intelligence projects under Eureka, the timeline of future Calls for projects and the funding conditions. In addition, Martin Treiber from IKANGAI, an experienced Eureka project leader (e.g. in the ITEA project SOLOMON), shared his experience with the audience.
- Meeting with DLR (30 September 2022)
 On 30 September, we visited the DLR Project Management Agency office to share experiences regarding the ITEA
 PO Days and to understand national priorities in order to see how we could improve collaboration between German industry and German Public Authorities.
- Meeting with Vinnova (2 December 2022)
 On 2 December, a meeting took place in Stockholm between the ITEA Presidium and Vinnova back-to-back with the ITEA Board meeting of 1 December. During the meetings, ITEA was introduced to several contacts within Vinnova, including Susanne Liljeblad, the new ITEA liaison, and Frederic Pillot, responsible for strategy regarding the Eureka Clusters. Furthermore, there was an introduction to AI Sweden and discussion took place on collaboration opportunities between the three organisations. Several activities have been agreed as follow-ups for collaboration; in the short term, this includes the organisation of an ITEA session during the online Sweden Innovation Days that will take place on 21-23 March 2023.



4.3 ITEA stakeholder satisfaction surveys

Together, the different stakeholders of ITEA create the strong ITEA Community that forms the central point of the ITEA programme. As quality is of paramount importance to ITEA, the opinions, ideas and experiences of the ITEA Community are highly valued as they allow ITEA to keep improving. To collect all of this information, ITEA conducts several surveys every year. Scores are measured on a scale of 5, where 1=very poor, 2=poor, 3=good, 4=very good and 5=excellent or an equivalent of these values.

Results of the Project leader and technical contact satisfaction survey

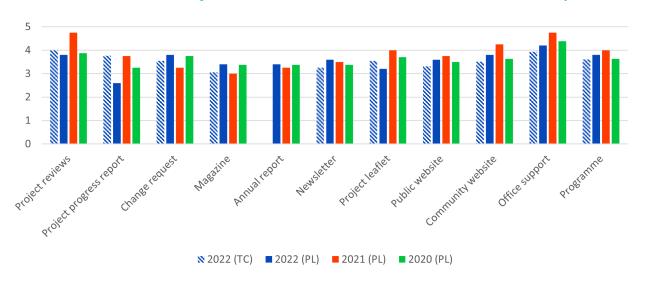


Figure 6: Results of the project leader (PL) satisfaction surveys, 2022 vs 2021 and 2021. From 2022 onwards, the results of the technical contact (TC) satisfaction survey are also included.

- > Project leader and technical contact satisfaction survey, sent to project leaders and technical contacts at the completion of a project, covering all of the different processes of a project and the different elements of the ITEA programme. The 2022 results per topic are shown in comparison with 2021 and 2020 in the figure above. Most processes are well-appreciated; only the Project Progress Report (PPR) process received a low satisfaction score from the project leaders. A separate and more extended PPR survey has been set up to get more feedback on the issues and more suggestions for improvement. Several improvements are already in place and more will be implemented in 2023.
- > PO submission survey (ITEA Call 2022), sent to all Project Outline (PO) leaders, technical contacts and country coordinators, covering all topics of the PO stage. Overall, the PO submission process was well-appreciated, as usual. PO leaders gave a score of 3.69. Technical contacts and others gave a score of 3.74. The (last-minute) coordination between (new) partners seemed to be the biggest challenge for both PO leaders and technical contacts. For next year, we will implement a full online PO submission process and review the required steps and information.
- > FPP submission survey (ITEA Call 2021), sent to all Full Project Proposal (FPP) leaders, technical contacts, work package leaders and country coordinators, covering all topics of the FPP stage. The FPP submission process was well-appreciated with another very high score of 3.82 from FPP leaders and 3.91 from the technical contacts. Alongside a lot of positive feedback, a few new PLs and TCs indicated that the portal was complex. For future Calls, the submission process will take place fully online, which will avoid confusion and possible duplications.

- > ITEA event surveys, sent to all participants of an event:
 - ITEA Smart Systems Engineering workshop, sent to all registrants of the online session. Although it is more challenging with online events, the workshop received a good evaluation score of 3.5 and 83% would attend a similar workshop again, in which topics like Al methods, existing open-source software and energy-aware software could be relevant topics according to the respondents. More information about this workshop can be found in Section 4.2.1.
 - ITEA Smart Health customer workshop. The 2022 ITEA Smart Health customer workshop was a big success, with an evaluation score of 4.13, and all respondents see opportunities for their organisation thanks to the workshop. In the future, the workshop can still be improved by clarifying the problem statements better and strengthening the link between the (stories of the) panellists. In the end, seven Smart Health POs were submitted in ITEA Call 2022, of which six have been invited to submit their FPP by 13 February. More information can be found in Section 4.2.4.
 - ITEA PO Preparation Days 2022, sent to all PO Days participants who attended the event physically. After two online editions, we were finally able to get back together again for the PO Days 2022. It was already evident from last year's evaluations that there was a strong need to have the PO Days physically again. This has been confirmed by the survey; this year's PO Days were rated with a score of 4.0 compared to 3.4 in 2021.
 As it was the first time that we had an online pitch session prior to the event, the participants were also asked if they appreciated this; 59% of the respondents indicated that it was better this way than having on-site pitch sessions during the PO Days. We will therefore continue to do so in 2023.
 More information about this event can be found in Section 4.2.5.

The results of each survey are discussed within the ITEA Office and issues are resolved or further investigated. In this digital era in which you may receive surveys for (too) many interactions in which you are involved, ITEA promises that this is not only an administrative step but truly a way to make your voice heard in order to further improve the ITEA programme and facilitate your participation in successful projects.

4.4 ITEA media coverage

In 2022, ITEA and its projects were mentioned several times on external websites and in press publications. Thanks to the collaboration with the project leaders and partners of the award-winning projects CyberFactory#1, IMPACT, PANORAMA and OPTIMUM, the ITEA Awards of Excellence were well-covered. Improvements still have to be made as no national newspaper covered a news item on ITEA (projects).

In total, there were 34 publications published by 59 different sources.

We have excluded event announcements for the Eureka events, the ITEA customer workshop and the PO Days from this overview. The same goes for news messages about these events on our partner websites.

A full coverage overview can be found at: https://itea4.org/media-coverage.html