# Report on the key findings from the Theme Development Workshop "AI in the Public Sector"

– November 2021 –

## Executive Summary

The first Joint Theme Development Workshop (TDW) co-organised by CLAIRE, TAILOR and VISION on "AI in the Public Sector" took place on the 7th and 9th September 2021 and was aimed to develop and identify the most promising and emerging Artificial Intelligence (AI) topics in the public sector. At this two-day workshop, experts from public and governmental institutions, industry and academia jointly developed initial input for the European AI research and innovation roadmap. Inspired by introductory speeches and presentations from selected experts, the participants actively discussed a wide variety of topics during the breakout sessions and shared their main results in the subsequent plenary presentations. Furthermore, some initial ideas for follow-up activities and further collaborations have been identified.

This report contains a summary of the results from the Theme Development Workshop "AI in the Public Sector", and complements the initial report, which has been available since September 2021. To make the results available to a broader audience and the European AI community in particular, this report will be published via the organiser's websites.

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# Introduction

In September 2020, four new AI networks were established by the European Commission via the call "Towards a vibrant European network of AI excellence centres" (ICT-48-2020). The aim of these networks is to foster the collaboration between the best research teams in Europe, and to address the major scientific and technological challenges in the field of AI. These four networks are coordinated and supported by the VISION project to foster activities that reach critical mass and enable the creation of a world-class AI ecosystem in Europe.

One of these activities are so-called Theme Development Workshops (TDWs), an innovative format bringing together key players from industry, academia and politics to jointly identify the key AI research topics and challenges in a certain area or for a specific industry sector. In December 2020, an agreement was made between the respective coordinators and leadership teams of TAILOR, VISION, HumanE-AI-Net and CLAIRE to plan and execute a series of Joint (co-organised) Theme Development Workshops, starting in 2021. This report is a result of the first Joint TDW organised and executed within the framework of this series of workshops.

# Keynotes and introductory presentations

The TDW “AI in the Public Sector” was opened by the Co-Chairs Silke Balzert-Walter (DFKI) and Freek Bomhof (TNO) on behalf of the Organising Committee (OC), which included further representatives from CBS, CLAIRE, Engineering Ingegneria Informatica, FBK and Intellera Consulting. They outlined the objectives of the TDW as well as the agenda and programme for the two days, and introduced the invited keynote speakers to the participants.

The inspiring keynotes on both workshop days were provided by high-level experts from several European countries. Their introductory presentations served as a basis for the discussions about the opportunities and risks of AI usage in the public sector, and provided some interesting examples of application areas. Accordingly, these presentations stimulated the expert discussions in the following breakout sessions.

**Introductory presentations 7th September 2021:**
**Daniel Sarasa Funes, Rasmus Haus & Christine Kvist**

**Daniel Sarasa Funes** in his role as the **Director of Fundación Zaragoza Cuidad del Conocimiento (Spain)** stressed the importance of so-called urban labs, which can serve as an important connection between different stakeholders and lower the barrier of technology adoption by citizens. These labs can thus also help to overcome the mistrust

created when a new technology like AI appears. The ‘Etopia Centro de Arte y Tecnología’ for example, a flagship urban lab in Zaragoza founded by the Spanish government, focuses on experimentation, participation and cooperation in the development and testing of sustainable


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innovation and transformation processes in cities. In his keynote, Daniel Sarasa Funes also mentioned the example of 'Toronto tomorrow', a project by Google/Sidewalk Labs, and explained why the project has failed, which he attributed to various factors such as the resistance of public servants. He concluded his presentation by stressing the importance of accountability for AI in the public sector, because municipalities are the institutions closest to citizens.

**Rasmus Hauch and Christine Kvist, CTO and Public Sector Lead of 2021.AI (Denmark),** gave an interesting keynote explaining the role of startups and scaleups in supporting the public sector. They summarised their focus on responsible leadership, empowering transparency while respecting privacy and compliance by design, outlining that these topics are very important in dealing with AI. They also emphasized further aspects like AI governance and AI frameworks in assuring compliance with external regulations, internal codes-of-conduct and other best practices. Furthermore, they argued that AI platforms are very beneficial in addressing technical requirements and in order to provide a kind of AI asset store. They also mentioned some interesting activities and initiatives in Denmark, and provided an overview of potential use cases in the public sector like chatbot assistance, optimized traffic routing or AI assisted tax calculations. As the biggest challenges for AI projects, they identified legal barriers and regulatory requirements as well as issues around the quantity and quality of data. In addition to these barriers, Rasmus Hauch and Christine Kvist stressed the need to have more profound AI competencies and skills within the municipalities, so education in AI will play an important role in governmental and public institutions in the future.

## Welcome note and Introductory presentations 9th September 2021: Ammar Alkassar, Andrea Renda and Marieke van Putten

**Ammar Alkassar in his role as the State Commissioner for strategy as well as CDO & CIO at the Saarland State Government (Germany)** delivered a welcoming message to the participants of the second workshop day and emphasized the importance of AI for governmental institutions. In particular, he referenced the ongoing digitisation of public services, and pointed out the necessity for AI to be trustworthy in order to generate acceptance of the technology among public administrations and citizens.

**Andrea Renda, Senior Research Fellow and Head of Governance, Innovation & Digital at the Centre for European Policy Studies (CEPS, Belgium)** introduced in his keynote "Trustworthy AI: an imperative for government" the work of the Independent High-Level Expert Group on Artificial Intelligence (HLEG), that has designed the Ethics Guidelines for Trustworthy AI. In these guidelines, they have defined that Trustworthy AI

should rest on three pillars – lawful AI, ethical AI and robust A; that Trustworthy AI systems should fulfill the following key ethical principles: respect for human autonomy, prevention of harm, fairness and explicability; and last but not least, the HLEG identified seven key requirements based on these four principles: human agency and oversight, technical


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robustness, safety, privacy, data governance, transparency, diversity, non-discrimination and fairness, societal and environmental wellbeing as well as accountability. To help assess whether the AI system that is being developed, deployed, procured or used, complies with these seven requirements of Trustworthy AI, the HLEG also developed an assessment list for Trustworthy AI (ALTAI) in June 2020.
In his keynote, Andrea Renda also addressed the new AI Regulation with a critical look on its effects, for example with respect to broader societal risks emerging when humans lose control of the process. Furthermore, digitalisation demands governments to be active in a number of roles such as a regulator, auditor, service provider, and trustee. This prepares the ground for various use cases for AI in the public sector such as analysing public consultation submissions with Natural Language Processing or analysing case law to inform judicial decisions and legal advice. Last but not least, Andrea Renda outlined four urgent actions that are needed to trigger government uptake in the future: matching AI use with administrative and constitutional law, developing sandboxes on key use cases, guidance on AI procurement, and providing ad hoc guidance on specific AI use cases.

**Marieke van Putten, Senior Innovation Manager at the Ministry of the Interior & Kingdom Relations Den Haag (The Netherlands),** outlined in her introductory presentation the evolution of more complex AI solutions in the public sector, with a variety of different inputs, levels of complexity and types of applications. From her point of view, the public sector has to take a leading role in trustworthy AI because a lot of applications in this area incorporate high risks. She also gave some insights into the policy and the work on Trustworthy AI in the Ministry of the Interior & Kingdom Relations in The Netherlands, which includes research on what trusted AI really means, its possible impacts and how to develop instruments to ensure and enhance it. Marieke van Putten concluded with the statement, that more public organisations than ever are now active in the area of AI. Accordingly, there are various application areas for AI in this area like tailored solutions for citizens, process optimisation, maintenance in cities, inspection and enforcement, crime investigations as well as forecasting and policy development.


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# Key results from the breakout sessions

## Day 1: Focus on application areas

The first day of the TDW was focussed around application areas for AI in the public sector. The topics for the breakout sessions were prepared by the Organising Committee and introduced by selected experts, and the community had the opportunity to suggest further topics via an online form before the workshop.

### AI for public safety and security

The breakout session started with a brief presentation on how AI is used in the area of law enforcement on an international level, including some use case examples. The guiding questions which were discussed during this breakout session can be summarised to: (1) “How can we protect AI tools from being used for the wrong purposes?” and (2) “How can future AI support decision making while protecting and respecting privacy?”

The discussion showed that to win the race against organised crime, it is highly recommended that **the public sector should possess the knowledge, tools, and budget** to fight against criminals using AI. It is of utmost importance that the public sector is aware of this, and that corresponding tools are developed. Especially regarding law enforcement, the topic is highly complex and **requires understanding of a fundamental tension**, namely:

- Combining data across different public organisations and (potentially) private actors, and the building of AI-enabled tools, is increasingly necessary to combat new forms of (cyber)crime that rely on more advanced technologies and techniques.
- At the same time, this sharing and AI system development creates incredibly powerful tools that, if used without care/principle, for the wrong reasons or problems or in the hands of the wrong actors, may lead to serious forms of harm.

As a result, there is both a serious **political problem**, as well as a **need for insight and knowledge** about how both of these issues can be addressed integrally.

**Building trust in AI systems** is the key challenge. It must exist on both the public and private side in order to encourage its use. Here, an **independent and objective institution is needed** to guarantee the safety of AI systems. But should it be at local, regional or national European level? Situations are different but it is important to understand the local level before extending. Also the guidance in the field of AI on both sides is essential. The importance and opportunities of the technology must be demonstrated and explained so that both sides know exactly what they are dealing with. An exchange between all parties involved and their use of AI is also of great importance.

During the discussion it was noted that currently dominant topics (fairness, accountability, transparency, explainability) are all *contextual* and need to be understood, studied, developed and implemented across the above topics. As such the experts in this breakout


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session propose a **shift in paradigm from *technology*-centered to *system and human*-centered**, in which *human* refers to the protection of human rights and prevention of citizen harms by AI systems (both in terms of AI systems aiding crime prevention and the prevention of AI systems' harmful uses), and *system* refers to the technology situated in complex sociotechnical practices, organisations and institutions.

From a research perspective, the challenges and topics discussed in this breakout session could motivate the further study and development of the following topics: Development of **ecosystems of trust** for enabling and safeguarding AI systems in law enforcement; **sociotechnical specification** of AI systems in law enforcement; **institutional design** for AI systems in law enforcement; **meaningful human control** of AI systems in law enforcement; boundary conditions for **public-private collaboration in AI systems** for law enforcement

**AI for urban mobility**

The second breakout session of the first workshop day was about AI for urban mobility. In this session, seven participants discussed the key future innovative AI technologies for the planning and management of urban mobility for citizens, civil servants and decision-makers. The discussion covered various concepts and topics, from the availability of data to the transparency and trust of solutions to be adopted by the public sector.

One of the key results was to focus not only on urban but also on rural mobility and **interfaces between urban and rural areas**. Also, the question how the public sector can **build trust on AI solutions** provided by private companies in the public sector played an important role during the session. This aspect, which is closely related to transparency, Intellectual Property Rights and monetisation addressed the question of the openness and the availability of data and the possibility and ability to **define parameters that measure the level of trust in AI solutions**. Further points of discussion were the **replicability** of AI solutions linked to the **availability of data** and representation as well as the **interaction between developers and civil servants** and on how to integrate AI solutions that impact the kind of solution that can be implemented in the public sector. During the session, several ideas for use cases, hackathons and other challenges were discussed, for example in regards to an AI applied to solving the surface parking problem at the centres of our cities or on how to make best use of satellite images in building AI solutions for mobility. One of the long-term project ideas was on how to combine car sharing/car pooling/Automatic Driving and optimisation algorithms.

**AI for reliable statistics**

Breakout session 3 looked at the topic of AI for reliable statistics. The group consisted of representatives from the private sector, academia and official statistics institutes. One of the three identified key elements on this topic was on the community of official statistics. A non-competitive environment allows for excellent opportunities and great potential for collaboration at the European level. The group also looked actively into the **use of AI for new data sources** (satellite data, websites, sensors, etc.) that require new technologies since they produce an enormous amount of data sets that are too large to be processed

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manually. The use of reliable statistics also requires a **guarantee of quality for the used data**, which raised the question on **how to define certain quality aspects** that need to be taken into account for the reliability of statistics. The Covid crisis, for example, has shown that aspects like **timeliness** can be of particular importance. Therefore, relevant statistics, relevant policy and decision making should be used rather than historical data. Another key element addressed during the session was the role to produce trustworthy and transparent statistics. The questions that came up in this regard was if **users should be educated** and **to what extent AI-based statistics can be explained** with the definition of the target group in question. The participants of the breakout session also came up with ideas for Hackathons, i.e. on explainability or to concretely work with data sources like satellite data and to use AI technologies to gain experience.

**AI for next generation public services**

Breakout session 4 focused on the next generation of public services based on AI. After an introductory presentation of a so-called "no-stop-shop" concept, eight people intensively discussed to what extent AI is suitable to support citizens in a seamless interaction with public services provided by public administrations and authorities, and how this can be practically implemented. In this context the justification of AI in public services is crucial. It must be made clear to users which services use which data and for what purpose they are used (transparency). **Only through transparency can the acceptance** and thus also the use of the services by the citizens be guaranteed. But there are also barriers to overcome on the part of the authorities. Civil servants working with these new technologies also **need to be educated** to see the benefits and be encouraged against the idea that technology will take over their jobs. With the mass of data and sources available another important aspect is to **increase the availability and reliability of data sets**. A possible two-step process for verifying data and services was proposed and discussed. Moreover, it is necessary to think about **how to deal with false positives & false negatives**, what the consequences could look like and who is authorised to use which service. Accordingly the aim for AI models that are **reliable and explainable is crucial** but they will also **depend on which kind of service** is being addressed and which criteria has to be fulfilled. Instead of a one-fits-all approach, a **fully integrated research approach including several perspectives and aspects is needed**. This requires different experts to work together: AI experts, the local authorities, lawyers, etc.

**AI expertise in the public sector**

The public sector faces several challenges in attracting talents and empowering their employees to provide AI-based solutions. In this breakout session, the experts discussed the specific needs for AI training and upskilling programmes, and how these needs can be aligned with existing academic activities. First of all, there was a clear need for education on AI identified, including the importance to understand the different 'awareness levels' which need to be addressed: ignorance, belief in AI fairy tales, not believing in AI at all, or even being afraid of AI. Also terms like 'prediction' for example can mean different things for an AI researcher and for a policymaker or public health authorities. Furthermore, politicians can sometimes perceive 'AI as magic' and thus expect way too much. So, it is important to **train**


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**administrators on what AI is, and to manage expectations** for civil servants on the one hand, and on the other hand also train AI experts on the specificities of public administrations' work.

One of the main themes identified in this breakout session is to **challenge the current mentality i**n order to make use of AI technologies. In the public sector, it is sometimes difficult to accept failure even in small scale projects, so a mindset change is required towards an openness for experimentation. To make the benefits obvious for all stakeholders, testlabs for citizens to play around with AI could be created for example. Also, AI-based support for **citizen involvement** could be beneficial, for example by promoting citizen science and citizen-based control mechanisms. Furthermore, municipalities sometimes face barriers based on a 'not invented here syndrome'. This could be addressed with knowledge transfer between private sector and public sector, and between governments, and be supported by a coordinated action plan on AI. It is important to share data and models, but mostly **experience is fundamental**. It would be useful to have a resource pool of experts and cases to draw from. Skills and capacity are also needed to make better procurement, including an open source strategy.

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## Day 2: Focus on Trustworthy AI

The second day of the TDW changed the perspective towards horizontal topics of AI spanning many application areas. In particular, the discussions were focussed on different aspects of Trustworthy AI, including some topics for breakout sessions which emerged during the first workshop day.

**Statistics of AI usage and accountability**
On the second day of the workshop, representatives from the private sector, academia and official statistics institutes continued their discussions from the first day (topic: Reliable statistics**)** in the breakout session on **Statistics of AI usage and accountability**. One of the five key elements identified during the session focused on a **certification approach** (including governance) as a suitable area to consider for AI statistics, also on a European level as it is crucial for the public acceptance of AI. The second key element that was discussed was an **algorithm register** linked to the importance of reflecting the usefulness and beneficiality from an innovator-like perspective for the use of AI. The participants of the breakout session also talked about the possibility of making software code available to the public (open source) in order to **improve accountability and trust** individually addressed per project and to give the right perception to the public that the use of AI is **ethical and transparent**. The last two key results of the discussion dealt with the **measuring performance of AI ecosystems** and a discussion on how diversity and bias can be measured. This also brought up the idea to start working on the question of **how to measure ecosystems performance based on data driven approaches,** e.g., by organising a hackathon around this topic.

**Transparency**
The discussions in this breakout session picked up different insights and findings from the first day regarding transparency aspects in different application areas. The session was mainly focused on but not limited to **data transparency,** and also included topics like having datasets available or providing a clear communication on what the data is used for. The outcomes on this topic relied also on the requirements published by the High Level Expert Group, namely on **explainability, communication and traceability**. Explainability **needs to be tailored to a specific audience and on different levels to be explicit**, e.g. via user panels. It was also considered important to **communicate statistical principles of uncertainty**, meaning the limits of the respective methods in documentation, education, interpretation and making conclusions. For communication, existing misleading narratives of AI might hinder the communication for transparency in AI. Therefore, the traceability of AI methods plays an important role to transparency by making information like the intended use of the data (who is involved) or explanations (who is responsible) accessible. **All three components for these requirements have to go hand in hand** to enable transparency.

The participants also talked about the idea of looking into the EU AI Act, specifically into the methods and not only into the applications. Another topic discussed was transparency and


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having a **human in the loop** with stricter requirements on keeping human awareness and information to ensure transparency. One of the main takeaways of the session was that there are **many facets and requirements to fully implement transparency** which should be accomplished together with all involved stakeholders.

**Systemic analysis of AI effects**

In the breakout session, a variety of different topics were discussed. The participants talked about how the **role of the public sector could be transformed** in terms of AI, and how new elements like AI can be identified in the ongoing digitisation of the public sector. Linked to these new elements, new risks can appear that could cause harm (data leaks, language models, etc.), so one of the emerging questions was how the government should be equipped to deal with these issues. The participants also discussed the topic of **inhouse development in comparison to existing dependencies to the private sector** and how different stakeholders handle the rules i.e. on image search related content. It was considered important how **systemic effects and government functioning could be measured**, also taking into account social and technical issues like existing distrust of sharing data with the government versus sharing data with private stakeholders. In terms of funding, the group identified the need to **rethink how investments in technology and change need to be organised** from a governmental point of view.

In summary, the key points of the discussion were the understanding of unknown unknowns (risks and systemic risks) with the Covid crisis as a good example to learn from, as well as the question on how to make public services for all by also meeting the user expectations. One of the main insights in this context was, that considering AI technology alone is not sufficient, but a more **systems-based approach is necessary**, also in order to guarantee system safety for example. As one idea to address this, sandboxes to reproduce some algorithmic decisions were discussed. Another key element identified during the discussion in this breakout session was the **challenge of oversight and public administrative reform** and the political alignments and to approach trustworthy AI as interdisciplinary.

**Public trust in AI systems**

The fourth breakout session addressed the topic of **Public Trust in AI**, which was also discussed frequently during the first day. The experts identified four important topics/actions which have to be taken into account to achieve a beneficial use of AI:

(1) Ensure **trustworthiness** at both the technical and process level

- **'Technical' level of trustworthiness:** Transparency, robustness, explainability, accuracy, data quality and bias
- **Process-related trustworthiness:** Organisational context, goal function, testing & certification, political decision-making; also not too much transparency but "just enough transparency"

(2) **Better educate** the public, the professional users, and developers/designers in AI

- For the public, AI needs to be 'demystified'. Many people today understand the basics of cars without being mechanics, or understand the internet without being


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computer scientists. So we need to convey the basics of AI in the same way, without expecting the public to become AI scientists.

- A new generation will take AI technologies and applications for granted that already existed when they were born, but they may take some aspects too much for granted, like privacy/sensitive data for instance. This needs to be taken into account.
- Well-educated citizens will require better civil servants, because they will ask questions that need to be answered.

**(3)** Better **communication** and explanation of AI

- The term 'artificial intelligence' may need to be rebranded. We need to find better ways to communicate what we actually mean.
- Other effective ways of improved communication could be storytelling, practical examples and use cases.

**(4)** Develop and implement a **life-cycle approach** in procurement/management

- Meaning that also the resources to operate and evaluate the system need to be taken into account, plus the end-of-life of AI system
- The topic involves both high-risk and low-risk AI systems. There will be different challenges.
- Any company that wants to enter in a tender for public administration, should be ready to provide a minimum level of openness. Any algorithm that is to be used for the public good, needs to have higher requirements of explainability.

In order to achieve public trust in AI systems, the user of an AI system needs to know when a system is operating out of bounds, and this also needs to be clearly communicated. Also, anybody possibly affected by an AI system should know about this, especially when a decision has been taken by a machine. Thus the main point in this context is transparency.

**Public-private collaboration**

Collaboration among the public and private sector can unlock the potential of AI in the provision of services for citizens and improve the effectiveness of the public administration. However, the capacity to process technical requirements at large and within complex organisations is challenging, especially in the context of the Public Sector. Public administration usually lacks the competences that will enable an effective acknowledgment and monitoring of the impact of AI adoption in their context. The provision of practical examples may make this process smoother and simpler, even to organizations that face this challenging set-up.

On the procurement side, rules still have a steep road ahead due to complex formal procedures. There is a need to transform these rules and make them more flexible as technology evolves. Flexibility is particularly important on small tenders and bids, so that Public Administrations have the opportunity to test advancements in strategic fields before scaling up to widely extended programs.

During the discussions in this breakout session, the following four main topics were identified:


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- Structuring innovation partnerships between the public and private sector for enhancing collaboration should have a high priority. Partnerships need to rely on co-creation and co-development of AI applications, single events and workshops are not enough
- An economic model for innovation regarding the public and private partnerships should be developed in order to implement AI.
- In the education context, new and innovative ways of transferring knowledge between the public and private sector should be elaborated. Both in terms of upskilling human resources and providing practical examples of the possibilities of technology in their fields.
- Regarding potential implementation, writing tender requirements is difficult when you do not know what to ask for, or what the questions could be. Accordingly, there is a need to develop and disseminate guidelines for civil servants to procure AI solutions.

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# Input to the AI research and innovation roadmap

Based on the results summarised in the previous section, the Organising Committee identified several topics which could be a valuable input to a European AI research and innovation roadmap. These topics will be presented to and further discussed with experts from TAILOR, VISION and CLAIRE in order to enrich the respective roadmap activities.

The below topics are the ones that stood out most prominently and will thus provide the 'core' of the input. However, when the roadmaps will be constructed, all inputs from the Theme Development Workshop will be considered.

### Public sector specific

- **Education**
  Due to a lack of proper understanding, new technologies are marginalised in the processes of public administration, and the dialogue with technical developers is complicated, reducing the potential benefits and impact of AI technologies and solutions. Tailored education for civil servants and other public sector workers could be a possible approach to address this challenge, especially by focussing on
  - a better understanding of the general framework for the potential introduction of AI in the processes of public administration,
  - balancing expectations, having a more concrete view of limits and capabilities of AI
  - increasing acceptance of AI as part of the future working activities.

- **Measure performance of AI ecosystems**
  The deployment of AI in society by governments will have systemic effects. Citizens, companies and other organisations will change their behaviours. In order to detect potential harmful side-effects, it is necessary to be able to measure the effects of AI in society in a systematic way. One of the underlying aspects that could be measured is the performance of AI ecosystems: clusters of companies that develop AI, (local) governments that stimulate the update of AI, end users (both companies and citizens) that use AI.

- **Algorithm register**
  The development and deployment of algorithm registers addresses a number of concerns that are related to the usage of AI in the public sector. Such a register provides a way to implement transparency and could also be a basis for public accountability. The concept could be extended so that it fosters citizen engagement, for instance by supporting citizen science initiatives.

- **Procurement, and market creation**
  Governments can play a role in market creation and thus influence developments in a favourable way. A number of considerations are relevant here: is there a place for in-house development and how does this relate to procurement from private


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companies? How should investments be organised, what is the role of public-private partnerships? Also, guidelines for tender processes need to be updated as a result of changing requirements.

**More general topics not limited to the public sector**

- **Data**
  Data is vital to produce AI solutions, but the availability of a large amounts of data is not a unique requirement; also the quality and accessibility of the data are key requirements to produce and replicate trustworthy AI solutions, for both public and private sectors. This includes
  - the need to overcome information silos in different public organisations and (potentially) private actors,
  - the design of both governance models and technologies for data sharing infrastructure (as enabler for trustworthy AI solutions) ensuring availability, quality and accessibility of the data.

- **Requirements of AI**
  The requirements for AI systems as identified by the High-level Expert Group on AI are still very valid and relevant, and many aspects still need to be further detailed and made more concrete. Important is also a broad and integrated view on these aspects. An additional consideration is how certification could support the promotion of trust and adoption of AI systems that are used in the public sector. This could be organised alongside the previously mentioned algorithm register.

- **Systemic approach and life-cycle management**
  A more integrated approach towards procurement and deployment of AI is necessary. It is not only important to set out clear procurement guidelines, at the same time, it should be ensured that the necessary knowledge and resources to operate and maintain the system are in place. This is specifically important because AI systems can adapt themselves, so monitoring of the system performance is needed: is the system still operating within the scope for which it was designed and trained? How does the system react to new or adapted other systems? When will a system become end-of-life? There are also links to the previously mentioned topics of ‘measuring systemic effects’, ‘Requirements of AI’ and ‘Education’, which could be further investigated.

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# Summary and Conclusion

The high international interest that was expressed in response to the announcement of the AI in the public sector Theme Development Workshop translated into excellent attendance of the event. In total, 57 participants joined the workshop, with around ⅓ of participants being female. Twelve countries were represented in the workshop, with most participants coming from EU countries, but also important participation from non-EU countries such as the UK. Most significant for the workshop, however, and a key sign of the success that it represents, were the diverse affiliations of the participants. Academia and industry were almost equally represented, with 43% of participants being high-level researchers and 57% being managers from public institutions and industry.

The workshop thus successfully provided a platform for discussions between representatives from academia, the public sector and industry: Discussions that are key in unlocking the full potential of AI in Europe. The workshop also caught the attention of high-level political and governmental institutions, specifically members of the European Commission, the United Nations Interregional Crime and Justice Research Institute (UNICRI), the UK Office for National Statistics, the State Chancellery of Saarbruecken, the Den Haag Ministry of Interior & Kingdom Relations, the City of Amsterdam, and the City of Frankfurt am Main, joined the discussions. High-level academics and managers from industry were hence not only able to exchange ideas with each other but also discussed these directly with decision makers from politics. This Theme Development Workshop, therefore, created a rare opportunity for the exchange of ideas and opinions about important challenges and topics for AI in Europe.

The Organising Committee would like to express its deep gratitude to all experts for their valuable input and contributions to this Theme Development Workshop! Their active participation in the workshop and engagement in the breakout session discussions paved the way for the excellent results presented in this report.


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In addition to this list, 11 participants of the TDW preferred not to be mentioned publicly by name and affiliation.

**The organisers would like to thank all participants for their valuable input and contributions to the Theme Development Workshop!**


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