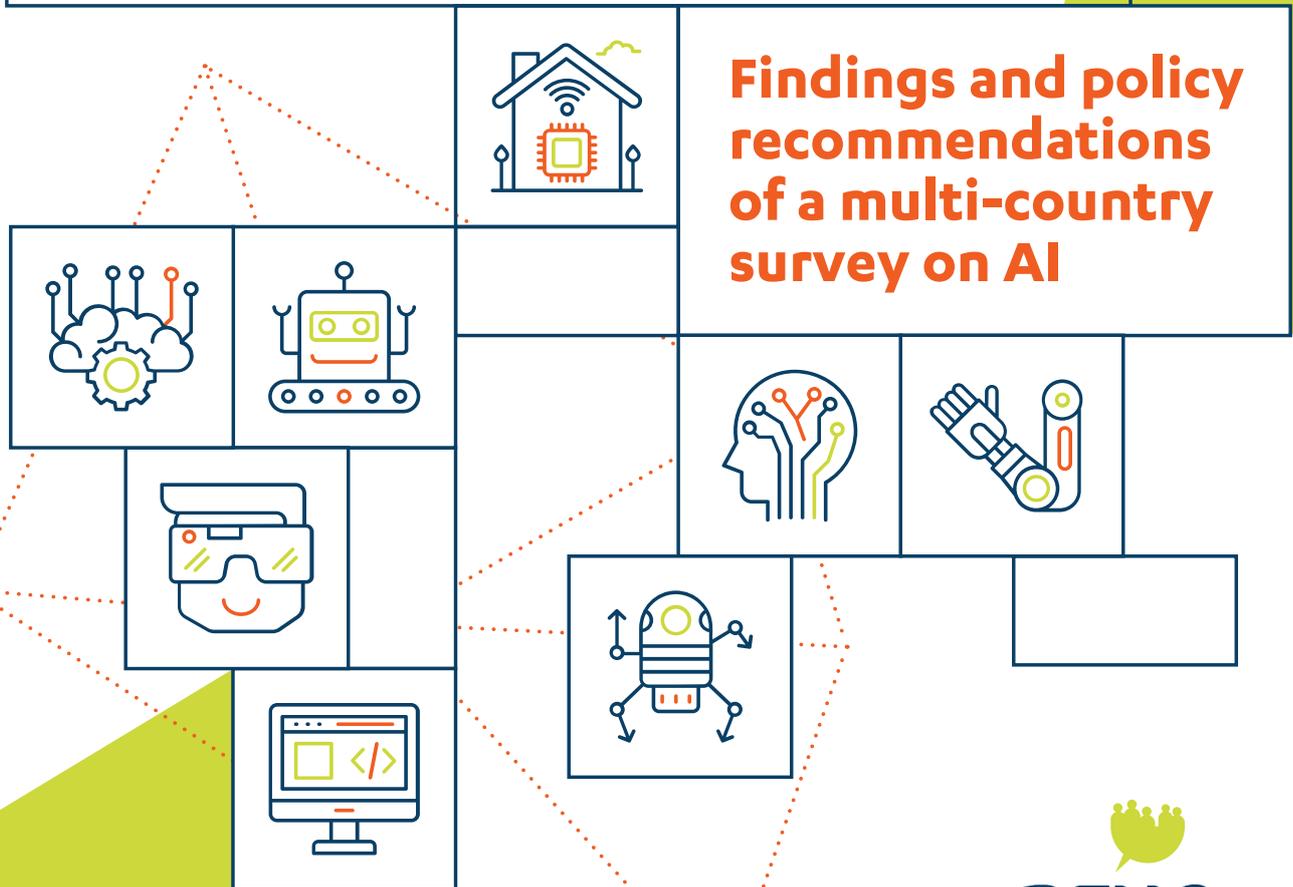


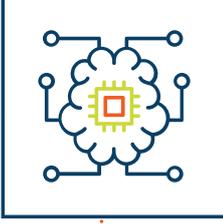
# Artificial Intelligence: what consumers say



**Findings and policy  
recommendations  
of a multi-country  
survey on AI**



# Introduction

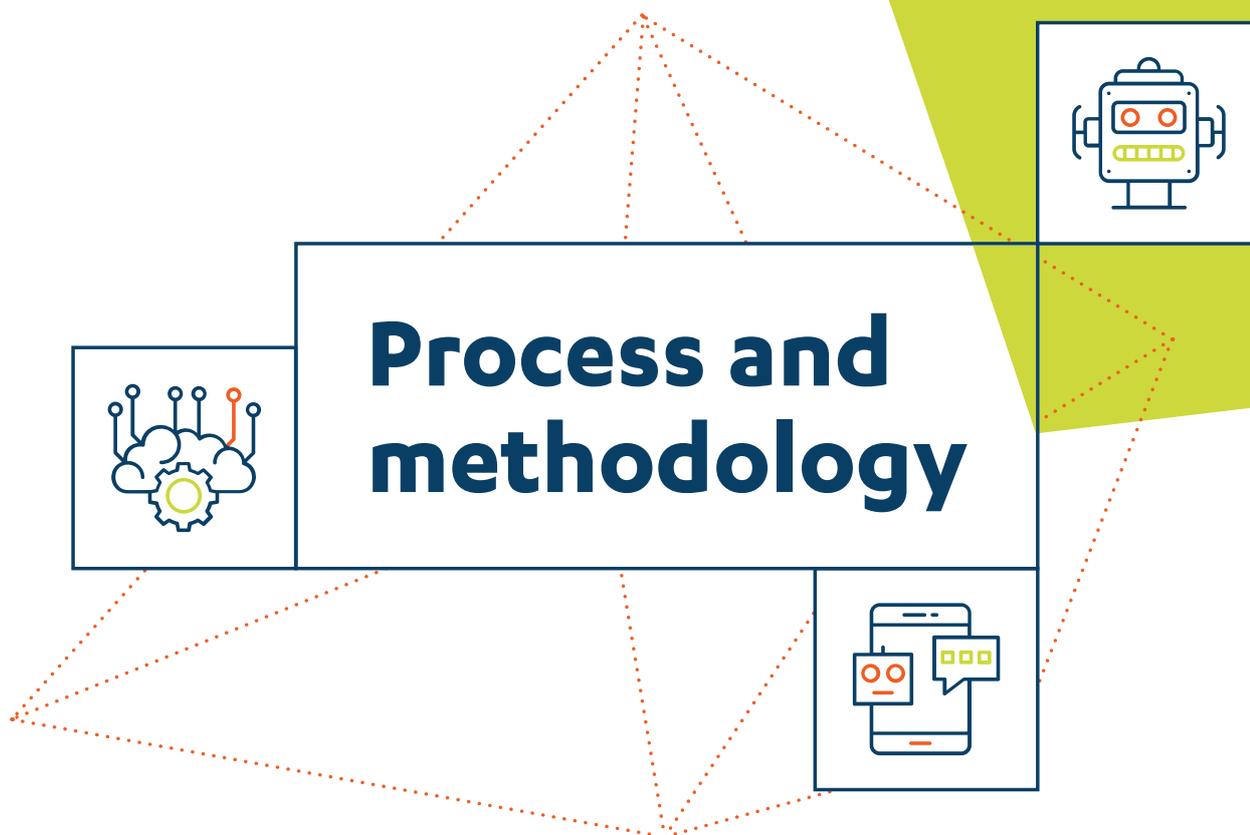


Products and services consumers deal with on a daily basis – e.g. insurance policies based on automated risk assessments, product offers on e-commerce sites and price comparison tools – are increasingly powered by artificial intelligence (AI). This technology promises to make consumers' lives more convenient and our societies better. It can enable innovative products and services, such as autonomous cars. It can also help make progress in areas such as scientific research and healthcare.

But AI also has major implications on how consumers make choices, how they interact with companies and the potential risks of products and services. AI and algorithm-based decision making (ADM) are fundamentally altering the balance of power between businesses and consumers. Consumers risk being manipulated and subjected to discriminatory treatment and arbitrary, non-transparent automated decisions. In a market run by algorithms, transparency and comparability for consumers may disappear.

BEUC member organisations from across Europe conducted a survey to see what consumers think about AI. How much do they know about it? Do they find AI useful? What are their main concerns? Is it properly regulated? What rights do they think they have or should have?

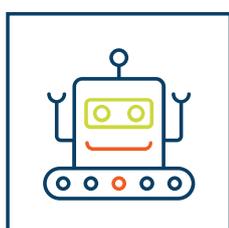
As the European Commission prepares new rules on AI, we hope that the findings of this survey will inform EU decision-makers and help them to devise rules that guarantee strong consumer protection that fully respect fundamental EU rights and values.

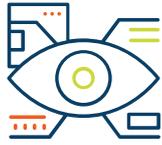


The survey was conducted simultaneously across nine EU countries (Belgium, Denmark, France, Germany, Italy, Poland, Portugal, Spain and Sweden) throughout November and December 2019. The data, which was collected by a market research company via an online questionnaire, was analysed by the Belgian consumer organisation Test Achats/Test Aankoop. The questionnaire, comprising 22 questions, was given to panels of just over 1,000 respondents per country in Belgium, Italy, Spain and Portugal and panels of 1,500 in Denmark, France, Germany, Poland and Sweden. Respondents were selected based on age, gender and geographical region (according to the distribution of the national general population). Samples were then weighed for age, gender, educational level and region in order to be representative of the countries' national populations. A postal questionnaire was also sent in Belgium, Italy, Portugal and Spain.

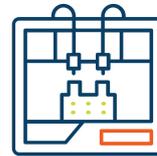
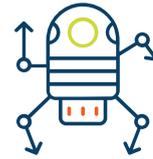
For the purposes of this report we have structured the results of the survey around three topics:

- Consumers' knowledge, perception and experience of AI
- Consumers' concerns and trust in AI
- Consumers' views on the regulatory framework for AI





# Main findings



1

## Consumers consider AI can be useful and think it will play an important role in many areas of their lives

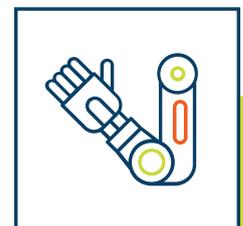
- A large majority of respondents perceive AI to be somewhat or even very useful to them in different areas, especially when it is used to predict traffic accidents (91%), their health (87%) or financial problems (81%).
- A significant number of respondents (44% in Portugal and 50% in Spain) also believe AI will contribute to increase our life expectancy.
- Consumers also believe that AI will help to make the world more sustainable: this is the case for 44% of Spanish and 45% of Italian respondents.

## 2 While they see benefits, consumers have low trust in AI and its added value, as well as concerns such as the abuse of personal data and the use of AI to manipulate their decisions

- For example, 78% of respondents consider that real-time car journey suggestions offer some or even a lot of added value, yet almost 45% believe home virtual assistants offer no added value at all. The same is true for personalised content/advertisement on e-commerce platforms: 44% feel it has no added value.
- Consumers actually reported having experienced “bad service” in several areas. 41% have this impression regarding information for loan proposals based on automated decisions and 40% give the lowest score to the availability of options in customer information/support systems run by ADM.
- There is a significant lack of trust: when asked whether they trust if their privacy is protected when using AI devices, a large majority of consumers state this to be medium or low. An average 50% of Belgian, Italian, Portuguese and Spanish as well as 45% of Danish, French, German, Polish and Swedish respondents have low trust in the protection of their privacy with wearables\*. With voice/virtual assistants, the level of low trust ranges from 40% in Sweden to 71% in Belgium.
- The majority of respondents (60%) in Belgium, Italy, Portugal and Spain also say that they agree or strongly agree that AI will lead to more abuse of personal data. For Denmark, France, Germany, Poland and Sweden it is 45%\*.
- In Belgium, Italy, Portugal and Spain most people (64%) agree or strongly agree that companies are using AI to manipulate consumer decisions. The same is true for respondents from France, Denmark, Germany, Poland and Sweden (52%)\*.

## 3 Consumers do not think that the current rules efficiently regulate and oversee AI. Consumers think they should be properly informed about automated decisions and have a right to say “no” to them.

- Significant numbers of people (50% in Sweden and 55% in Portugal) do not think that current rules effectively regulate AI\*.
- Around 56% of respondents in all countries – with peaks of 70% in Belgium – have low trust in authorities to exert effective control over AI\*.
- The majority of people (up to 83% in Spain) think that consumers should be well informed when they deal with an automatic decision system\*.
- Respondents agree or strongly agree that AI users should have the right to say “no” to automated decision-making. The numbers are as high as 78% in Italy and Portugal and 80% in Spain\*.



For some of the questions, respondents were asked to express whether they “strongly agreed”, “agreed”, “disagreed” or “strongly disagreed” with certain statements. For these questions, respondents in Denmark, France, Germany, Poland and Sweden also had the possibility to answer with “no opinion”. This option was not available to respondents of the postal questionnaire in Belgium, Italy, Portugal and Spain. For this reason, results for the two groups of countries are split in some sections of this report. This is indicated throughout the report with an asterisk (\*).

# Detailed findings, assessment and recommendations



Here we detail the findings from the survey, and give our assessment and recommendations for action.

## Knowledge, perception and experience of AI

To get a better understanding of what AI means to consumers and their level of awareness, respondents were asked questions about their knowledge, perception and experience of AI.

### Main findings

- 82% have previously heard of AI. Highly educated respondents are those who have most heard of it (except for Spain where respondents' financial situation is the most important variable).
- While 48% say that they feel somewhat informed about AI, only 9% say they are well-informed. 43% say they are either ill-informed about AI or have never heard of it.
- 18% of people see AI as very present in their daily lives while 39% see it as somewhat present. 22% think AI is very little or not at all present; 21% have never heard of AI or have no idea about its presence. Among respondents with no/basic computer skills or no/basic skills with connected devices, this increases drastically (up to 89%/84% in Sweden and 90%/90% in Denmark).
- Respondents are sceptical about AI's ability to perform highly complex human behaviour or human properties like emotions. 41% and 45% of respondents respectively perceive that advanced technology will never be able to feel emotion or give a verdict in court. Yet 55% and 69% respectively think that advanced technology is already able to autonomously speak/interact and recognise images and faces. Those who say they are well informed about AI consistently say that it is already being used to autonomously perform image recognition as well as speaking/interacting (exception for Germany and France for image recognition).
- Respondents seem to hope that AI will help to resolve some fundamental problems of human life. In all participating countries, people find the following services based on machine calculations somewhat or very useful:
  - Predicting traffic accidents (91%)
  - Predicting their health problems (87%)
  - Predicting their financial problems (81%)
- 91.8% of all respondents find at least one automated service useful.
- In all countries, those who have advanced automated devices skills rate the usefulness of these services higher

than those with non/basic user skills. But, with one exception (Sweden, where predicting financial problems scores slightly higher than predicting health problems for the non/basic users), also non/basic users rank the different services in the same order of usefulness.

- A considerable number of people recognise that AI services and applications, in certain areas, can have some added value. But only car itinerary recommendations are rated by more than a quarter of respondents to have a lot of added value (39%) among services people have used in the past 12 months. This is

followed by image search engines (24%) and music identification apps 24%. However, in other areas – like home virtual assistants or personalised advertisements on shopping platforms – around 45% say they have not experienced any added-value in the last 12 months.

- Consumers have not experienced many services/situations based on ADM. Product purchase proposals rank highest with only 18% (21% in Sweden; 12% in France) and medical prescriptions lowest with 7% (12% in Poland; 5% in Denmark).

## BEUC assessment and recommendations

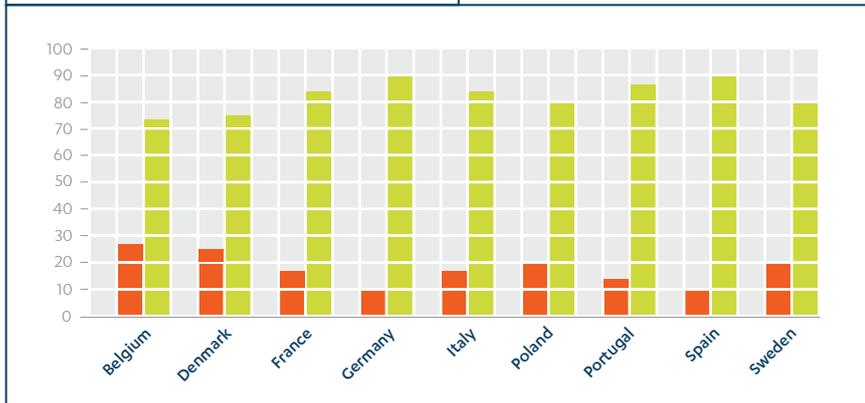
Although AI is still fairly new, consumers are already very much aware of it or somewhat informed about it.

Although almost all consumers surveyed are aware of AI, only half of them believe it is present in their lives. Not surprisingly, those who believe that it is most present are also the most informed. In general, the direct connection between the level of digital education and the appreciation of the benefits brought by AI is evident.

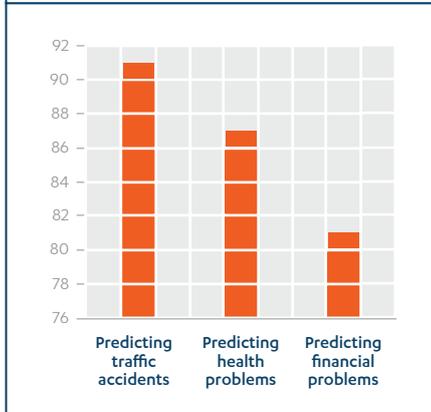
Respondents are united in their belief that automation can be useful in the management of some activities and that they have already perceived this usefulness at least once. The perception of this utility significantly changes according to the sectors. Despite this, only a few say that they have actually benefited from it.

These results show that consumers believe that AI can bring benefits, but it is not delivering yet. They also show a need to further raise awareness and educate consumers about what AI is, when and how it is used, what the risks are and what to do if something goes wrong. Consumer organisations can play an important role in this by informing consumers about useful, safe, and legally-compliant applications and how best to use it.

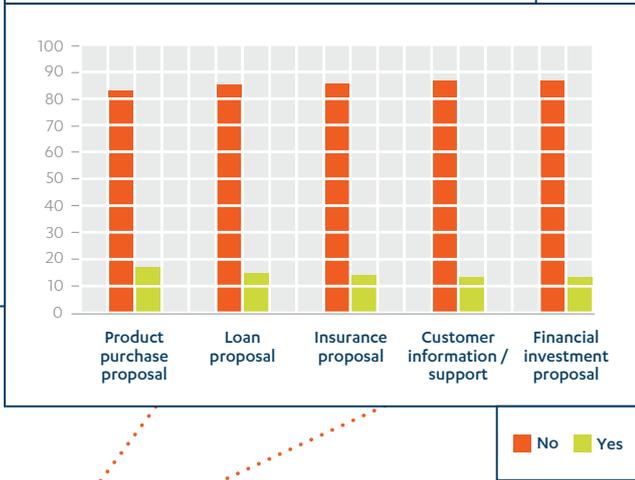
### Have you ever heard of AI?



### Percentage of respondents who find the following services based on machine calculations somewhat/very useful. All countries



### Did you experience any of these services based on AI? Top 5



# Consumer concerns and trust in AI

We sought to understand and identify the main concerns consumers have about AI. This is essential to be able to address these concerns properly.

## Main findings\*

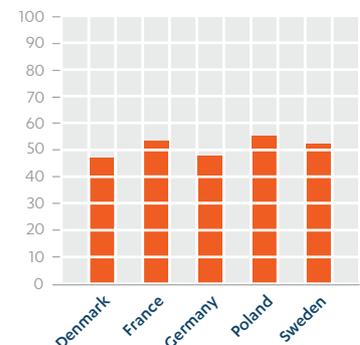
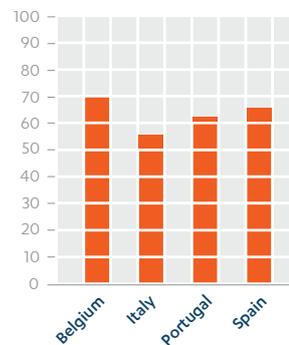
- For Belgium, Italy, Portugal and Spain the majority of respondents (60%) say they agree or strongly agree that AI will lead to more abuse of personal data. For Denmark, France, Germany, Poland and Sweden it is 45%.
- Respondents have low trust in privacy protection when using voice/virtual assistants. For instance, 71% of Belgian consumers have low levels of trust, rising to 68% of German respondents.
- For Belgium, Italy, Portugal and Spain the majority of respondents (52%) say they strongly agree or agree that AI is potentially dangerous because machines can fail. This is 46% in Denmark, France, Germany, Poland and Sweden.
- In Belgium, Italy, Portugal and Spain the majority of respondents (64%) agree or strongly agree that companies are using AI to manipulate consumer decisions. The same is true for respondents from Denmark, France, Germany, Poland and Sweden (52%).

- Regarding the use of AI by governments, 57% of Belgian, Italian, Portuguese and Spanish respondents agree with the statement that “governments are using AI to control citizens”, with only 17% (strongly) disagreeing. The number drops to 44% for respondents from Denmark, France, Germany, Poland and Sweden.
- For Belgium, Italy, Portugal and Spain the majority of respondents (60%) agree or

strongly agree that it is not clear who is accountable if AI is not secure or causes harm. In Denmark, France Germany, Poland and Sweden this is 49%.

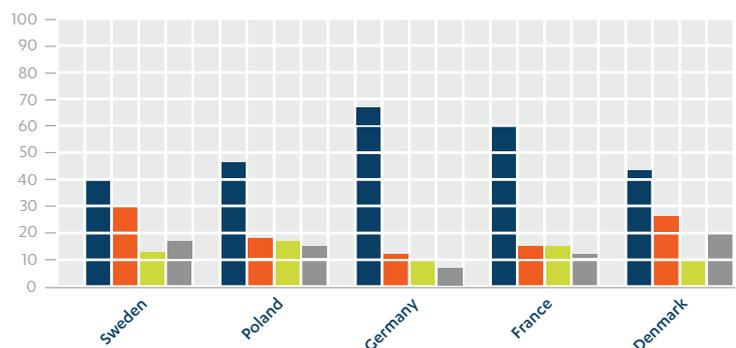
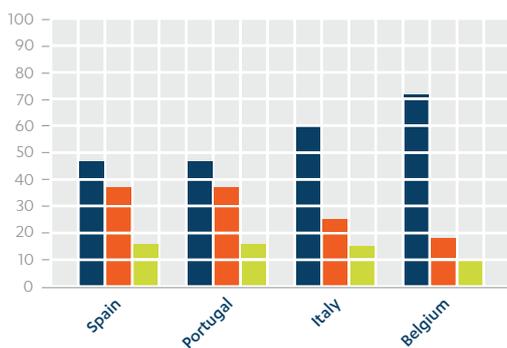
- The majority of respondents (51%) in Belgium, Italy, Portugal and Spain agree or strongly agree that AI will lead to unfair discrimination based on individual characteristics or social categories. This is 37% in Denmark, France, Germany, Poland and Sweden.

### Respondents who (strongly) agreed that companies use AI to manipulate consumer decisions



### To what extent do you trust that your privacy is protected when using voice/virtual assistant?

Respondents in these countries were given the option to reply 'No opinion'



Low trust Medium trust High trust

Low trust Medium trust High trust No opinion

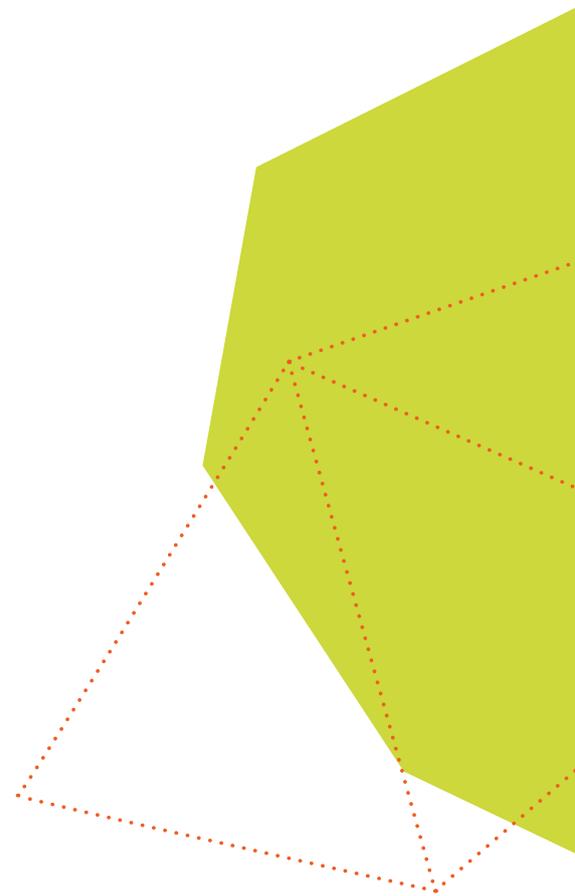
## BEUC assessment and recommendations

The results of the survey show clear concerns regarding the use of AI. Firstly, the majority of respondents consider AI will increase the misuse of their personal data. They particularly do not trust voice/virtual assistants to respect their privacy.

Secondly, respondents also consider that companies can use AI to manipulate their decisions and that AI will lead to unfair discrimination.

Thirdly, respondents consider that AI can be dangerous because machines can fail. Many are also worried that it is unclear who is accountable if AI is not secure or causes harm.

**Consumers have clear concerns regarding their privacy protection, AI manipulating their decisions, the risks of discrimination, the reliability and safety of AI, and the allocation of responsibility and liability if something goes wrong. These concerns must be properly addressed to ensure strong protection for consumers and for them to trust this technology.**



## The legal framework applicable to AI and the protection of consumers

**There are existing EU rules (i.e. data protection or consumer law) that apply to AI but no specific laws designed to regulate its development and use. We sought to understand whether consumers consider that current legislation is adequate to regulate AI-based activities, whether they see gaps in protection and what rights they think they should have.**

### Main findings\*

- In Belgium, Italy, Portugal and Spain more than half of respondents (51%) disagree or strongly disagree that current regulation is adequate to efficiently regulate AI. In all countries, less than 20% feel that current rules can adequately protect them from the potential harm AI poses.
- 57% of the respondents in Belgium, Italy, Portugal and Spain have low trust in authorities to exert effective control over AI, while 32% have medium trust and only 11% have high trust. In Denmark, France, Germany, Poland, and Sweden 56% have low trust, 26% have medium trust and 12% have high trust.

- In Belgium, Italy, Portugal and Spain 66% of respondents agreed or strongly agreed that AI can be hazardous and should be banned by authorities (8% strongly disagree and 7% disagree). In Denmark, France, Germany, Poland and Sweden only 18% (strongly) disagreed that harmful AI should be banned.
- 82% in respondents in Belgium, Italy, Portugal and Spain think consumers should be well informed when they deal with an automatic decision system (63% strongly agree and 19% agree). Only 7% disagree that citizens should be well informed about AI and its consequences (3% strongly disagree and 4% disagree). 71% in Denmark, France,

Germany, Poland and Sweden agree or strongly agree that consumers should be well-informed when they deal with an automatic decision system. And only 11% disagree or strongly disagree that citizens should be well-informed about AI and its consequences.

- In Belgium, Italy, Portugal and Spain 77% agree that users of AI should have the right to say “no” to automated decision-making (58% strongly agree and 19% agree) In Denmark, France, Germany, Poland and Sweden 66% agree that users should have the right to say “no” to automated decision-making (47% strongly agree and 19% agree).

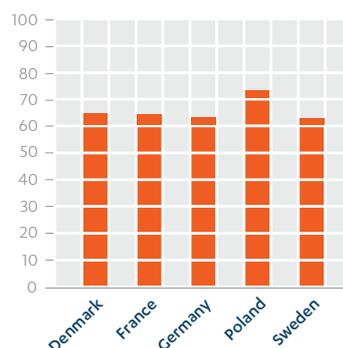
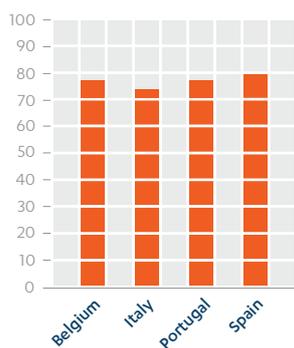
## BEUC assessment and recommendations

Significant numbers of respondents believe that the current rules are insufficient to regulate AI. Also, there are very few respondents who have full confidence in authorities to exercise effective oversight over AI systems. Consumers believe that authorities should be able to exercise their powers by, for example, banning hazardous AI.

In terms of the rights consumers think they should have, most of the respondents want to be informed and have control over the automated processes that concern them and be free to say “no” to automated decision making.

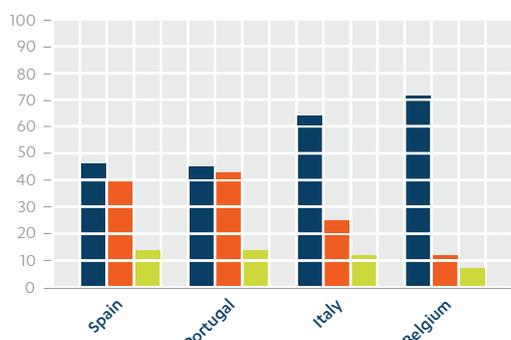
While AI applications are already subject to European legislation – on e.g. data protection, privacy, non-discrimination, consumer protection, product safety and liability – existing rules are not fit to address the risks that AI poses and additional measures are needed. Existing legislation should be updated and a new legislation should be introduced to strengthen consumer rights in AI to ensure they are adequately protected.

### Respondents who strongly agreed that users should be able to say “no” to automated decision-making

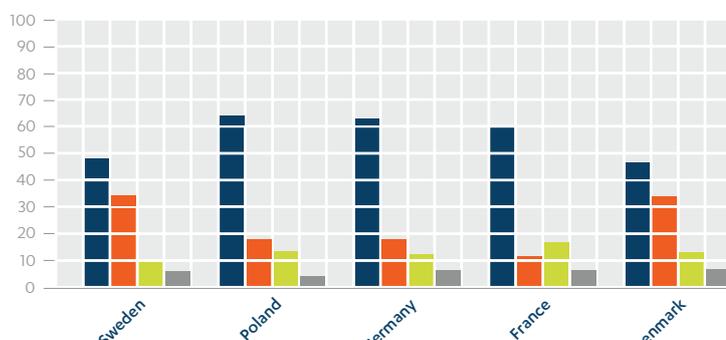


Respondents in these countries were given the option to reply 'No opinion'

### To what extent do you trust authorities to exert effective control over (organisations and companies using) AI?



Low trust Medium trust High trust



Low trust Medium trust High trust No opinion

