

Federal Department of the Environment, Transport, Energy and Communications DETEC

Federal Office of Communications OFCOM International Relations

9 December 2022

**OFCOM Report** 

# Monitoring of the "Artificial Intelligence" Guidelines for the Confederation

Evaluation of the application and relevance of the guidelines



# **Executive summary**

In November 2020, the Federal Council adopted the <u>Guidelines on Artificial Intelligence for the</u> <u>Confederation</u>. The seven guidelines in total provide the Federal Administration and the agencies entrusted with performing administrative tasks for the Confederation with a general frame of reference and aim to ensure a coherent policy on AI.

The application and relevance of the guidelines were reviewed for the first time in 2022. The Federal Office of Communications (OFCOM) conducted a survey within the Federal Administration and invited the agencies concerned to report on the application of the guidelines and to identify any areas where they need to be amended.

This survey revealed there is a high level of awareness of the AI guidelines at the Federal Administration and that they are taken into account and applied by employees who work on AI (i.e. the use of AI, at regulatory level, etc.). The guidelines are useful as a general frame of reference on the use of AI at the Confederation and there is currently no need to amend or update them.

However, it seems that more in-depth discussion of the guidelines and their specific application within the Confederation would be beneficial. OFCOM will use the Administrative Committee of the <u>'Plateforme Tripartite'</u> for this purpose. The <u>Competence Network for Artificial Intelligence (CNAI) at the</u> <u>Confederation</u> can also contribute towards raising awareness of the guidelines. The specialist legal affairs group ('Knotenpunkt Recht'), which supports the 'Plateforme Tripartite' and CNAI as an expert group on legal matters, will also apply the guidelines in relation to legal requirements in AI projects and contribute towards their implementation.<sup>1</sup>

In view of the rapid pace of technological development, the guidelines must be kept current and applicable. In accordance with the Federal Council's mandate, OFCOM – in cooperation with the federal agencies concerned – will carry out another evaluation of the guidelines in 2024. Until then OFCOM will monitor the development and application of AI and – together with the Federal Office of Justice and the FDFA's Directorate of International Law – will continue to keep track of the regulation of AI at national and international level. OFCOM, in collaboration with the other federal agencies concerned, will also work towards developing an appropriate international framework for AI.

<sup>&</sup>lt;sup>1</sup> Decision of the Federal Council of 13 April 2022 on the Artificial Intelligence and International Rules report by the Federal Department of Foreign Affairs.

# Content

1	Introduction		4
2	Background		5
	2.1	Overview of the Guidelines on Artificial Intelligence for the Confederation	
	2.2	Current use of AI at the Confederation	5
3	Evaluation of the guidelines		5
	3.1	Survey	
	3.2	Results	6
	3.2.1	Application	6
	3.2.2	Usefulness	7
	3.2.3	Relevance	7
4	Summ	nary and next steps	7

#### 1 Introduction

As an enabling technology, artificial intelligence (AI) plays a key role in the digitalisation of the state, the economy and society. It provides significant potential for innovation and growth and is already successfully deployed in a wide range of areas.

It is important that Switzerland is able to take advantage of the new opportunities presented by AI, while also guaranteeing fundamental rights in relation to its use. Optimal conditions must be created to enable Switzerland to establish itself and develop as a leading innovative location for autonomous but responsible research, development and application of AI.

Based on the <u>Challenges of Artificial Intelligence Report</u>, the Federal Council adopted the Guidelines on Artificial Intelligence for the Confederation in November 2020. The seven guidelines in total provide the Federal Administration and the agencies entrusted with performing administrative tasks for the Confederation with a general frame of reference and aim to ensure a coherent policy on AI.

In view of the rapid pace of technological development, the guidelines must be current and applicable. The Federal Council tasked the Federal Office of Communications (OFCOM) with monitoring the guidelines in cooperation with the federal agencies concerned. An evaluation of the guidelines should be carried out every two years.

The application and relevance of the guidelines were reviewed for the first time in 2022. The Federal Office of Communications (OFCOM) conducted a survey at the Federal Administration and invited the agencies concerned to report on the application of the guidelines and to identify any areas where they need to be amended. This report provides a summary of the responses to the survey, considers the application and relevance of the guidelines, and outlines the next steps.

# 2 Background

## 2.1 Overview of the Guidelines on Artificial Intelligence for the Confederation

The <u>Guidelines on Artificial Intelligence for the Confederation</u>, which the Federal Council adopted in November 2020, set out the following frame of reference for the use of AI for the Confederation.

- 1. Putting people first: When developing and using AI, the dignity and well-being of the individual as well as the common good should be paramount. Particular importance is attached to the protection of fundamental rights, especially data protection.
- 2. Regulatory conditions for the development and application of AI: The Confederation should continue to ensure the best possible regulatory conditions so that the opportunities presented by AI for increasing value creation and improving sustainable development can be exploited. Switzerland aims to become a leading location for research and application of AI and for companies specialised in this field.
- **3. Transparency, traceability and explainability:** Al-based decision-making processes should be designed so that they are clearly recognisable as such.
- 4. Accountability: In order to be able to clarify and establish responsibilities in the event of damage, an accident or a violation of the law, liability must be clearly defined when using AI. Responsibility may not be delegated to machines.
- 5. **Safety:** Al systems must be designed to be safe, robust and resilient in order to have a positive impact and must not be vulnerable to misuse or misapplication.
- 6. Actively shape Al governance: Switzerland should actively shape global Al governance and contribute to the definition of global standards and norms in line with its own interests and values.
- **7. Involve all relevant national and international stakeholders:** In the debates on Al governance, Switzerland should work to ensure that all relevant stakeholders are involved in the political decision-making processes.

# 2.2 Current use of AI at the Confederation

The <u>Competence Network for Artificial Intelligence (CNAI)</u> was set up at the Confederation in 2022. One of the CNAI's tasks is keeping a <u>list of projects</u> being carried out at the Federal Administration which are related to or based on AI or AI technologies. This list ensures transparency over the application and use of AI at the Federal Administration and facilitates the exchange of experience. It is regularly updated.

A look at the CNAI's current project list shows that AI systems are currently mainly used to improve efficiency (e.g. text, language or image recognition, fraud detection, plausibility checks, chatbots/conversation agents) and, to a lesser extent, as a basis for decision-making (e.g. better forecasting). Specific examples of AI projects at the Confederation include 'SwissPollen' at meteosuisse, which automates Switzerland's pollen monitoring network, or the 'ADELE' mapping project at the Federal Statistical Office, which is used to detect changes in land usage and cover. Many other AI projects at the Federal Administration are currently still at the trial or development stage, which means they are not yet operational.

#### 3 Evaluation of the guidelines

#### 3.1 Survey

To evaluate the application and relevance of the Guidelines on Artificial Intelligence for the Confederation, OFCOM carried out an online survey within the Federal Administration in the third quarter of 2022 and invited the agencies concerned to report on the application of the guidelines and any need for amendment.

The survey was aimed at all employees of the Federal Administration who work on AI (i.e. the use of AI, at a regulatory level, etc.). Consolidated answers per federal agency were requested where appropriate and possible. The survey could also be completed – additionally or alternatively – by individual employees. Fifty responses to the survey were received, 14 of which were consolidated responses from federal agencies.

# 3.2 Results

# 3.2.1 Application

Firstly, there is generally a high level of awareness of the AI guidelines amongst Federal Administration employees who work with AI. The survey indicated that only a small minority were not previously aware of the guidelines. However, a relatively low number of employees – around half of respondents – and federal agencies actively use the guidelines. This is not due to shortcomings in the guidelines but is instead explained by the fact that very few federal agencies carry out specific AI-related projects and many such projects are still at an early stage (also see point 2.2).

The survey also revealed that the vast majority of people directly involved with or who use Al also apply the guidelines. The guideline on transparency, traceability and explainability was used most frequently. In second place was the guideline on putting people first. Several specific examples of the use of the Al guidelines are provided below for illustrative purposes:

- The **putting people first** and **transparency**, **traceability and explainability** guidelines are being applied to the revision of the Data Protection Act (FADP), which will enter into force on 1 September 2023. The new law provides for the duty to carry out a data protection impact assessment if planned data processing presents a high risk to privacy or fundamental rights. A duty to provide information is also now being introduced for decision-making based entirely on automated data processing. In this case, the right to information covers both automated individual decisions as well as the logic on which such decisions are based (cf. Art. 25 para. 2 let. f FADP).
- The **transparency**, **traceability and explainability** and **accountability** guidelines are currently being applied as part of a project involving the launch of an expert system to determine status under social insurance law (gainfully employed/self-employed) where the use of AI is being assessed. The key criteria used to assess the status will be disclosed to users. With regard to accountability, the project's conditions stipulate that the final decision about the status will still lie solely with the OASI compensation office and cannot be delegated to a machine.
- The actively shape Al governance guideline is currently being applied at international level at the Council of Europe where a representative of Switzerland, the Head of International Affairs at OFCOM, has been appointed as the chair of the <u>Committee on Artificial Intelligence (CAI)</u>. Switzerland is represented by a delegation made up of employees from OFCOM, the Federal Office of Justice and the FDFA's Directorate of International Law. The delegation is led by the Deputy Director of the FDFA's Directorate of International Law. The CAI aims to negotiate the first binding convention on AI with global scope. The guidelines were also taken into account when defining <u>Switzerland's negotiating mandate</u> for the CAI, which was adopted by the Federal Council in September 2022. Switzerland is also actively involved in governance issues at other international organisations, such as UNESCO, the OECD and ITU, and contributes to the development of global standards and norms in line with its interests and values.
- The involve all relevant national and international stakeholders guideline is applied as part of the <u>'Plateforme Tripartite'</u>, which is used as a national information hub and multi-stakeholder platform for dialogue on AI and other topics related to digitalisation and which is open to any interested persons or institutions in Switzerland. The <u>Swiss Internet Governance Forum (Swiss</u> <u>IGF</u>) – which is also open to all stakeholders – has also repeatedly addressed the use of AI. The <u>CNAI Competence Network</u> also follows this guideline by contributing to the networking and involvement of all relevant stakeholders in the field of AI through the establishment of a 'community of practice' and a 'community of expertise'.

#### 3.2.2 Usefulness

The guidelines were generally regarded as being relevant and clear. Most participants indicated they were useful or very useful. In particular, the guidelines were considered useful because they provided a general, consistent frame of reference and contribute to establishing a common understanding of the use of AI at the Confederation. Guideline 3 on transparency, traceability and explainability, Guideline 4 on accountability, and Guideline 5 on safety were deemed particularly relevant. Many participants also indicated that all the guidelines were useful and relevant.

The vast majority believe there is no need to amend the guidelines. However, there was a general desire to see the guidelines made more accessible. Some participants indicated that more precise guidelines on AI were required as opposed to the guideline on putting people first. The guidelines are intended to be general and are worded in a way that is highly abstract. A checklist (e.g. for evaluating the consequences of algorithm-based decision-making systems) or a screening questionnaire on risk assessment could be useful for implementation in specific cases, particularly with regard to safety. AI systems must be designed to be safe, robust and resilient.

In relation to the guideline on Transparency, traceability and explainability, it was also noted that this is of little use or very difficult to implement for deep learning, for example, as traceability is often not ensured when using this AI method. It is also important not to overlook the fact that some federal agencies must process sensitive data as part of their activities and that absolute transparency cannot always be guaranteed in this respect. One comment indicated that the guidelines lack a binding element or sanctions in the event of non-compliance. Such an element could improve usefulness. It was also pointed out that the guidelines only apply to employees of the Federal Administration and agencies entrusted with performing administrative tasks for the Confederation, but not to other actors in the field of AI in Switzerland from the private sector and the field of research.

#### 3.2.3 Relevance

The guidelines should be a document that is continually updated to take account of new technologies and potential risks related to their use. However, the survey indicated that everyone currently using the guidelines considers them to be up to date. One reason for this appears to be that the guidelines were written in a manner that is abstract and general, which ensures they remain valid. At the same time, this can make them difficult to apply. The guidelines are also broad-based to ensure they cover all types of AI-related projects.

A key point with regard to the interpretation and relevance of the guidelines is the international work being carried out on AI. This includes, for example, the draft legislation on AI at EU level and the negotiations at the Council of Europe on a binding agreement on AI that is of major importance to Switzerland. This work is currently still in progress and no new regulations have been approved since the adoption of the guidelines in November 2020 that would require them to be updated.

#### 4 Summary and next steps

In summary, the survey shows there is a high level of awareness of the AI guidelines within the Federal Administration and that they are taken into account and applied by employees who work with AI (i.e. the use of AI, at regulatory level, etc.). The guidelines are useful as a general frame of reference on the use of AI at the Confederation and there is currently no need to amend or update them.

However, it seems that more in-depth discussion of the guidelines and their specific application within the Confederation would be beneficial. OFCOM will use the Administrative Committee of the 'Plateforme Tripartite' for this purpose. The CNAI Competence Network can also contribute towards raising awareness of the guidelines. The practical aspect of applying the guidelines can be explored and discussed in the CNAI's Community of Practice. The specialist legal affairs group ('Knotenpunkt Recht'), which supports the 'Plateforme Tripartite' and the CNAI as an expert group on legal

matters, will also apply the guidelines in relation to the legal requirements in AI projects and contribute towards their implementation.<sup>2</sup>

In view of the rapid pace of technological development, the guidelines must be kept current and applicable. In accordance with the Federal Council's mandate, OFCOM – in cooperation with the federal agencies concerned – will carry out another evaluation of the guidelines in 2024. Until then, OFCOM will monitor the development and application of AI and – together with the Federal Office of Justice and the FDFA's Directorate of International Law – will continue to keep track of the regulation of AI at national and international level. OFCOM, in collaboration with the other federal agencies concerned, will also work towards developing an appropriate international framework for AI.

<sup>&</sup>lt;sup>2</sup> Decision of the Federal Council of 13 April 2022 on the Artificial Intelligence and International Rules report by the Federal Department of Foreign Affairs.