



STATISTICS

DZ.7 Improving the visibility of AI in the national accounts

Global consultation outcomes

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Background: Artificial Intelligence (AI)

- Examples of AI:
 - Decision-support / decision-making tools for businesses
 - Agriculture – determine which crops to grow, when to plant, pesticide usage
 - Health care – analyze diagnostic images
 - Finance – make lending decisions
 - Autonomous vehicles
 - Voice-controlled virtual assistants
- Motivation for guidance note:
 - AI has the potential to replace high reasoning / decision making tasks traditionally undertaken by labor – making it an analytically important element for SNA/BPM users.
 - Currently AI is not mentioned in SNA 2008, BPM6, ISIC Rev.4, or CPC 2.1

Key Recommendations in Guidance Note (1)

- 1) Proposed statistical definition of AI:
 - “A computer program operating a system capable of recognition and reasoning consistent with human recognition and reasoning.”
- 2) Update SNA definition of Intellectual Property Products (2008 SNA 10.98) to:
 - The result of research, development, investigation, or innovation leading to knowledge **or the creation of intelligent systems** that the developers can market or use to their own benefit in production because use of the knowledge or system is restricted by means of legal or other protection.
- 3) Give AI explicit visibility within the asset classification by adding an “of which” category under Computer Software. This would permit countries to distinguish between AI and non-AI computer programs when analytically useful to do so.

Key Recommendations in Guidance Note (2)

- 4) The value of the cost of producing or purchasing training datasets should be excluded from the value of own-account AI and included instead in the value of Data assets or intermediate consumption, as relevant.
- 5) The next CPC update should include specific classes for AI and that this guidance note serves as the SNA drafting recommendations.
- 6) The next ISIC update should consider the need to establish separate ISIC classes for AI and that this guidance note serves as the SNA drafting recommendations.

Global Consultation Outcomes (1)

Question: Is this topic of relevance for your country?

- **33 of 48** respondents consider improving the visibility of AI in the national accounts as being of medium or high relevance

	High relevance	Medium relevance	Low relevance	Not relevant	No answer
EU	1	4	4	1	
Other Europe	1	3	2		
Americas	4	3	1	2	
Middle East and Near East	3	1	1		
Asia and Pacific	1	7	1	1	1
Africa	4	1		1	
TOTAL	14	19	9	5	1

Global Consultation Outcomes (2)

Question: Do you agree that the updated SNA include the following definition of AI: "AI is a computer program operating a system capable of recognition and reasoning consistent with human recognition and reasoning"?

- **40 of 48** respondents agree with this definition
- Some suggested improvements:
 - Modify the phrase "consistent with" to "simulating"
 - Add references to prediction and autonomy to make the more definition more precise.

Potential revised statistical definition of AI:

- "AI is a computer program operating a system capable of recognition, reasoning, **communication, and prediction simulating** human recognition, reasoning, **and communication**"

Global Consultation Outcomes (3)

Question: Do you agree to update the definition of Intellectual Property Products to....(include) “...the creation of intelligent systems...”

- **44 of 48** respondents agree with this proposal
- One response indicated a preference for citing the specific phrase “artificial intelligence” rather than “intelligent systems”.

Potential revised IPP definition:

- “The result of research, development, investigation, or innovation leading to knowledge or **the creation of artificial intelligence systems** that the developers can market....”

Global Consultation Outcomes (4)

Question: Do you agree that Artificial Intelligence should be explicitly mentioned in the asset classification in a new class called “Computer Software and Artificial Intelligence” with AI appearing with an “of which” category?

- **38 of 48** respondents agree with this proposal
- Several of the negative responses anticipated practical difficulties in differentiating AI from other software, and wanted it clarified that the “of which” category would be voluntary.

Global Consultation Outcomes (5)

Question: Do you agree that the value of the cost of producing training datasets should be excluded from the value of own-account AI and included instead in the value of Data assets?

- **38 of 48** respondents agree with this proposal
- Several of the negative responses cited anticipated practical challenges with the general concept of separating computer software and databases (as recommended in GN DZ.6 “Recording of Data in the national accounts”).

Global Consultation Outcomes (6)

Question: Do you agree that the value of the cost of data services required by an AI should be excluded from the value of AI and recorded as intermediate consumption?

- **42 of 48** respondents agree with this proposal
- One response indicated that the value of data services may also be included as part of a Data asset purchase rather than IC

Global Consultation Outcomes (7)

Question: Do you agree that the updated CPC include specific classes for AI and that this guidance note serves as the SNA drafting recommendations?

- **42 of 48** respondents agree that separate CPC classes for AI should be established

Question: Do you agree that the updated ISIC should include no structural change for AI, or do you think that separate ISIC classes for AI should be established?

- **40 of 48** respondents agreed that separate ISIC categories for AI should not be established

Questions for the AEG

- 1) Does the AEG support modifying the proposed definition of AI to “a computer program operating a system capable of recognition, reasoning, **communication, and prediction simulating** human recognition, reasoning, **and communication**?”
- 2) Does the AEG support modifying the proposed definition of IPP to “the result of research, development, investigation, or innovation leading to knowledge **or the creation of artificial intelligence systems** that the developers can market or use to their own benefit in production because use of the knowledge or system is restricted by means of legal or other protection.”?
- 3) Does the AEG support including AI as an “of which” classification in a new IPP class called “Computer Software and Artificial Intelligence”?
- 4) Does the AEG agree that the value of the cost of producing or purchasing training datasets should be excluded from the value of AI and included instead in the value of Data assets or intermediate consumption, as appropriate?
- 5) Does the AEG agree that this guidance note should serve as the AEG drafting recommendations for the CPC and ISIC Update Task Teams?