

content generated by generative adversarial networks;

(2) fundamental research on technical tools for identifying manipulated or synthesized content, such as watermarking systems for generated media;

(3) social and behavioral research related to manipulated or synthesized content, including human engagement with the content;

(4) research on public understanding and awareness of manipulated and synthesized content, including research on best practices for educating the public to discern authenticity of digital content; and

(5) research awards coordinated with other federal agencies and programs, including the Defense Advanced Research Projects Agency and the Intelligence Advanced Research Projects Agency,<sup>1</sup> with coordination enabled by the Networking and Information Technology Research and Development Program.

(Pub. L. 116–258, § 3, Dec. 23, 2020, 134 Stat. 1151.)

### § 9203. NIST support for research and standards on generative adversarial networks

#### (a) In general

The Director of the National Institute of Standards and Technology shall support research for the development of measurements and standards necessary to accelerate the development of the technological tools to examine the function and outputs of generative adversarial networks or other technologies that synthesize or manipulate content.

#### (b) Outreach

The Director of the National Institute of Standards and Technology shall conduct outreach—

(1) to receive input from private, public, and academic stakeholders on fundamental measurements and standards research necessary to examine the function and outputs of generative adversarial networks; and

(2) to consider the feasibility of an ongoing public and private sector engagement to develop voluntary standards for the function and outputs of generative adversarial networks or other technologies that synthesize or manipulate content.

(Pub. L. 116–258, § 4, Dec. 23, 2020, 134 Stat. 1151.)

### § 9204. Generative adversarial network defined

In this chapter, the term “generative adversarial network” means, with respect to artificial intelligence, the machine learning process of attempting to cause a generator artificial neural network (referred to in this section as the “generator”<sup>1</sup> and a discriminator artificial neural network (referred to in this section as a “discriminator”) to compete against each other to become more accurate in their function and outputs, through which the generator and discriminator create a feedback loop, causing the generator to produce increasingly higher-quality artificial outputs and the discriminator to increas-

ingly improve in detecting such artificial outputs.

(Pub. L. 116–258, § 6, Dec. 23, 2020, 134 Stat. 1152.)

#### REFERENCES IN TEXT

This chapter, referred to in text, was in the original “this Act”, meaning Pub. L. 116–258, Dec. 23, 2020, 134 Stat. 1150, known as the Identifying Outputs of Generative Adversarial Networks Act and also as the IOGAN Act, which is classified principally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 9201 of this title and Tables.

This section, referred to in text, was in the original “this paragraph”, and was translated as reading “this section”, meaning section 6 of Pub. L. 116–258, to reflect the probable intent of Congress.

## CHAPTER 118—SUSTAINABLE CHEMISTRY

Sec.	
9301.	National coordinating entity for sustainable chemistry.
9302.	Strategic plan for sustainable chemistry.
9303.	Agency activities in support of sustainable chemistry.
9304.	Partnerships in sustainable chemistry.
9305.	Prioritization.
9306.	Rule of construction.

### § 9301. National coordinating entity for sustainable chemistry

#### (a) Establishment

Not later than 180 days after January 1, 2021, the Director of the Office of Science and Technology Policy shall convene an interagency entity (referred to in this chapter as the “Entity”) under the National Science and Technology Council with the responsibility to coordinate Federal programs and activities in support of sustainable chemistry, including those described in sections 9303 and 9304 of this title.

#### (b) Coordination with existing groups

In convening the Entity, the Director of the Office of Science and Technology Policy shall consider overlap and possible coordination with existing committees, subcommittees, or other groups of the National Science and Technology Council, such as—

- (1) the Committee on Environment;
- (2) the Committee on Technology;
- (3) the Committee on Science; or
- (4) related groups or subcommittees.

#### (c) Co-chairs

The Entity shall be co-chaired by the Director of the Office of Science and Technology Policy and a representative from the Environmental Protection Agency, the National Institute of Standards and Technology, the National Science Foundation, or the Department of Energy, as selected by the Director of the Office of Science and Technology Policy.

#### (d) Agency participation

The Entity shall include representatives, including subject matter experts, from the Environmental Protection Agency, the National Institute of Standards and Technology, the National Science Foundation, the Department of Energy, the Department of Agriculture, the Department of Defense, the National Institutes of Health, the Centers for Disease Control and Pre-

<sup>1</sup> So in original. Probably should be “Activity.”

<sup>1</sup> So in original. Probably should be followed by a closing parenthesis.