Korea

National Strategy for Artificial Intelligence⁶⁰¹

Korea's "National Strategy for Artificial Intelligence" was announced in December 2019. While its main focus is building a world class AI technical capacity through ambitious targets such as 'achieving a world top 3 digital competitiveness by 2030', it also aims to address AI ethics and algorithmic transparency related issues under the pillar of realizing people centered AI.

This national strategy materializes the "Presidential Initiative for AI" that President Moon Jae-in announced on October 28, 2019. During his remark, he stated "AI is moving beyond scientific and technological advancements and is approaching us as a new civilization... AI will not only affect industrial sectors but also solve many issues facing our society: public health in an aging society, welfare for senior citizens living alone, the safety of women living by themselves, and the prevention of crimes that are becoming more sophisticated."

Korea's "National Strategy for Artificial Intelligence" has nine major strategies and 100 major tasks in three major areas. The major areas are (1) fostering a global-leading AI ecosystem, (2) becoming a country unrivaled for its use of AI, and (3) realizing people-centered AI. This "National Strategy for Artificial Intelligence" is a result of the cooperation of the entire Korean ministries and offices including the Ministry of Science and ICT, the Ministry of the Interior and Safety, and the Ministry of Education, and the 'Presidential Committee on the Fourth Industrial Revolution' that deliberates upon and coordinates important policy matters pertaining to the development of AI.⁶⁰²

AI R&D Strategy

To strengthen its national technological competitiveness, expand infrastructure, and secure AI talents, Korea announced the AI R&D Strategy

⁶⁰¹ Ministry of Science and ICT, *Policies, National Strategy for Artificial Intelligence* (Mar. 23, 2020)

https://www.msit.go.kr/english/msipContents/contentsView.do?cateId=tst60&artId=2771 576

⁶⁰² Presidential Committee on the Fourth Industrial Revolution, *About PCFIR* (2020) <u>https://www.4th-ir.go.kr/home/en</u>

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in May 2018 in which the government will invest 2.2 trillion won for five years (2018 – 2022) in the sectors of brain science, industrial mathematics, infrastructure, AI technology and talents, and AI service and industry.⁶⁰³ Furthermore, Korea plans to promote the Next AI R&D Project⁶⁰⁴ (2022 – 2026) on the scale of 1 trillion won to go beyond the limitation of the current AI technology and to become the world's leading AI technology country. Above all, it emphasizes the importance of ensuring explainability, robustness, and fairness of AI R&D activities.

Amendments to the Three Major Data Privacy Laws

The Korean government amended the major three data privacy laws in February 2020 to protect personal information and improve the personal data protection and privacy governance system in the era of the 4th industrial revolution.⁶⁰⁵ The three laws are the *Personal Information Protection Act* (PIPA), the *Act on the Promotion of the Use of the Information Network and Information Projection* ("the Network Act"), and the *Credit Information Use and Protection Act* (the "Credit Information Act"). The amendments are the legislative measure that reflects the outcomes of the "Hackathon agreements" (February and April 2018) in which related ministries, civil organizations, professionals from industry and the legal circles participated, and the recommendations of the Presidential Committee on the Fourth Industrial Revolution (May 2018). It focuses on introducing the concept of using fictitious names to foster the use of data, reviewing related laws and unifying the regulatory system, and strengthening the responsibility of the users.

Establishment of Personal Information Protection Commission (PIPC)

The amendments to the three major data privacy laws in February 2020 brought together personal information protection functions scattered across ministries and launched the new organization, PIPC, on August 5,

⁶⁰³ HRST Policy Platform, AI R&D Strategy (May 2018),

https://hrstpolicy.re.kr/kistep/kr/policy/policyPlanKorDetail.html?board_seq=26570&board_class=BOARD01&rootId=2003000&menuId=2003102

⁶⁰⁴ (footnote #1) National Strategy for Artificial Intelligence, p. 22

⁶⁰⁵ Ministry of Culture, Sports and Tourism, "Data 3 Act" (Mar. 30, 2020) http://www.korea.kr/special/policyCurationView.do?newsId=148867915

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2020.⁶⁰⁶ The PIPC an integrated supervisory authority with the primary role of the protection and supervision of personal information. PIPC was originally under the President as a body run based on compromise and agreement, but now it has the independent authority for its operation.

Global Partnership – OECD, G20, GPAI, and UNESCO

As a member of the global community, the Korean government has been actively participating in international cooperation in the AI sector to promote responsible development and use of AI. Korea endorsed the OECD Principles in 2019⁶⁰⁷ as well as the G20 principles and actively participates in international cooperation to set up the global AI principles. Furthermore, the Korean government is one of the founding members of the Global Partnership on AI (GPAI), the world's first international AI initiative.⁶⁰⁸

In July 2020, the Korean government co-organized the Virtual Asia-Pacific Consultation on the first draft of the UNESCO Recommendation on the Ethics of AI with the UNESCO, and led the discussions on values, principles, and policy tasks regarding the UNESCO Recommendation on the Ethics of AI.⁶⁰⁹

AI Ethics

On October 28, 2019, in his "Presidential Initiative for Artificial Intelligence" President Moon Jae-in stated "The Korean government will pay special attention to change in the job market and AI-related ethical issues."⁶¹⁰ In particular, Korea's "National Strategy for Artificial

⁶⁰⁶ Personal Information Protection Commission, 2019 Personal Information Protection Policy Performance at-a-glance (Sept. 18, 2020)

http://www.pipc.go.kr/cmt/english/news/selectBoardArticle.do

⁶⁰⁷ OECD, Forty-two countries adopt new OECD Principles on Artificial Intelligence (May 22, 2019) https://www.oecd.org/science/forty-two-countries-adopt-new-oecd-principles-on-artificial-intelligence.htm

⁶⁰⁸ OECD, OECD to host Secretariat of new Global Partnership on Artificial Intelligence (June 15, 2020) https://www.oecd.org/going-digital/ai/oecd-to-host-secretariat-of-newglobal-partnership-on-artificial-intelligence.htm

⁶⁰⁹ Ministry of Science and ICT, *Launch of first global AI initiative, GPAI* (June 15, 2020)

https://www.msit.go.kr/english/msipContents/contentsView.do?cateId=tst56&artId=2996 961

⁶¹⁰ Cheong Wa Dae, Remarks by President Moon Jae-in at Korean Artificial Intelligence Developers Conference "DEVIEW 2019" (Oct. 28, 2019)

https://english1.president.go.kr/Briefingspeeches/Speeches/682

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Intelligence" includes 'preventing AI dysfunction and establishing AI ethics' as one of nine major actions and aims to set up AI Ethics Principles through a public consultation.

As a follow-up action to establish the comprehensive AI ethical standards which all members of society – developers, providers, and users – can refer to, from development to use of AI, the Korean government has formed an AI ethics research team and analyzed the commonalities and differences in OECD AI Principles and 25 global major AI ethical principles. As a result, it has drafted the Korean AI ethical standard that embraces the existing domestic and international ethical principles. The Korean government plans to announce the Korean AI ethical standards in December 2020 after hearing opinions of the academia, industry, and civil organizations.⁶¹¹

Meanwhile, the Korean government takes a stance that the AI development should refrain from developing lethal autonomous weapons, but rather focus on supporting non-weapon systems such as the human decision-making process and effective management of military supplies. To this end, it will continue to conduct research activities that correspond to the international norms, including discussions on lethal autonomous weapons at the meetings of the expert group under the UN.⁶¹²

Algorithmic Transparency

The Korean government outlined the regulation to secure accountability, interoperability, and safety of intelligence information technology in the newly drafted *Framework Act on Intelligence Informatization*.⁶¹³ The Korean government will determine the details and level of regulation as a form of ministerial decree after hearing opinions

⁶¹¹ National Strategy for Artificial Intelligence, p.49 (Dec. 2019)

https://www.msit.go.kr/cms/english/pl/policies2/__icsFiles/afieldfile/2020/03/23/Nationa 1%20Strategy%20for%20Artificial%20Intelligence 200323.pdf

⁶¹² ZDNet, University boycott ends after 'KAIST' confirms no 'killer robot' development (April 10, 2018) https://www.zdnet.com/article/university-boycott-ends-after-kaist-confirms-no-killer-robot-development/

⁶¹³ National Law Information Center, (Name of the Law) (June 9, 2020)

https://www.law.go.kr/lsSc.do?section=&menuId=1&subMenuId=15&tabMenuId=81&eventGubun=060101&query=%EC%A7%80%EB%8A%A5%EC%A0%95%EB%B3%B4 #undefined

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from the related parties and considering the technology development progress, AI industry vitalization, and infringement of business' autonomy.

Improvement of Policies and Laws for the Era of AI

In May 2020, the Korean government amended the *Framework Act* on *National Informatization*⁶¹⁴ with the new name of the *Framework Act on Intelligence Informatization* to provide fundamental law for the era of intelligence information. This Act presents the definition of intelligence information technology and the basis of all regulations that address the development and use of AI, such as the basic principles of the intelligence information society, technical requirement, standardization, and personal data protection. Moreover, the Korean government has introduced the 'future-oriented legal system'⁶¹⁵ to review and revise regulations to address the issues of using AI in (1) data, (2) intellectual property, (3) accountability, (4) regulation of algorithms and trade secret, (5) finance, (6) platform, (7) labor, (8) healthcare, and (9) welfare.

Human Rights Advocacy

The Korean government has established the National Human Rights Commission of Korea (NHRCK) in 2001 as a national advocacy institution for human rights protection.⁶¹⁶ During his congratulatory remark on 2018 Human Rights Day in December, President Moon Jae-in stated "when human rights are realized in everyday lives, their value is demonstrable... Human rights are guaranteed through peace, and peace is secured through human rights." He also extended his gratitude to NHRCK for "fully demonstrating the history and significance of the *Universal Declaration of Human Rights*."⁶¹⁷

⁶¹⁵ (footnote #1) National Strategy for Artificial Intelligence, p. 26

⁶¹⁴ National Law Information Center, *Framework Act on National Informatization* (2015) http://www.law.go.kr/lsInfoP.do?lsiSeq=172205&lsId=000028&chrClsCd=010202&url Mode=engLsInfoR&viewCls=engLsInfoR#0000

https://www.msit.go.kr/SYNAP/skin/doc.html?fn=14acc067ebaf2780a558e24993a560f0 &rs=/SYNAP/sn3hcv/result/202010/

⁶¹⁶ National Human Rights Commission of Korea, *Purpose* (2001)

https://www.humanrights.go.kr/site/homepage/menu/viewMenu?menuid=002001001001

⁶¹⁷ Cheong Wa Dae, *Congratulatory Remarks by President Moon Jae-in on 2018 Human Rights Day* (December 10, 2018)

https://english1.president.go.kr/Briefingspeeches/Speeches/101

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In addition, the Korean government has been an active member in the seven core international human rights instruments including the "International Covenant on Civil and Political Rights" and "International Covenant on Economic, Social, and Cultural Rights." Especially since its entry into the United Nations (UN) in 1991 and the Commission of Human Rights (CHR) in 1993, Korea has been engaged in various international cooperation activities for improvement of human rights, especially the rights of the vulnerable and the North Koreans.⁶¹⁸

Evaluation

Korea is one of the leading countries in national AI policies. Korea has adopted a comprehensive National Strategy for AI and has promoted a "future-oriented" legal system. Korea has updated national privacy laws, established a Personal Information Protection Commission, and maintains a leading role in the defense of human rights. Korea has endorsed the OECD and the G20 AI principles, and works in cooperation with other countries on AI policy. While Korea has not yet expressed support for the Universal Guidelines for AI or the Social Contract for the Age of AI, elements of these documents are reflected in the national AI policies.

⁶¹⁸ Ministry of Foreign Affairs, *Human Rights Diplomacy*, <u>http://www.mofa.go.kr/eng/wpge/m_5648/contents.do</u>