13/June/2020

JEITA Position Paper on European Commission's "WHITE PAPER On Artificial Intelligence"

Japan Electronics and Information Technology Industries Association (JEITA) is Japan's leading ICT and electronics association, with around 400 member companies from Japan and abroad. JEITA serves as a platform for connecting industries such as electronic components and devices, electronic equipment, and IT solutions and services as well as stakeholders in those industries.

We appreciate this opportunity to share our views on the "White Paper On Artificial Intelligence - A European approach to excellence and trust ('White Paper')."

In May 2018, JEITA's Technical Strategy Board released its recommendations entitled "Towards the Implementation of an Artificial Intelligence Society to realize SDGs and Society 5.0" (URL: https://home.jeita.or.jp/press_file/20181002154214_5ArIOKGNLH.pdf), in which JEITA emphasized the following five points that, we believe, are in line with the views expressed in the White Paper:

(1) AI exists for the sake of society; therefore, it should be actively used;
(2) Importance of wide and accurate understanding of AI by the general public;
(3) Necessity to create social systems for practical use of AI;
(4) International cooperation to promote the societal implementation of AI; and
(5) Need for a broad perspective in HR development in the era of AI.

JEITA understands that the objectives of the White Paper are: to promote the development and innovation of AI industry in Europe; to protect fundamental human rights from potential risks AI would impose; and to resolve social challenges through the use of AI. We respect and support these objectives.

JEITA appreciates the efforts of the European Commission ("EC") to develop rules for human-centered AI with adopting risk-based approach. To this end, JEITA hopes the EC to consider our comments below.

- Rules governing the use of AI should be developed together with private sector. It is important that experts in the private sector participate in the rule making process.

- Multi-stakeholders approach should be employed to carefully discuss and achieve the balance between the protection of privacy/human rights and the protection of safety/health/livelihood of individuals, as the ongoing COVID-19 pandemic highlights.

- To improve the stability and predictability of the laws and regulations, clarifying the definition of high-risk AI applications is of high importance.

- As to high-risk AI applications, instead of focusing on AI technology itself, the EC should first examine with multi-stakeholders whether the existing laws and regulations applicable to an entire system incorporating AI in specific businesses or industries already address the concerned risks on the use of AI adequately.

- Given that technologies are and will be used globally and cross-border, if and when introducing new laws and regulations, consistency with international standards should be fully considered through cooperation with non-EU countries.

- To promote social benefits innovative technologies such as AI would bring, laws and regulations governing the use of AI, if to be implemented, should not be unnecessarily restrictive or overly burdensome in terms of complying with them.

- Cost of regulatory compliance must be reasonable and should not hinder sustainability of AI businesses.

- If a regulatory framework would be adopted, effectiveness and usefulness of such framework should be tested through a pilot program in advance.

- Give the rapid pace of evolution of AI technology, instead of introducing new laws and regulations governing the use of AI at this point, providing guidelines on the use of AI with regular and timely updates as appropriate would be desirable.

Based on the above views, we submit JEITA's additional comments on the White Paper that we could not include in the Consultation questionnaire due to the limitation of the number of the characters.

Note: In the following, WP stands for White Paper and CO stands for Consultation

WP SECTION 4. AN ECOSYSTEM OF EXCELLENCE (WP p.5~)

CO 1.1 In your opinion, how important are the six actions proposed in section 4 of the White Paper on AI ?

(JEITA answer)

Very Important:

Working with Member states (4.A)
Skills (4.C)
Partnership with the private sector (4.E)
Promoting the adoption of AI by the public sector (4.F)

Important:

Focussing the efforts of the research and innovation community (4.B)
Focus on SMEs (4.D)

CO 1.2 Are there **other actions that should be considered?**

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It is important to:
-Ensure business continuity to maintain effective data, computer infrastructure, applications and other tools which are required for social benefits.
-Consider balance between saving people's lives, securing safety and health of individuals while securing privacy as the COVID -19 crisis highlighted.
-Consider international cooperation and coordination to promote common rules on the ethical development and use of AI, which preserve an enabling environment for innovation.

Supplement to our answer on 1.2

JEITA believes actions based on two points of views described at "***4.G SECURING ACCESS TO DATA AND COMPUTING INFRASTRUCTURES" and "4.H INTERNATINAL ASPECTS"*** are important along with six actions. Please see our comments on 4.G and 4.H of the White Paper for details.

WP 4A. *WORKING WITH MEMBER STATES* (WP p.5)

CO 1.3 In your opinion, how important is it in each of these areas to align policies and strengthen coordination as described in section 4.A of the White Paper ?

(JEITA answer)

Very Important:

Strengthen excellence in research
Establish world-reference testing facilities for AI

Important:

Promote the uptake of AI by business and the public sector
Increase the financing for start-ups innovating in AI

Develop skills for AI and adapt existing training programmes
Build up the European data space

CO 1.4 Are there other areas that should be considered?

500 character(s) maximum

-Build a reliable framework between companies inside and outside Europe through free and secure cross-border data flows.
-Establish a project development methodology by utilizing AI to address issues with data-driven solutions.
-Provide support to improve skills required for businesses using AI, including software development and ethics related to use of AI.

4B. *FOCUSING THE EFFORTS OF THE RESEARCH AND INNOVATION COMMUNITY* (WP p.5)
4C. *SKILLS* (WP p.6)
4E. *PARTNERSHIP WITH THE PRIVATE SECTOR* (WP p.7)

CO 1.5 In your opinion how important are the three actions proposed in sections 4.B, 4.C and 4.E of the White Paper on AI ?

(JEITA answer)
Very Important:
Set up a public-private partnership for industrial research
Important:
Support the establishment of a lighthouse research centre that is world class and able to attract the best minds
Network of existing AI research excellence centre

CO 1.6 Are there any other actions to strengthen the research and innovation community that should be given a priority?

500 character(s) maximum

-Incorporate AI components in the Horizon Europe research projects and fund critical AI research.
-Establish a framework for wide-ranging participation both inside and outside Europe to promote international cooperation and coordination.

WP 4D. *FOCUS ON SMES* (WP p.7)
We don't have any specific comments on it.

WP 4G. *SECURING ACCESS TO DATA AND COMPUTING INFRASTRUCTURES* (WP p.8)

・「G, SECURING ACCESS TO DATA AND COMPUTING INFRASTRUCTURES："Promoting responsible data management practices and compliance of data with the FAIR principles will contribute to build trust and ensure re-usability of data. Equally important is investment in key computing technologies and infrastructures".

Comments from JEITA

・We believe that management and compliance that promote use of data are necessary, while ensuring the protection of privacy and the rights of individuals.

・Clarification on ”responsible data management practices and compliance of data”is needed in the future discussion on European Data Strategy and to have dialogue and cooperation with non-EU countries.

WP 4H. *INTERNATIONAL ASPECTS* (WP pp.8-9)

（WP）The EU will continue to cooperate with like-minded countries, but also with global players, on AI, based on an approach based on EU rules and values.

Comments from JEITA

・We support the EU regulations and the European value on fundamental rights (including human dignity, pluralistic coexistence, unity, non-discrimination, privacy and protection of personal information). Close cooperation with like-minded countries outside EU is indispensable with considering global and cross-border use of AI

・When transferring personal information within and outside the EU through AI systems, we believe that consideration for the information entity (owner) is necessary, such as notification to and consent of the entity, if handling personal information in special manner.

WP SECTION 5. *AN ECOSYSTEM OF TRUST: REGULATORY FRAMEWORK FOR AI* (WP p.9～)

WP 5A. *PROBLEM DEFINITION* (WP p.10)

CO 2.1 In your opinion, how important are the following concerns about AI ?

(JEITA answer)

Very Important:

AI may endanger safety

Important:

AI may breach fundamental rights (such as human dignity, privacy, data protection,

freedom of expression, workers' rights etc.)

Neutral:

The use of AI may lead to discriminatory outcomes
AI may take actions for which the rationale cannot be explained
AI may make it more difficult for persons having suffered harm to obtain compensation
AI is not always accurate

CO 2.2 Do you have any other concerns about AI that are not mentioned above?
Please specify:
500 character(s) maximum

-Although the above 4 concerns JEITA checked “Neutral” need adequate and reasonable consideration, these concerns should not be over-emphasized. They are not specific to AI, and they have already been alleviated to some extent. -Risks AI imposes should be explained in a manner which is understandable even by non-experts based on comparison with concerns and risks existing (non-AI) technologies impose. -Dependency on AI may cause adverse effects on human autonomy. (468)

Supplement to our answer

No one can fully guarantee the safety of AI. In the medical sector, for example, skills of doctors vary, and it is reasonable to use medical AI that brings same level of judgment and medical skills as experienced doctors. At present, it is considered reasonable to identify technical and non-technical issues in a step-by-step manner and define the process, while promoting the use of AI as a means to assist doctors, such as diagnostic AI, instead of fully automated AI for medical.

WP 5B. *POSSIBLE ADJUSTMENTS TO EXISTING EU LEGISLATIVE FRAMEWORK RELATING TO AI*
(WP p.13)

CO 2.3 Do you think that the concerns expressed above can be addressed by applicable EU legislation? If not, do you think that there should be specific new rules for AI systems?

(JEITA answer) Other

Other, please specify
500 character(s) maximum

-Guidelines on “High Risk AI applications” is desirable at this stage as more time needed to identify and regulate them. -In healthcare and railway sectors, physical and operational safety measures are regulated by the existing sectorial laws to eliminate or ease risks. The existing rules should be reviewed before creating a specific new rule for AI.

-If new rules are to be introduced, such rules should be revised in a timely manner upon stakeholders' requests as AI evolves fast. (481)

WP 5C. *SCOPE OF A FUTURE EU REGULATORY FRAMEWORK* (WP pp.16-18)

CO 2.4 If you think that new rules are necessary for AI system, do you agree that the introduction of new compulsory requirements should be limited to high-risk applications (where the possible harm caused by the AI system is particularly high)?

(JEITA answer) Other

Other, please specify
500 character(s) maximum

-For technology progress, use of "High Risk" AI systems showing extremely high performance may be allowed under certain procedures (with regulatory supervision).

-The definition of "High Risk" should be aligned with the discussions at international SDOs and initiatives.

-The requirements on a "High Risk" AI applications should be exempted or eased in case risks of an entire system are sufficiently eliminated or mitigated by measures such as independent and redundant fail-safe systems.

Supplement to our answer

JEITA believes that it is important to carefully consider in an approach to regulating technologies involving high-risk AI applications include the following:

1) Are these technologies necessary for their purposes and applications (safety, healthcare, transport, energy, public sector and so on)?
2) Are rationality and validity of the technologies verified in advance?
3) Are there other effective ways to achieve the same objective without using such sensitive data?

JEITA further believes on high-risk AI applications as follows:

・Since AI is a tool, we believe that AI itself is not a high risk, and that it is necessary to educate a wide range of people to improve their literacy including ethics in order to use tools properly.

・Even if regulations are introduced for high-risk AI applications, we think it is important to;

- pilot before implementing regulations and conduct adequate risk assessments in advance as a part of process.
- build a system to review standards as appropriate as technology evolves faster.

- discuss in each sector to balance the economic and social benefits and social costs (example: discuss self-driving cars and healthcare separately).
- make no exceptions of high-risk AI applications and certain criteria because any exceptions increases business risk as any AI applications can become high-risk.

CO 2.5 If you wish, please indicate the AI application or use that is most concerning ("high-risk") from your perspective:

500 character(s) maximum

None

WP 5D. *TYPES OF REQUIREMENTS* (WP pp.18-22)

CO 2.6 In your opinion, how important are the following mandatory requirements of a possible future regulatory framework for AI (as section 5.D of the White Paper) (1-5: 1 is not important at all, 5 is very important)?

(JEITA answer)

Very Important:

The quality of training data set
The keeping of records and data
Robustness and accuracy of AI systems
Human oversight
Clear liability and safety rules

Important:

Information on the purpose and the nature of AI systems

Supplement to our answer

・ We believe it is necessary to clarify the standards of requirements (a) to (f) with rationales and validity for stability and predictability of laws and regulations.

a) *Training data* (WP pp.18-19)

・（WP）「*Requirements to take reasonable measures aimed at ensuring that such subsequent use of AI systems does not lead to outcomes entailing prohibited discrimination. These requirements could entail in particular obligations to use data sets that are sufficiently representative, especially to ensure that all relevant dimensions of gender, ethnicity and other possible grounds of prohibited discrimination are appropriately reflected in those data sets(p.19)*」

Comments from JEITA

It is important to use unbiased data sets, but we cannot avoid data sets with bias. In the requirement to use an unbiased dataset, it should allow to use such data set if the bias can be mitigated by algorism. However, it is not clear how much residual bias is acceptable when there is no definition of equality.

b) *Keeping of records and data* (WP p.19)

・*(WP「Measures should be taken to ensure that they are made available upon request, in particular for testing or inspection by competent authorities.(p.19)」*

Comments from JEITA

We believe that source codes and algorithms, a source of competitive strength for products and services, should not be required to be submitted by authorities. If necessary, clear reasons should be given, required information should be limited as minimal as possible, and sufficient consideration to handle confidential information should be provided.

・*(WP 「The records, documentation and, where relevant, data sets would need to be retained during a limited, reasonable time period to ensure effective enforcement of the relevant legislation. Measures should be taken to ensure that they are made available upon request, in particular for testing or inspection by competent authorities.」*

Comments from JEITA

・AI algorithms and application development are the result of long-term research and development of a company. It is impractical to keep records of all the data sets used to training and testing for a long development period. It would be difficult to be consistent with the EU privacy rules (request to delete personal information no longer needed).

・Documentation, training methods, processes, and technology related to the programs used to build, test, and validate the AI system are the confidential information of a company, and we believe that there must be clear rules for handling such information in the inspection and investigation of authorities.

c) *Information provision* (WP p.20)

・*(WP)「Ensuring clear information to be provided as to the AI system's capabilities and limitations(p.20)」*

Comment from JEITA

・Providing information for transparency is an important issue, but it is not easy, and we believe that a realistic approach is needed.

d) *Robustness and accuracy* (WP p.20)

Please see our answer in 2.10 and 2.11 of Consultation.

e) *Human oversight* (WP p.21)

・*(WP)「in the design phase, by imposing operational constraints on the AI system (e.g. a driverless car shall stop operating in certain conditions of low visibility when sensors may become less reliable or shall maintain a certain distance in any given condition from the*

preceding vehicle).(p.21)」

Comments from JEITA

・When high-precision AI is widespread, each AI system is implemented by a very complicated model. Therefore, consequences should be considered for failsafe to avoid increase of possibilities of another accident.

・If risk elimination is designed, or if AI or mechanical verification has been proven to be more accurate than human verification, this requirement may be excluded.

・*（WP） the output of the AI system does not become effective unless it has been previously reviewed and validated by a human (e.g. the rejection of an application for social security benefits may be taken by a human only);*

・ *the output of the AI system becomes immediately effective, but human intervention is ensured afterwards (e.g. the rejection of an application for a credit card may be processed by an AI system, but human review must be possible afterwards)*

Comments from JEITA

・AI applications, including IoT and M2M, are expected to expand in the future. In such a situation, excessive demand for human involvement may impede innovation. Required level of human involvement and the applied sectors need to be carefully verified.

f) *Specific requirements for remote biometric identification* (WP p.21)

CO 2.7 In addition to the existing EU legislation, in particular the data protection framework, including the General Data Protection Regulation and the Law Enforcement Directive, or, where relevant, the new possibly mandatory requirements foreseen above (see question above), do you think that the use of remote biometric identification systems (e.g. face recognition) and other technologies which may be used in public spaces need to be subject to further EU-level guidelines or regulation:

（JEITA answer）

☑ Biometric identification systems should be allowed in publicly accessible spaces only in certain cases or if certain conditions are fulfilled (please specify)

Please specify your answer:

-The benefits of ICT and AI for protection of life and livelihoods (public interest) should be balanced with privacy protection as the COVID-19 crisis highlights.
-Although we acknowledge the concerns on using data collected in public place without individuals' consent, face recognitions have a wide range of potential AI applications for social benefits. Since GDPR addresses proper handling of biometric data for remote identification, additionally overarching regulations may not be warranted.

Supplement to our answer

- It is necessary to clarify the definition of public place such as shared vehicles and unmanned shuttles.
- It is necessary to clarify whether a case which benefits a person and not public, such as a vehicle theft prevention system using face authentication in public places (public carpooling space) is exempt from application.
- If regulations on remote biometric technologies is to set-up, they should be limited to systematic surveillance conducted on a large scale in publicly accessible spaces in order to ensure safety and security, well balancing with freedom of assembly and privacy protection.
- We believe it is necessary to understand risks through multi-stakeholder discussions when '*the Commission will launch a broad European debate on the specific circumstances, if any, which might justify such use, and on common safeguards.*(page 22 of the White Paper)'.

WP 5E. *ADDRESSEES* (WP p.22)

Comment from JEITA

- In the future discussion, the definition of entities in the AI value chain, such as developers and service providers (who use AI), and the scope of accountability for each entity (consistency with existing legislation needs to be taken into account) should be clarified.

WP 5F. *COMPLIANCE AND ENFORCEMENT* (WP p.23)

CO 2.10 What is the best way to ensure that AI is trustworthy, secure and in respect of European values and rules?

(JEITA answer)

☑ A combination of ex-ante compliance and ex-post enforcement mechanisms

Supplement to our answer

JEITA believes that the followings should be carefully considered for ex-ante compliance and ex-post enforcement mechanisms.

- Ex-ante compliance:
  - -To accelerate discussions among various stakeholders inside and outside the EU on transparent and objective standards to improve market environment
  - -Open and neutral ecosystem of trust (e.g. provision of retraining and the location of assessment body should not be limited within the EU)
- Ex-post enforcement:
  - -Clear criteria for conducting post-market surveillance
  - -A certain risk management on AI's continuous learning with new data, for outputs of ever-learning AI may not be predictable

JEITA further believes:

・Careful design is needed on how to establish and update testing and evaluation systems to catch up with rapidly evolving AI applications.
・Imposing excessive test in AI conformity assessment as well as requiring a broad range of AI products and services should be avoided in order to avoid delays in the introduction of innovative AI in Europe,

CO 2.11 Do you have any further suggestion on the assessment of compliance?

500 character(s) maximum

-Conformity assessment by third parties should not require disclosure of competitive or proprietary information (e.g. algorithms, data set details, etc.)
-Method and physical location of retraining of AI should not be unreasonably restrictive (e.g., Retraining should not be limited within the EU countries.) Retraining method should be discussed based on internationally shared best practices.

Supplement to our answer

・It is important when choosing an assessment mechanism so that it does not place an excessive burden on developers and app providers. The mechanism should be practical so that the designated assessment bodies can properly perform its duties. The level of expertise of both applications sector as well as AI and human resources of assessment bodies would determine whether an assessment can be conducted quickly. There is no "One Size Fit All" approach to assessing compliance, and the context in which the AI technology operates must be considered case by case.
・We believe that requiring datasets used in AI systems training being those only in compliance with EU regulations would not lead to international competitiveness because the available data for companies operating in Europe turns out to be limited by that requirement.

WP 5G. *VOLUNTARY LABELLING FOR NO-HIGH RISK AI APPLICATIONS* (WP p.24)

CO 2.8 Do you believe that a voluntary labelling system (Section 5.G of the White Paper) would be useful for AI systems that are not considered high-risk in addition to existing legislation?

（JEITA answer）

☑ Rather not

CO 2.9 Do you have any further suggestion on a voluntary labelling system?

500 character(s) maximum

-Proliferation of voluntary self-labelling systems that are similar or incompatible would confuse markets and users. Such confusion should be avoided.

-International AI standards are being developed by international standardization bodies such as ISO/IEC JTC 1 SC 42, IEEE-SA EDA and P7000-7014. European Commission's support to industry-led global standardization efforts (e.g., by providing good practices to increase reliability of AI) is highly appreciated.

WP 5H. *GOVERNANCE* (WP p.24)

(WP)
The EU enjoys excellent testing and assessment centres and should develop its capacity also in the area of AI. Economic operators established in third countries wanting to enter the internal market could either make use of designated bodies established in the EU or, subject to mutual recognition agreements with third countries, have recourse to third-country bodies designated to carry out such assessment.

Comments from JEITA

・We are concerned about the risk of leakage of corporate intellectual property when outsourcing assessment. It should be carefully considered.

CO SECTION 3 – SAFETY AND LIABILITY IMPLICATIONS OF AI, IoT AND ROBOTICS

CO 3.1 The current product safety legislation already supports an extended concept of safety protecting against all kind of risks arising from the product according to its use. However, which particular risks stemming from the use of artificial intelligence do you think should be further spelled out to provide more legal certainty?

□ Cyber risks
☐ Personal security risks
☐ Risks related to the loss of connectivity
☐ Mental health risks

(Comments from JEITA) We give JEITA's opinion at 3.2 on this paper.

CO 3.2 In your opinion, are there any further risks to be expanded on to provide more legal certainty?

500 character(s) maximum

-Above risks are neither specific to AI nor inherently related to AI. Discussion on these risks should be based on concrete applications of a particular AI system.
-Providing legal certainty should focus on risks inherently related to characteristics of AI, IoT or Robotics, which affect physical or mental well-being of consumers. Since these risks are well addressed in the existing laws and regulations, clarifying their applicability and interpretation to such risks must be a better approach.

CO 3.3 Do you think that the safety legislative framework should consider new risk assessment procedures for products subject to important changes during their lifetime?

(Comments from JEITA) We give JEITA's opinion at 3.4 on this paper.

CO 3.4 Do you have any further considerations regarding risk assessment procedures?

500 character(s) maximum

-New risk assessment procedures should be limited when critical functional changes may significantly alter the performance disclosed in tests or safety reports.
-Applicable requirements should be eased when AI assessment confirms sufficient low-risks; human oversights should be exempted for mitigated risks in designs or more reliable mechanical control.
-Balanced allocation of liabilities and responsibilities is required among AI stakeholders such as developers, service providers, and end users.

CO 3.5 Do you think that the current EU legislative framework for liability (Product Liability Directive) should be amended to better cover the risks engendered by certain AI applications?

(Comments from JEITA) We give JEITA's opinion at 3.6 on this paper.

CO 3.6 Do you have any further considerations regarding the question above?

500 character(s) maximum

-Since the existing framework for liability is robust, technologically neutral, and flexible enough to cover challenges stemming from emerging technology, changes to the current framework should not be made without due consideration.
-Changes to the current framework should only take place to mend significant and demonstrable shortcomings.
- Liabilities of software and service providers should be carefully tailored so that concerns on such liabilities would not discourage innovations.
(487)

CO 3.7 Do you think that the current national liability rules should be adapted for the operation of AI to better ensure proper compensation for damage and a fair allocation of liability?

(Comments from JEITA) We give JEITA's opinion at 3.8 on this paper.

Please specify the AI applications:

CO 3.8 Do you have any further considerations regarding the question above?

500 character(s) maximum

-Use of AI should be promoted as adequate safety measures eliminating or mitigating risks AI imposes are being implemented as the entire system incorporating AI.

-To ensure proper compensation and to fairly allocate liability on harms caused by AI, adequate governance structures are required. The each national authorities should have adequate expertise and share the uniform standards for investigation. Confidentiality of proprietary or sensitive business information should be strictly secured.
(499)

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