Question 1

What are the challenges and opportunities faced by policy makers and regulators in embracing transformative technologies for greater impact?

- a) **Keeping up with the pace of AI development**, especially for regulators to understand its dynamics, capabilities and the associated risks. **Developing and implementing new AI legislation may take a long period**, and there is a potential for these **policies may become outdated quickly**. In Malaysia, various Government Ministries/Agencies, academia as well as the private sectors are embracing and actively monitoring the development and use of AI¹.
- b) Availability of baseline information/data on the adoption of AI within the sector (the use of AI among the licensees) is necessary to make any informed decision in relation to shape relevant regulatory framework and policies to support the responsible and effective use of AI in the communications and multimedia sector.
- c) Balancing the elements of protecting the consumers' interests, promoting innovation with the use of AI and the need for regulatory oversight. The rise of generative AI may impose emerging risks such as deepfakes and AI-generated voice cloning i.e potential increased case of false and menacing content to be regulated. By focusing on these key elements, an adaptable regulatory framework would help to mitigate the risks of AI (such as algorithmic bias, privacy infringement, potential misuse of AI, workforce displacement, etc.) while promoting the use of AI in a responsible manner that benefits both consumers and innovators.
- d) The need for leadership in global AI Governance because transformative technologies often transcend national borders. The emerging global AI governance landscape is fragmented and dominated by relatively powerful states and large corporations. An international organization such as the UN has an important role to play in AI governance and harmonise cooperation at the global level, including in the maintenance of international peace and security.
- e) Safety measures against potential cybersecurity threats is also a challenge because issues like data privacy, security, ownership, and control become paramount with transformative technologies that rely heavily on data. Malaysia has embarked on a transformative journey to improve data governance through revising the Personal Data Protection Act 2010 and revisions to subsidiary regulations. The *Dewan Negara* (Senate) has also passed the Cyber Security Bill 2024 with the aim to enhance the nation's cyber security.

In addition, tapping into new areas such as AI may create significant **opportunities** for regulators other than improving productivity and efficiency, are as follows:

- a) **Spearhead regulatory initiative to mitigate the risk of AI-generated content** that potentially may harm the public such as false content, offensive content, menacing content, deepfake, etc.
- b) **Initiate regulatory roundtable, host forum discussions with thought leaders** as proactive engagement with the relevant stakeholders to assess the potential uses and risks of AI.
- c) **Development of relevant guideline/standard/technical codes** in promoting responsible use of AI among industry.
- d) **Building capacity through reskilling and upskilling initiatives** to equip people with new skill and knowledge such as AI. These are foundational knowledge to be equipped with in shaping effective policies/regulations that promote ethical and responsible use of AI.

¹ For instance, the Ministry of Science Technology and Innovation (MOSTI) has launched National Artificial Intelligence (AI) Roadmap 2021-2025 to pave the chart for AI development in Malaysia. Recently, the development of AI code of ethics and governance guidelines by the MOSTI will be completed in 2024. It outlines seven (7) principles of AI which to be complied across all 3 main categories, namely users and the public, policymakers and providers/developers of AI-based technology.

- e) Advocacy and awareness initiatives to introduce and to promote Al literacy to the society. For instance, the Government of Malaysia has introduced an initiative called "Al Untuk Rakyat"² in 2024 to raise awareness of Al among Malaysians.
- f) **Boosting innovation** by establishing clear and predictable regulations, policymakers can create an environment that encourages further development and adoption of transformative technologies.
- g) Addressing global issues with transformative technologies can be harnessed to address global challenges like climate change, poverty, and healthcare access. Policymakers can create frameworks that incentivise using these technologies for social good.
- h) **Promoting efficiency** as these technologies can streamline government processes, improve service delivery, and reduce costs. For example, the Malaysian judiciary made history in 2020 by using AI in the sentencing of individuals found guilty of drug related crimes.
- Empowering citizens as transformative technologies have the potential to empower citizens by increasing access to information and services. Policymakers can help ensure equitable access to these benefits.
- j) **Fostering collaboration** by establishing regulatory sandboxes and pilot programs can be created to facilitate collaboration between policymakers, businesses, and researchers to develop effective regulations for emerging technologies.

Question 2

What are the key regulatory measures and guiding principles to follow to foster positive and inclusive impact of transformative technologies?

- a) A well-defined scope of AI gives clarity to the technology's stakeholders. For instance, by having a clear definition of AI would assist the regulators and policymakers to understand the technology, applications, risk imposed and use cases of AI that fall within the regulatory framework.
- **b)** There is a need to **streamline regulations to promote investments** by reducing bureaucratic hurdles, offering incentives, etc.
- c) Improve the safeguarding of data privacy is necessary as_the deployment of AI processes large amount of data and this may include personal data. As such, data used by AI applications must comply with the existing Personal Data Protection Act to ensure potential sensitive information gathered and processed by AI applications are treated in a safe manner
- d) **Development of standards for AI is a must** to create trust, to help navigate emerging technologies, as a tool to meet certain objectives (e.g. privacy, responsible, interoperability). Ideally, standards should be global not according to certain industry. This is to ensure an inclusive, nonbiased, and trustworthy use of AI.

As a general principle, the Organisation for Economic Co-operation and Development (OECD) has established the AI Principles³, which has become a global benchmark in related to AI as depicted below:

OECD AI Principles	Recommendation for Policymakers
Inclusive growth, sustainable development and well-being	Investing in AI research and development
 highlights the potential for trustworthy AI to contribute to overall growth and prosperity for all – individuals, society, and planet – and advance global development objectives. 	 Governments should facilitate public and private investment in research & development to spur innovation in trustworthy Al.
Human-centred values and fairness	Fostering a digital ecosystem for AI
 Al systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and should include appropriate safeguards to ensure a fair and just society. 	 Governments should foster accessible AI ecosystems with digital infrastructure and technologies, and mechanisms to share data and knowledge.
Transparency and explainability	Shaping an enabling policy environment for Al

² Al untuk Rakyat is a self-learning online program designed to raise public awareness about Artificial Intelligence (AI) in Malaysia. It aims to demystify AI for people from all walks of life – a student, stay-at-home parents, a professional in any field, a senior citizen - basically, anyone interested in getting acquainted with it. Link: https://ai.gov.my/#/home

³ The OECD AI Principles promote use of AI that is innovative and trustworthy and that respects human rights and democratic values. Adopted in May 2019, they set standards for AI that are practical and flexible enough to stand the test of time https://oecd.ai/en/ai-principles

OE	CD AI Principles	Recommendation for Policymakers
•	This principle is about transparency and responsible disclosure around AI systems to ensure that people understand when they are engaging with them and can challenge outcomes.	Governments should create a policy environment that will open the way to deployment of trustworthy AI systems.
Rol	oustness, security and safety	Building human capacity and preparing for labour market
•	Al systems must function in a robust, secure and safe way	transformation
	throughout their lifetimes, and potential risks should be	Governments should equip people with the skills for AI and
	continually assessed and managed.	support workers to ensure a fair transition.
Acc	ountability	International co-operation for trustworthy AI
•	Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the OECD's values-based principles for AI.	 Governments should co-operate across borders and sectors to share information, develop standards and work towards responsible stewardship of AI.

Question 3

How to drive positive behaviours of market players? How to minimize risks while maximising benefits?

In driving positive behaviour among market players to embrace AI tech, readiness of initiatives related to AI are identified as follows:

- a) Establishing an AI code of ethics is the building block for the development of policies and laws to promote and regulate AI. It seeks to promote the beneficial and ethical use of AI while mitigating potential risks and harms. It provides clear guidelines and standards for ethical behaviour and responsible conduct in AI technology development and use, serving as a safety net for market players.
- b) Safety measures (in relation to data privacy, management of AI data, etc.) are in place and the readiness digital infrastructures to support the use of emerging technologies. This would contribute to building a safe and responsible ecosystem of AI for that will benefit the society as a whole. Such measures would minimise the risks associated with the use of AI.
- c) Offering financial incentives to encourage the use of emerging technologies by providing tax exemptions, tax relief, grants for R&D, etc.
- d) Education and raising awareness of AI is important to the society in enlightening the use, benefits and risks of AI. These concerted efforts would contribute to create demand for services/products powered by AI and foster the growth of AI ecosystem.
- e) **Foster collaboration** between governments, academic institutions, private sector, consumer groups and public) to develop best practices and share knowledge on ethical AI development. It is also encouraged that industry-led initiatives to develop codes of conduct and best practices for ethical AI development.
- f) Develop clear and adaptable regulations and ethical standards for AI development and deployment. These should focus on achieving positive societal outcomes without stifling innovation. Apart from that, it is important to consider whether full-fledged regulations are currently the most effective approach.
- g) **International collaboration** is essential for addressing the global nature of AI. Harmonized standards and regulations can prevent a patchwork approach and ensure responsible development.