Artificial intelligence

Defensives

*How would ChatGPT/GPAI be covered by the Commission proposal for the AI Act?*

- The proposed AI act takes a risk-based approach. A different set of rules of the AI Act applies depending on the risk level determined by the legislator:
  - unacceptable risk: prohibited;
  - high-risk: compliance with requirements on data, documentation, transparency, human oversight, robustness, accuracy and cybersecurity is verified in a conformity assessment before the system is placed on the internal market;
  - low/transparency risk: disclosure obligations i.e. natural persons should be informed that they are dealing with an AI-system (bot) and not with a human;
  - other: none.
- General Purpose AI such as ChatGPT has a multitude of potential applications, which may include all four-risk categories.

- Certain uses of ChatGPT like social scoring by public authorities may be prohibited due to the unacceptable level of risk.

- To assess whether an AI-system is high-risk the AI Act uses the concept of "intended purpose", which is a common characteristic of EU product legislation. The provider of an AI system will have the responsibility to determine the purpose for which category its product is intended to be used. This decision leads to a classification of the system in the high-risk category and thus triggers the application of the corresponding rules (in particular the ex-ante conformity assessment of the requirements for high-risk systems).

- As far as ChatGPT can be directly used, including for high-risk applications (like the evaluation of job candidates), it would therefore have to fulfill the corresponding requirements for high-risk AI systems, if the AI Act were in force. This assessment would only be different, if any use for a high-risk purpose had been excluded by the provider.

- As ChatGPT is a chat bot, therefore the transparency obligations would have to be respected, i.e. natural persons would have to be informed that they interact with an AI.

- Thus, a risk assessment of each General Purpose AI based on its different potential applications is needed to determine which rules are applicable in each case.

- General Purpose AI can also be used as input by other companies to offer more specific AI applications. For example, a General Purpose Image Recognition AI could be further developed and used for airport security controls or biometric identification. In that case, the company using the General Purpose AI as an input would have the responsibility to comply with the corresponding obligations.

*How would ChatGPT/GPAI be covered by the latest Council proposals? Will this be sufficient to cover all the risks?*

- The proposed Council General Approach of 6 December foresees specific provisions on General Purpose AI introduced by the French Presidency. A General Purpose AI system is defined as a “system which performs generally applicable functions such as image and speech recognition, audio and video generation, pattern detection, question answering or translation and others; a general purpose AI system may be used in a plurality of contexts and be integrated in a plurality of AI systems”.

- According to this definition ChatGPT can be considered as a General Purpose AI.
• The Council approach is that General Purpose AI shall be treated as high-risk AI (compliance with requirements and conformity assessment) unless the GPAI provider has explicitly excluded GPAI from being used for a high-risk use case. Furthermore, the Council established an explicit obligation for GPAI providers to cooperate, as appropriate, with downstream providers of high-risk AI systems to enable their compliance with the AI Act.

• Providers of General Purpose AI systems who are SMEs would not be subject to the new rules. (OpenAI, the provider of ChatGPT, is not an SME).

• The Commission was tasked by the Council to adopt two implementing acts: 1) to determine the exact information to be given to the downstream providers and 2) to adapt and specify within 18 months the requirements applicable to high-risk AI systems (data quality, technical documentation, transparency etc.), taking into account the specific features of General Purpose AI, technical feasibility and the specificities of the AI value chain.

• As in the COM proposal, ChatGPT would remain subject to the transparency obligations applicable to chatbots (i.e. people would need to be informed that they are dealing with an Artificial Intelligence and not with a human being) and to the prohibitions to the extent ChatGPT would engage in a prohibited practice (the Council has extended the prohibitions to social scoring by private actors). The prohibitions can apply in fact to any AI systems, including general purpose AI.

• The ability by ChatGPT to generate text in a manner not seen before and in a plurality of contexts has recently attracted a lot of attention. In particular, it has sparked debate around additional risks posed by AI beyond specific high-risk use cases such as in relation to bias and exclusion, misinformation, information hazard, psychological harm and toxic content, malicious use. It is to be expected that these issues will be raised and discussed during the trilogues, for instance on further rules on misinformation and transparency labelling of text generated by GPT Chat.

**How would ChatGPT/GPAI be covered by the European Parliament's proposal?**

• The Parliament’s position proposes stricter obligations for GPAI, especially for foundation models.

• Article 28 (value chain) will regulate the information to be provided by the upstream provider of General Purpose AI to the downstream provider.

• For foundation models, there are requirements in the development stage, including login capabilities, due diligence, using good data. These systems are not high-risk and there is no conformity assessment obligation.

• For generative AI these systems must be designed and developed in accordance with EU law and fundamental rights, including freedom of expression. There are three additional obligations:

  • It is possible that the EP will include in Art 52 the requirement to inform natural persons that they are interacting with an AI system also on generative AI systems and might include specific marking obligations with a view to allow copyright owners to further investigate. Note that this part is under exclusive competence of JURI. While JURI voted its opinion already last year, we understand there are still discussions ongoing and amendments at the plenary vote are likely.

  • Safeguards against illegal content to be built in, state of the art.

  • Provide a one-page summary of copyrighted material. The material does not need to be documented or listed in detail.

• There will be environmental standards for foundation models.
Who is responsible for disinformation and privacy concerns resulting from GPAI/ChatGPT? How will the Commission respond?

- The Code of Practice on disinformation includes commitments/measures on fakes generated by AI by relevant signatories. OpenAI is however not a signatory of the Code of Practice on Disinformation. While there is no legal obligation for them to become a signatory, they are certainly encouraged to consider coming on board. The Code of Practice is a voluntary industry led instrument with commitments from the signatories to reduce the spread of disinformation. The Commission and the signatories of the Code stand ready to provide more clarifications to OpenAI on the Code.

- In addition, all data protection and copyright rules remain entirely applicable.

- The possible need for further legal measures may be one of the topics for discussion in the upcoming trilogues.

Legal compliance of data collection

- The creation of foundation models requires large quantities of data which often raise questions related to IPR and data protection for the acquisition processes such as web scraping. This is especially valid when concerning personal data such as speech protected by GDPR. The current approach of American companies is to rely on the “Fair Use” principle, while in Europe, the “Text and Data Mining” exception (TDM) clause allows the collection of copyrighted data for research purposes. However, the use of these data to create foundation models for non-research purposes raises obvious legal and ethical concerns.

Which rules apply to ChatGPT in terms of copyright? Are these rules fit-for-purpose?

- The interplay between AI and copyright is complex and requires constant monitoring. At this stage, the current copyright rules seem generally sufficient to deal with different issues raised. This has been broadly confirmed by the analysis of the results of the study on “Copyright and New Technologies” commissioned by the Commission and published in March 2022. The study provided a good base for the assessment of AI from the copyright angle.

- In line with the study results, if an application like ChatGPT generates output without human creative choices, such an output is not protected by copyright. The study also came to the conclusion that an extension of copyright protection to the elements of an artistic style does not seem desirable.

- Regarding works protected by copyright and used to train applications like ChatGPT, as a general rule, the developer or user of the AI should seek the right holder’s consent for a use of such works unless relevant copyright exception or limitation applies. Newly created Text and Data Mining exceptions provided for in Articles 3 and 4 of the Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market are the most relevant exceptions that could apply to AI. While the rules are clear and in principle sufficient, the enforcement remains a challenge, especially in an international context. It would be desirable if the GPAI had a transparent policy on the sources used for its training (public domain material or in case of the material protected by copyrights the relevant licences used or the relevant exceptions applied).

What can rightholders (e.g., artists) do to remove their creative work from the training data of an AI solution? What rights does EU legislation grant them? Should the AI Act address this and require consent before creative work is included in AI training data?

- In Europe, authors are granted copyright protection on their original works. As copyright is an exclusive right, rightholders enjoy in principle the prerogative to allow or forbid uses of their works including their reproduction by third-parties. However, this right is subject to exceptions.
Meeting with OpenAI Virtual, 31 May 2023

Topics for discussion

- The 2019 Copyright reform (Directive 2019/790) introduced an exception for text-and-data mining, a technique often used by AI developers. This exception seeks to provide balance between rights of artists and AI developers. To this end, the EU legislator introduced a specific opt-out mechanism to safeguard the choice of copyright rightholders who do not wish to have their works used for such purposes. Under this mechanism, rightholders can expressly reserve their rights over their content and in that case text and data mining techniques may not be used to collect training data for AI solutions. The Directive requires that a reservation be made in machine-readable format by rightholders for works that are publicly available online. Currently there is no revision of the copyright framework planned. The 2019 Directive has just been implemented and should not be changed in this context.

- It is possible that the EP will request increased transparency rules for GPAI under Art. 52 AI Act (transparency) or/and Art. 29 AI Act (user obligations). This may include a clarification that a text is artificially generated and specific marking obligations with a view to allow copyright owners to further investigate. This part is under exclusive competence of JURI. While JURI voted its opinion already last year, we understand there are still discussions ongoing and amendments at the plenary vote are likely.

**Is the Commission planning any in-depth studies into GPAI? How will the Commission assess the impact of the AI Act on GPAI?**

- The Commission works closely with the JRC and with outside experts to gain an in-depth understanding of new trends and possible regulatory problems and solutions related to GPAI.

- At this point, the Commission does not consider it opportune to delay the legislative process of the AI Act in order to wait for a dedicated study of GPAI to be launched. Any in-depth study would require at least several months for the selection of the contractor and for carrying out the study.

- However, if the Commission would be empowered to adopt Implementing Acts on certain issues related to GPAI, as currently foreseen in the Council’s General Approach, it will carry out in-depth studies as part of the Impact Assessments and public consultation, focusing on the specific objectives of the empowerment.

**Is ChatGPT in scope of the Digital Services Act?**

- The Digital Services Act (DSA, Regulation 2022/2065) covers only intermediary services that qualify as "mere conduits", "caching services" and "hosting services". Specific obligations apply in particular to a subset of hosting service providers, namely online platforms and, within those, very large online platforms.

- The algorithmic systems used by online platforms are subject to specific rules, irrespective of what technologies they use. For example, special rules apply to recommender systems used by online platforms, and very large online platforms must assess and address the systemic societal risks linked to their algorithmic systems, including, where applicable generative models they might use. Should a very large online platform use software such as the one behind ChatGPT, this would likely be part of the scope of their risk management and auditing obligations [for instance, it has been reported that Bing will use ChatGPT in the context of its search engine].

- Prima facie, ChatGPT does not seem to meet the criteria to be considered an online platform within the meaning of the DSA, but further technical details on how it stores and shares information are needed for a definite assessment. The function offered by ChatGPT seems closer to a recommender system, within the meaning of the DSA, which alters and transforms content and does not disseminate it to the public, as such.

- We are monitoring all the technological developments and innovative online services that are evolving very fast. Even if a version of a new online tool does not fall into the DSA scope today, the situation might change as the tool gets updated or merges with other services, or it is introduced as a functionality of an existing service.
**When will the AI Act apply?**

- The AI Act will probably be adopted in the end of 2023 or early 2024, followed by a two to three year transition period.

**Background**

**Open AI**

- Open AI was founded as a non-profit in 2015 by Silicon Valley Gurus like Elon Musk and Sam Altmann (of Y-Combinator). Nowadays, most of the investors in Open AI other than Microsoft are venture capitalists funds (Bedrock, Sequoia, Andreessen Horowitz...).

- OpenAI's stated mission is to ensure that artificial general intelligence (AGI) benefits all of humanity. The organization aims to directly build safe and beneficial AGI, or to aid others in achieving this outcome.

- In 2019, OpenAI transitioned from non-profit to "capped" for-profit. The same year Microsoft invested $1 billion in OpenAI, half in the form of Azure credits so OpenAI would use the Microsoft cloud. In exchange, OpenAI agreed to license some of its intellectual property to Microsoft. According to the New York Times, Microsoft invested an additional $2 billion in OpenAI between 2019 and early 2023.

- In January 2023 Microsoft injected a further 10 bn $. While the Microsoft deal is reported to value OpenAI at $ 29 bn, implying a roughly 33% share, it would have a unique structure, where Microsoft would get a 75% share of profits that OpenAI will generate in the future, until it recoups the $10 billion investments, and 49% of all profits thereafter up to a maximum of $ 1 trn.

- On May 16, 2023 Sam Altman, the chief executive of the San Francisco start-up OpenAI, testified before members of a Senate subcommittee and called on US lawmakers to regulate large A.I models. OpenAI’s CEO called for independent audits, a licensing regime and warnings akin to nutritional labels on food.

**ChatGPT**

- OpenAI’s main product, ChatGPT, is an AI chatbot that was initially built on a family of large language models (LLMs) collectively known as GPT-3. OpenAI has now announced that its next-gen GPT-4 models are available. These models can understand and generate human-like answers to text prompts, because they've been trained on huge amounts of data.

- ChatGPT became the fastest-growing app of all time, reaching 100 million users in only two months thanks to its ability to produce human-like responses to a vast range of questions and to generate all type of written content.

- Early users have revealed some of ChatGPT's limitations. OpenAI says that its responses "may be inaccurate, untruthful, and otherwise misleading at times". OpenAI CEO Sam Altman also admitted in December 2022 that the AI chatbot is "incredibly limited" and that "it's a mistake to be relying on it for anything important right now".

- GPT-4 was officially announced on March 13. This new version is said to be more creative, less likely to fabricate facts, and less biased than its predecessor, GPT-3.5. GPT-4 has been described as a multimodal model, meaning it can take both text and image inputs, allowing it to respond to questions about pictures. It can handle larger text inputs, remembering and acting on more than 20,000 words at once. For example, it can take an entire novella as a prompt.

- The image recognition capabilities of GPT-4 were demonstrated but aren't publicly available yet. One of the demonstrations involved GPT-4 describing why an image of a squirrel with a camera was funny, and creating a working website based on a hand-drawn sketch.
How can we foster GPAI development in Europe?

General purpose AI is foundational to a variety of applications and is becoming increasingly important in AI markets. Breakthrough results have been achieved mostly by US and Chinese companies, while Europe is lagging behind. It is important to ensure that Europe does not become dependent on the models developed in the US and China, often disrespectful of privacy and EU values, and increasingly capable of independent programming; investment is needed to exploit opportunities in areas where Europe is strong. One such area is languages; there are ongoing developments in Europe, albeit not yet adequate. Other areas of interest include models based on images, video and audio. A particularly promising domain are multi-modal models, combining several of the above.

Currently, more than three quarters of so-called ‘foundation models’ (GPAI models based on large volumes of unlabeled data) are developed in the US, and most of the rest in China. One successful exception is the French-based international cooperation model BLOOM. Similarly, there is also an effort in Germany to develop a comparable model called GPT-X. On balance, however, the EU lags behind.

ChatGPT is a foundation model focusing and has been train on approximately 410 billion words. (The Encyclopaedia Britannica is 40 Mio words; Wikipedia is 4 Bio words). The performance of General Purpose AI systems depends on the amount of available data and the computing capacities available. For large language models, we have started the Language Data Space aiming to collect all text and speech available as a base for European industry to engage in similar endeavours.

Given the size of the resources required (OpenAI, the developer of Chat GPT, reportedly spent half a billion $ on hosting alone), one way of supporting foundation models could be to define a Multicountry Project, for which an EDIC could be created.

Within the Digital Decade Policy Programme, we intend to federate efforts from the Member States through the new legal instrument (EDIC) to support the development and deployment of larger AI models.

State of play on AI Act

Timing of the EU AI Act negotiations


- State of play in the EP: In the European Parliament the AI Act has just passed the committee stage. A vote in plenary session is expected early/mid June.

- Trilogues between the co-legislators would be held under Swedish and Spanish and possibly under the Belgium Presidency. There is a firm (informal) commitment by all co-legislators to conclude negotiations before the EP mandate ends in spring 2024. Once the AIA is adopted, there will be a 2 or 3-year transitional period before the regulation becomes applicable to operators.

AI Act - main changes by Council (GA of 6 December)

- The compromise text largely preserves the overall architecture of the Commission’s proposal. Among the several points on which the Council has amended the Commission’s proposal the following can be mentioned:
  - The Council introduces some changes to the definition of an AI system and of remote biometric identification (RBI).
  - The Council extends the scope of the prohibition of social scoring to the private sector. The ban on RBI is maintained, with some adjustments that loosen the exceptions.
  - The Council strengthens the risk-based approach by adding an additional risk layer for classification of the use cases listed in Annex III, excluding systems where the output is purely accessory. The Council also makes some substantial changes to
the list of high-risk use cases in Annex III by deleting two use cases from the law enforcement area (detection of ‘deep fakes’ and crime analytics) and one from the migration area (verification of the authenticity of travel documents). At the same time, it adds two new use cases for risk assessment in relation to individuals and pricing for health and life insurance as well as safety components of critical digital infrastructure.

- Governance. The Council strengthens the powers of the AI Board and introduces certain changes to the structure of the AI Board.
- The Council introduces a new regime for testing of stand-alone high-risk AI systems and strengthens the AI regulatory sandboxes.
- The Council maintains the decentralised system for market surveillance. To support authorities a pool of experts will be set-up and specific testing facilities.
- The Council approach is that General Purpose AI shall be treated as high-risk AI (compliance with requirements and conformity assessment) unless the GPAI provider has explicitly excluded GPAI from being used for a high-risk use case. Furthermore, the Council established an explicit obligation for GPAI providers to cooperate, as appropriate, with downstream providers of high-risk AI systems to enable their compliance with the AI Act. Providers of General Purpose AI systems who are SMEs would not be subject to the new rules. The Commission was tasked by the Council to adopt two implementing acts: 1) to determine the exact information to be given to the downstream providers and 2) to adapt and specify within 18 months the requirements applicable to high-risk AI systems (data quality, technical documentation, transparency etc.)

**AI Act – state of play in the European Parliament**

In the European Parliament the AI Act has just passed the committee stage. A vote in plenary session is expected early/mid June. According to current compromise proposals:

- The definition will be aligned with the *new* OECD definition as closely as possible; more drafting will be in the recitals.
- Regarding the scope, a partial exemption was proposed on open-source AI systems, except when incorporated in a high-risk system and for foundation models
- **General Purpose AI** / foundation models.
  - Article 28 (value chain) will regulate the information to be provided by the upstream provider of General Purpose AI to the downstream provider.
  - **For foundation models**, there are requirements in the development stage, including login capabilities, due diligence, using good data. These systems are not high-risk and there is no conformity assessment obligation.
  - There will be environmental standards for foundation models.

For **generative AI** there are three additional obligations:

- It is possible that the EP will include in Art 52 the requirement to inform natural persons that they are interacting with an AI system also on generative AI systems and might include specific marking obligations with a view to allow copyright owners to further investigate. Note that this part is under exclusive competence of JURI. While JURI voted its opinion already last year, we understand there are still discussions ongoing and amendments at the plenary vote are likely.
- Safeguards against illegal content to be built in, state of the art.
- Provide a one-page summary of copyrighted material. The material does not need to be documented or listed in detail.
The prohibitions of AI systems using biometrics are being broadened: real time remote biometric identification would be banned without exception, post processing would only be allowed with a judicial authorisation. Emotion recognition and categorization would be banned as well, except for medical uses. There would also be a ban on predictive policing and scraping the Internet.

It is proposed to extend the ban on social scoring to private companies.

While in the original proposal the high-risk classification would be automatic, MEPs introduced the extra layer that the AI models covered under Annex III are high-risk only if they pose a significant risk of harm to health, safety, or fundamental rights. If AI providers consider that their system does not pose a significant risk, with a reasoned notification, they must inform the competent national authority. The national authority would have three months to question the classification. However, during this period, the AI providers could still launch their AI solutions on the EU market after the notification was sent (but would be liable). After the three months have passed, there would be a presumption of conformity.

As to Annex III, in education, AI applications to assess the appropriate level of education or detect cheating during exams have been added to the high-risk list. For AI in the workplace, Annex III now specifies AI systems intended for recruiting people, notably for placing targeted job ads, filtering applications, and evaluating candidates. The rules on border control, migration and asylum would be strengthened. As to democratic processes, systems used or designed to influence elections and referenda would be added to Annex III. Recommender systems of very large social media platforms are being added to Annex III.

There would be a fundamental rights impact assessment for AI uses that fall under areas deemed as high-risk.

A new article with six general principles applying to all AI systems is proposed (based on the work of the HLEG), as a voluntary basis for all systems.

Regarding the requirements for high-risk systems, there would also be an obligation to develop AI in an environment-friendly way. However, it would only be applicable later, after the benchmarking authorities and the Commission develop benchmarks and guidelines.

The role of the new AI Office has been considerably downsized in comparison to the initial plans to a supporting role (due to budgetary constraints) but would maintain its own secretariat and executive director and would coordinate the advisory forum. It would have monitoring tasks, including for foundation models.

The investigation powers are primarily in the hands of the national authorities. The European Commission is only to step up in the most severe cases, namely to review when a national authority bans a system that poses serious risks despite complying with the AI regulation. In cases affecting two or more Member States, the leading authority will be where the infringement occurred. However, joint investigations are envisaged if the violation is widespread or affects 45 million people in at least two countries. Widespread infringement would be defined as covering at least three EU countries. It can acquire a European dimension if it affects the collective interests of at least two-thirds of the EU countries or population.

The co-rapporteurs propose giving the possibility to bring representative actions for breaches of the AI regulation.

High-risk AI systems could be presumed to comply with the AI Act when they exit a regulatory sandbox. Each Member State will have to establish at least one regulatory sandbox with national coverage and with functions in regulatory testing and learning.

A new measure is proposed requiring AI literacy for the general public and for staff working with AI.
Europol – The Criminal use of ChatGPT – a cautionary tale about large language models

The full report is accessible here

In response to the growing public attention given to ChatGPT, the Europol Innovation Lab organised a number of workshops with subject matter experts from across Europol to explore how criminals can abuse large language models (LLMs) such as ChatGPT, as well as how it may assist investigators in their daily work.

Their insights are compiled in Europol’s first Tech Watch Flash report published today. Entitled ‘ChatGPT - the impact of Large Language Models on Law Enforcement’, this document provides an overview on the potential misuse of ChatGPT, and offers an outlook on what may still be to come.

The aim of this report is to raise awareness about the potential misuse of LLMs, to open a dialogue with Artificial Intelligence (AI) companies to help them build in better safeguards, and to promote the development of safe and trustworthy AI systems.

The following three crime areas are amongst the many areas of concern identified by Europol’s experts:

- **Fraud and social engineering**: ChatGPT’s ability to draft highly realistic text makes it a useful tool for phishing purposes. The ability of LLMs to re-produce language patterns can be used to impersonate the style of speech of specific individuals or groups. This capability can be abused at scale to mislead potential victims into placing their trust in the hands of criminal actors.

- **Disinformation**: ChatGPT excels at producing authentic sounding text at speed and scale. This makes the model ideal for propaganda and disinformation purposes, as it allows users to generate and spread messages reflecting a specific narrative with relatively little effort.

- **Cybercrime**: In addition to generating human-like language, ChatGPT is capable of producing code in a number of different programming languages. For a potential criminal with little technical knowledge, this is an invaluable resource to produce malicious code.

As technology progresses, and new models become available, it will become increasingly important for law enforcement to stay at the forefront of these developments to anticipate and prevent abuse.

Open Letter calling for a pause of giant AI experiments

Elon Musk and hundreds of global experts on Wednesday (29 March) signed a call for a six-month pause in research into artificial intelligences more powerful than ChatGPT 4, the OpenAI model launched in mid-March, citing "major risks to humanity.

In this petition published on the website futureoflife.org, they call for a moratorium until safety systems are put in place, including new dedicated regulatory authorities, monitoring of AI systems, techniques to help distinguish between the real and the artificial, and institutions capable of managing the "dramatic economic and political disruptions (especially for democracy) that AI will cause".

The petition brings together leading figures who have already publicly expressed their fears of uncontrollable AIs that would outpace humans, including Elon Musk, owner of Twitter and founder of SpaceX and Tesla, and Yuval Noah Harari, the author of "Sapiens".

OpenAI boss Sam Altman, who designed chatGPT, admitted he was "a little bit scared" of his creation if it was used for "large-scale disinformation or cyber attacks". "The company needs time to adjust," he told ABCNews in mid-March.
“The past few months have seen AI labs race uncontrollably to develop and deploy ever more powerful digital brains that no one - not even their creators - can reliably understand, predict or control,” they argue.

“Should we let machines flood our information channels with propaganda and lies? Should we automate all jobs, including rewarding ones? Should we develop non-human minds that may one day outnumber, outwit, outdate and replace us? Should we risk losing control of our civilisation? These decisions should not be delegated to unelected technological leaders,” they conclude.

The signatories also include Apple co-founder Steve Wozniak, members of Google's DeepMind AI lab, the head of OpenAI competitor Stability AI Emad Mostaque, as well as US AI experts and academics, executive engineers at OpenAI's ally Microsoft.

**Contact – briefing contribution:**