ANNEX I: TWO-PAGER ON EFFECTIVE DEFINITION OF MEASURES

How to guarantee an effective intervention through specifications and continuous dialogue

A case for technical obligations design

For regulatory interventions **to be as effective as possible, provisions, obligations and tailored remedies need to be detailed and specified**. This is particularly true in highly technical environments, which is the case in the complex digital environment that the Digital Markets Act proposes to address. This can only be done efficiently by ensuring regular interaction with all relevant stakeholders. This involves not only the regulated actors, but **also other market players** (e.g., potential or effective competitors and business users in the first place, as well as consumer associations, and civil society) in order to benefit from a larger and more objective variety of data and information which can be compared and assessed. This regulatory dialogue can take **several forms** such **as information and data collection** by the regulator, participation in **dedicated fora**, and committees with e.g., technical experts, **public consultations**, and so on.

Specifying some obligations to reinforce the DMA's operationality

The DMA proposal includes a rich set of obligations, some of which would be directly applicable with no further specification (Art. 5) and others which could be subject to further specification (Art. 6). Some of them, especially those requiring further technical specification, will need applying hands-on knowledge and concrete understanding of how such systems work. This is typically the case for obligations involving interoperability measures between applications and operating systems (Articles 6(c) and 6(f)), dynamic portability (Article 6(h)), and access to data (Article 6(i)). Moreover, **for more complex measures** such as interoperability and access, a **real tailoring based on a case-by-case assessment is necessary for the intervention to be effective**. A parallel can be drawn with some technical obligations that apply in the regulation framework for electronic communications services (ECS).

Technical remedies in ECS regulation

In the ECS sector, NRAs have been and are defining technical obligations and remedies to create the conditions for effective competition. The two-decade experience in this sector can be valuable to see how the technical specification of the regulatory intervention is done in practice.

Along with the objective of fostering interoperability, which is already set in the European Electronic Communications Code (EECC)[1], a variety of technical remedies have been effectively designed supported on a dialogue with all actors involved and based on detailed specifications:

[1] Cf. EECC, Article 61, Recitals 93 and 148.

- **Access** to the telecom physical network granted to service providers: electronic communications network providers give service providers access to parts of their networks which constitute a bottleneck to reach end-users;
- **Interconnection**: ECS providers give access to each other's networks in order to exchange information (e.g. voice, data) and allow end-to-end connectivity, including both physical interconnection and implementation of a set of protocols and procedures);
- **Number portability** among telephone network providers to the benefit of end-users and to encourage competition: it allows end-users to keep their phone number when switching providers, thereby reducing switching costs;
- Under specific conditions, **interoperability** between relevant providers of number-independent interpersonal communications services which reach a significant level of coverage and user uptake: the purpose is to ensure end-to-end connectivity among end-users.

To ensure the enforcement of those remedies, NRAs often set up and oversee permanent, regular or occasional **committees gathering stakeholders or experts to ensure the effectiveness and efficiency of the remedy**. Some remedies require a certain level of standardization e.g., on the technical conditions of access and interconnection, the exchange of information between players, and so on. Such standards can only be appropriately defined in a constructive dialogue between the regulator and the relevant stakeholders.

In some countries for instance, committees, chaired by the NRA and involving operators and when appropriate, local authorities, issue opinion on technical matters that the regulator may take into consideration. Stakeholders can give their opinion on the reference offers related to access or interconnection that the regulator imposes on the regulated actors to adopt where relevant, including details on exchange of information, protocols, etc. NRAs in general often carry out public consultations to receive feedback from all relevant stakeholders before decisions are made. Another example is given where industry groups are organised by the regulator to involve market players in regulatory changes. They are informed about potential changes and can give input to modify these changes. On a less formal basis, NRAs maintain constant interactions with stakeholders, collecting information and data on a regular basis and dialoguing with the sector. This is also the case for number portability where the obligation has to be established and implemented by the different operators to make it possible. For example, some regulators organise techno-economic fora with operators and equipment vendors, seeking expert views and the required knowledge to effectively address the technical, economic and organizational issues this kind of technical remedy implies in stakeholders' ecosystem. This fruitful collaboration was key to successfully design the technical specifications of the number portability obligation including details interfaces, procedures, etc. In a similar manner, the technical specification for IP interconnection is often also agreed by operators in fora hosted by the NRA before the remedy was actually imposed in voice termination markets.

This model of regulation allows the regulator to **identify issues quickly, and to intervene where necessary**. Furthermore, interactions with and among stakeholders is **essential for the application of the remedy** itself, by helping define standards where appropriate, or by contributing to designating the interfaces that should be opened, the technical specifications that should be disclosed, information that should be shared, the format to be used, procedures to

follow, etc. Under certain circumstances, the regulator may also need to set up task-focused working group involving the different stakeholders.